

## CONCLUSIONS:

These HAS recommendations on practice standardization have been the keystone for cost negotiations. The new coverage modalities aim to motivate liberal nurses to choose the best fitted products and providers to deliver the right quantities to patients. The expected benefits are an adjusted evaluation of the necessary equipment and a control of health expenditure due to the fixed costs of each infusion package.

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## OP133 Health Technology Assessment In Brazil: A 5-year Review Of Brazilian Health System (CONITEC) Activities

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### INTRODUCTION:

Since the creation of the National Committee for Health Technology Incorporation in the Brazilian Health System (CONITEC), a new phase started in the public Brazilian Health System (SUS): a continuous updating of the system based on Health Technology Assessment (HTA). CONITEC was created by federal law in 2012 and is responsible for advising the Ministry of Health regarding the incorporation or disinvestment of health technologies. The whole process involves a strong interaction with society, including the composition of the committee, which has the participation of the National Health Council. The objective of this study was to describe the results of CONITEC in five years of operation.

### METHODS:

This is a retrospective descriptive study, based on information from the database (period 2012–2016) and CONITEC's website.

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## RESULTS:

Since 2012, CONITEC assessed 541 technologies, including drugs (360), health products (71) and procedures (110); 303 assessment requests came from SUS agencies and institutions and the other 238 requests from pharmaceutical companies, medical societies, patient associations and the judiciary bodies. In this period, there were 190 public consultations, during which more than 24,000 feedback from society were received. The average time for evaluation was 146 days. The committee recommended the incorporation of 186 technologies into SUS, the disinvestment of 43 and was unfavorable to the incorporation of 88, generating a budgetary impact of approximately BRL2.5 billion (USD764 million).

## CONCLUSIONS:

From 2012–2016, CONITEC tripled the average annual incorporation of new technologies compared to the period 2006–2011. In this process, it was necessary to assess efficacy, safety and cost-effectiveness of technologies, generating positive results for the expansion of access, health gains for patients and sustainability for the system. It should be considered that the use of evidence for decision making strengthens transparency in public management and the development of active processes of information, communication and social participation.

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## OP134 Predictors Of Public Health Outcomes: A Case Study From Turkey

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### INTRODUCTION:

In Turkey, there is a scarcity of knowledge about the predictors of health outcomes at a national level, and it is well known that there is a gap between rural and urban parts of developing countries in terms of the level

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of health outcomes. This study aims to find out predictor factors of the public health outcomes at a province level in Turkey.

#### **METHODS:**

Life expectancy at birth and mortality are used as public health outcome indicators. Logistic regression and Random Forest classification generated by using 50, 100, and 150 trees were used to compare prediction performance of health outcomes. The results of different prediction methods were recorded changing the “k” parameter from 3 to 20 in k-fold cross validation. The Area Under the ROC Curve (AUC) was used as a measure of prediction accuracy. Prediction performance differences were tested using Kruskal-Wallis analysis and visualized on a heatmap. Finally, predictor variables of public health outcomes were shown on a decision tree.

#### **RESULTS:**

Study results revealed that Logistic regression outperformed Random Forest classification. The difference between all prediction methods to predict public health outcome indicators was statistically significant ( $p < .000$ ). The heatmap shows that AUC values to predict mortality have superior performance when compared with life expectancy at birth. Decision tree graphs present that the most important predictor variables were total number of beds for mortality and percentage of higher education graduates for life expectancy at birth.

#### **CONCLUSIONS:**

The results of this study represent a preliminary attempt to determine public health outcome indicators. It is hoped that the results of this study serve as a basis to understand the determinants of health care outcomes at province level with focus on a developing country. This study illustrates that there is a need to spend extra effort for future studies to analyze public health outcomes to improve social welfare functions in health systems.

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## **OP135 Confirmatory Versus Explorative Endpoints In Drug Approval Versus Health Technology Assessment**

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#### **INTRODUCTION:**

The early benefit assessment of drugs in Germany and their preceded market authorization pursue different objectives, resulting in divergent decision-making strategies. This is reflected inter alia by the diverse inclusion of confirmatory endpoints within the assessments of oncological drugs. The pharmaceutical manufacturers are facing the challenge of meeting the requirements for both evaluation processes by the available evidence and avoiding hereby negative early benefit assessments. This is mainly due to the concept of mutually relevant clinical trials.

#### **METHODS:**

Identification and gathering of the endpoints is based on a specifically developed guide. The extracted data from the documents of completed assessments up to July 2015 are used to estimate both separately and together the impact of explorative in relation to confirmatory endpoints on the drug approval and early benefit assessment, by contrasting the European Medicines Agency’s risk-benefit-ratio and the benefit-harm-balancing of the national Health Technology Assessment (HTA) jurisdiction.

#### **RESULTS:**

Twenty-one of forty-one studies’ oncological assessments could be included in the endpoint analysis. From a procedural point of view both the drug approval and the early benefit assessment seem to be not confirmatory since they include explorative endpoints as well. Yet, drug approval is in terms of quality of endpoints more confirmatory than early benefit assessment since it contains a higher proportion of