

METHODS:

Two data sets derived from the Canadian Health Measures Survey (CHMS) were used to test the concept of PC approximation: a spirometry subset with the measures from the first trial of spirometry; and, full data set that contained representative variables. Variables were centered and scaled. PCA were conducted with 282 and twenty-three variables respectively. PCs were approximated with two methods.

RESULTS:

The first PC (PC1) could explain 12.1 percent and 50.3 percent of total variances in respective data sets. The leading variables explained 89.6 percent and 79.0 percent of the variances of PC1 in respective data sets. It required one and two variables to explain more than 80 percent of the variances of PC1, respectively. Measures related to physical development were the leading variables to approximate PC1 and lung function variables were leading to approximate PC2 in the full data set. The leading variable to approximate PC1 of the spirometry subset were forced expiratory volume (FEV) 0.5/forced vital capacity (FVC) (percent) and FEV1/FVC (percent).

CONCLUSIONS:

Approximating PCs with input variables were highly feasible and helpful for the interpretation of PCs, especially for the first PCs. This method is also useful to identify major or unique sources of variances in data sets. The variables related to physical development are the variables related to the most variations in the full data set. The leading variable in the spirometry subset, FEV0.5/FVC (percent), is not well studied for its application in clinical use.

.....
PD27 A Case Study Of Equity In Health From Zhejiang Province, China

AUTHORS:

Xueshan Sun (sunxueshan@zju.edu.cn), Hao Zhang, Xiaoqian Hu, Shuyan Gu, Xuemei Zhen, Yuxuan Gu, Minzhuo Huang, Jingming Wei, Hengjin Dong

INTRODUCTION:

Equity is the core of primary care. The issue of equity in health has become urgent and China has attached increasing attention to it. With rapid economic development and great change of the policy on medical

insurance, the pattern of equity in health has changed a lot. Reform of healthcare in Zhejiang province is at the forefront of China; studies on Zhejiang are of great significance to the whole country. This paper aims to measure the equity in health from the perspectives of health needs and health seeking behavior, and provides suggestions for decision making.

METHODS:

A household survey was conducted in August 2016. A sample of 1000 households, 2807 individuals in Zhejiang was obtained with the multi-stage stratified cluster sampling method. Descriptive analysis and Chi-square test were adopted in the analysis. The value of concentration index was used to measure the equity.

RESULTS:

This study finds that the poor have more urgent health needs and poorer health situation compared with the rich. The utilization of outpatient services was almost equal, whilst the utilization of hospitalization was pro-rich (the rich use more).Individuals with employer-based medical insurance use more outpatient services than those with rural and urban medical insurance. Compared to the rich, there were more people in the poorer income groups who didn't use inpatient services due to financial difficulties.

CONCLUSIONS:

The issue of equity in health has attracted broad attention in the world, and China is no exception. We measured and analyzed the equity of health needs and absent rate of health services. We find that the poor have more urgent health needs and high absent rate of inpatient services compared with the rich. Income level and medical insurance may well explain the equity of outpatient and inequity of hospitalization. In view of the pro-rich inequity of hospitalization, more financial protection should be provided for the poor.
.....

PD30 Cost-Effectiveness Of Stereo-Electroencephalography For Refractory Epilepsy

AUTHORS:

Borja Garcia-Lorenzo, Tasmania del Pino-Sedeño, Maria M. Trujillo-Martin (mar.trujillomartin@sescs.es), Rodrigo Alberto Rocamora Zuniga, Juan Erviti López, Ana Toledo-Chávarri

INTRODUCTION:

Stereo-electroencephalography (SEEG) has been shown to be a valuable tool for the anatomo-electroclinic definition of the epileptogenic zone (EZ) in some patients with medically refractory epilepsy considered for surgery. In Spain, many of those patients are not offered this diagnostic procedure. The objective of our health technology assessment (HTA) report was to evaluate the effectiveness, safety and cost-effectiveness of SEEG to define the EZ in patients with refractory epilepsy considered for surgery compared to no SEEG intervention (i.e. remaining with further antiepileptic drugs).

METHODS:

We undertook a systematic review with meta-analyses on the effectiveness and safety of SEEG. A cost-effectiveness analysis was conducted using a Markov model which simulates the costs and health outcomes of individuals for a lifetime horizon from the perspective of the Spanish National Health Service (NHS). The effectiveness measure was quality-adjusted life years (QALYs). We ran extensive sensitivity analyses, including a probabilistic sensitivity analysis.

RESULTS:

The EZ was found in 92 percent of patients who underwent SEEG, 72 percent were eligible for epilepsy surgery and 33 percent were free of seizures after surgery (47 percent of those who received surgery). Any complications related to insertion and monitoring of SEEG and the subsequent intervention occurred in 1.3 percent of patients. In the base case analysis, SEEG led to higher QALYs and healthcare costs with an estimated incremental cost-effectiveness ratio of EUR 10,368 (USD 12,217) per QALY. The sensitivity analyses showed that the results of the study were robust.

CONCLUSIONS:

SEEG is a cost-effective technology in patients with refractory epilepsy considered for surgery when compared to no SEEG intervention.

.....

PD31 Financial Impact Of Target Molecular Therapies In A Brazilian Hospital

AUTHORS:

Maria Angélica Ferreira (mpiferreira@hcpa.edu.br),
Caroline Lacerda, Leila Moreira

INTRODUCTION:

The therapy using molecular-targeted (MTT) and monoclonal antibodies (MA) are examples of new therapeutic technologies in search of greater clinical effectiveness and reduction of adverse effects in the fight against frequent diseases. Generally, new technologies have a high cost impact on the health system. The objective of this study was to evaluate the financial impact generated by the use of MTT and MA therapies in the teaching Hospital de Clínicas, Porto Alegre, Brazil.

METHODS:

The first 60 higher monetary spending drug items of the last 12 months were analyzed. From them, drugs which fit in the categories under study, and have been regularly used, were identified. The monthly expenditures with each item were tabulated and compared with the total expenditures on drugs, in order to calculate the budgetary impact. The major groups of diseases treated with each agent were analyzed.

RESULTS:

Two MTT agents (gefitinib and infliximab) and three MAs (rituximab, basiliximab and abciximab) were identified. The highest expenditure items, respectively, per year, were the oncological medicines rituximab (USD127,890) and gefitinib (USD96,923), followed by the immunosuppressive basiliximab (USD88,998) and the immunomodulatory infliximab (USD68,642), and the platelet aggregation inhibitor abciximab (USD47,886). These values corresponding to, respectively, 1.1 percent, 0.8 percent, 0.8 percent, 0.6 percent and 0.4 percent of total drug expenditure per year (USD11,866,124). Trastuzumab, bortezomib and imatinib were often used, but directly supplied by the public system, in a way that didn't impact the hospital budgetary management.