

## PP194 Intersectoral Costs And Benefits In The Societal Perspective

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**Introduction.** Many health care interventions have costs and benefits that spill over to sectors outside the healthcare sector. Little is known about these inter-sectoral costs and benefits (ICBs). However, to achieve an efficient allocation of scarce resources, insights on ICBs are indispensable. The main objective of this study was to identify the ICBs related to health care and provide a sector-specific classification scheme for these ICBs. For this sector-specific classification scheme mental disorders were taken as an example, as we expect that this is the sector with the most ICBs.

**Methods.** Using PubMed, a literature search was conducted for ICBs of mental disorders and related (psycho)social effects. A policy perspective was used to build the scheme's structure, which was adapted to the outcomes of the literature search. In order to validate the scheme's international applicability inside and outside the mental health domain, semi-structured interviews were conducted with (inter)national experts in the broad fields of health care.

**Results.** The searched-for items appeared in a total of fifty-two studies. The ICBs found were classified in one of four sectors: "Education", "Labor and Social Security", "Household and Leisure" or "Criminal Justice System". Psycho(social) effects were placed in a separate section under "Individual and Family". Based on interviews, the scheme remained unadjusted, apart from adding a population-based dimension.

**Conclusions.** This is the first study which offers a sector-specific classification of ICBs. Given the explorative nature of the study, no guidelines on sector-specific classification of ICBs were available. Nevertheless, the classification scheme was acknowledged by an international audience and could therefore provide added value to researchers and policymakers in the field of health technology assessment. The identification and classification of ICBs offers decision makers supporting information on how to optimally allocate scarce resources. By exploring a new area of research, which has remained largely unexplored until now, the current study has an added value as it may form the basis for the development of a tool which can be used to calculate the ICBs of health care interventions.

## PP207 Evaluation On Effects Of Antimicrobial Stewardship In Tertiary Comprehensive Public Hospitals in Hainan, China

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**Introduction.** The National Health Commission issued a special task force on antimicrobial stewardship (AMS). We assess the effects of AMS from 2012 to 2016 in four tertiary comprehensive

hospitals in Hainan Province, China, to explore the achievement of AMS to facilitate rational use, to control antimicrobial resistance (AMR), to ensure safety and quality of care.

**Methods.** Data from Hospital Information System (HIS) of hospitals according to the criteria of AMS were analyzed. Microsoft Excel data entry and SAS version 9.3 was used for analysis.

**Results.** The indicators were general compliance to the national criteria from 2012 to 2016. The percentage of following results in hospitals were gradually reduced: the proportion of antibiotic use in outpatient care (11.09 to 3.25 percent); that in emergency departments (8.46 to 1.53 percent); antibiotics use rate of inpatient care (9.13 to 3.12 percent); antibiotics prophylactic use in type I surgical sites (24.19 to 3.38 percent); the proportion of drug cost (5.54 to 0.12 percent) and total cost of antibiotics (3.27 to 0.45 percent); total cost of antibiotics in outpatient care and emergency departments, which was below 10 percent. Pathogenic detection rate of antibiotics from 2013 to 2016 in three hospitals was increased from 38.75 to 59.6 percent. Hainan Provincial Antibiotics Resistance Monitoring Network conscientiously performs duties, several important and special detection rates of AMR close to the average national level, which have been effectively controlled.

**Conclusions.** It is needed to continue AMS and to enhance the capacity of rational use of antibiotics by medical professionals. Information systems need to be developed, coordinated and correlated to monitor the consumption of antibiotic use, surveillance of AMR and control of hospital infection.

## PP210 Identification Of Frailty to Healthy Ageing In European Population

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**Introduction.** The European population is aging rapidly. The number of Europeans aged over sixty-five will double in the next fifty years. Active and healthy aging is a societal challenge shared by all European countries, but also an opportunity. The World Health Organization indicated that frailty has become an indicator of lack of successful aging. Therefore, identification of frail elderly is becoming important. However, there are many different screening tools that are currently used to identify frailty. The optimal test should have the capacity to easily identify from the community-dwelling population, those older people at risk of adverse outcomes. During the past years, gait speed has been repeatedly reported as an appealing instrument as a screening tool to detect frailty.

**Methods.** Systematic review of literature on gait speed as predictor of frailty was performed.

**Results.** A total of 992 articles were retrieved from the literature search and only eleven studies met the inclusion criteria. Frailty is a common geriatric syndrome, characterized by decreased reserve and increased vulnerability to adverse outcomes, including falls, hospitalization, institutionalization and death. Despite frailty is being increasingly recognized in the literature, there is a paucity of direct evidence to guide interventions to reduce frailty. Many single and composite tools to detect the frailty have been

proposed but none is consensual, most are time-consuming while evaluating different domains of impairments, and many are not validated. Gait speed seems to be a single, reliable, valid, sensitive, cheap, quick and simple tool that identifies frailty people. However, the way to perform the test parameters vary widely, influencing interpretations of physical performance.

**Conclusions.** The evidence recommends to detect frailty in people in order to achieve an active and healthy ageing. Gait speed could be a suitable predictor to identify frailty although this systematic review found many differences between the gait speed protocols used in clinical practice. It is necessary to establish a standard protocol of gait speed agreed by experts in the area on frailty to be implemented with success in clinical practice.

## PP238 Budget Impact Of Methionine-Free Amino Acid Formula For Homocystinuria

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**Introduction.** The National Committee for Health Technology Incorporation (CONITEC) evaluates health technologies to recommend their inclusion or exclusion within the Brazilian Public Health System (SUS), and uses the budget impact assessment to estimate costs to the system. This study estimated the budget impact of the supply of methionine-free amino acid formula (MFAAf) for patients with classical homocystinuria (HCU) in the SUS.

**Methods.** The incidence of one case per 250,000 live births in Brazil and the registration of a Brazilian association of patients with HCU was assumed to calculate the population. Mortality and responsiveness to pyridoxine rates were applied. The costs of treatment were estimated according to the recommended dosage in literature and public purchasing prices. For calculating the dose of MFAAf patients, a median age of 19 years and weight of 60 kg were assumed, according to Brazilian study data.

**Results.** The annual cost of treatment was estimated at BRL 77,000 (USD 21,084) per patient. The incorporation of MFAAf for HCU would generate a budget impact in SUS of around BRL 37 million (USD 10.1 million) in 2019 and BRL 188 million (USD 51.5 million) after five years which considers the epidemiological data, and a budget impact of around BRL 6.4 million (USD 1.75 million) in 2019 and BRL 33 million (USD 9 million) after five years which considers the information of a Brazilian association of patients with HCU. The wide range of values in the incremental budgetary impact is due to the lack of information on the epidemiology of the disease in Brazil.

**Conclusions.** The incorporation of the MFAAf in the SUS represents an important budgetary impact and covers a small number of patients. CONITEC recommended the incorporation of the MFAAf in the SUS, according to clinical protocol.

## Vignette Presentations

### VP01 Methods Of Patient Involvement Now And Beyond 2020: A Case Study

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**Introduction.** Involving patients and the public in the health technology assessment (HTA) has always been fundamental to NICE. To ensure the appropriate method of patient involvement remains relevant to the evolving types of HTA, NICE uses varying methods of involvement. These methods have been reviewed to ensure they remain current and relevant for HTA now and beyond 2020, and also to give guidance on the approaches that should form a standard baseline and those that could be optional.

**Methods.** We identified and mapped the different methods of patient involvement used at NICE across five types of HTAs: diagnostics; medical technologies; medicines; ultra-orphan conditions; and surgical procedures. We looked at the varying methods of early engagement identifying similarities and differences, and considered the benefits and challenges of each.

**Results.** The different methods of patient and public involvement include: lay members (generalist and topic expert) involved in decision making, individual patient input (written and oral), and patient group (organisation) input (written). The types of involvement fell into the following categories: written group submissions, written individual statements, surveys of individuals, pre-meeting events/workshops, oral testimonies at committees, and written consultation responses. The common methods across all HTA types were generalist lay members and consultations.

**Conclusions.** This review highlighted the varying methods of involvement at NICE and highlighted additional methods that could be standardised across the different types of HTAs as a baseline. These included patient organisation submissions and a method for additionally including individual patients in each type of HTA. We identified that where patient involvement started early and continued at each stage of the process including a pre-meeting event, it was particularly helpful to the stakeholders' ability to contribute.

### VP02 Involving Patients In HTA Beyond 2020: A Thematic Review

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**Introduction.** Involving patients and the public in the health technology assessment (HTA) is crucial and a key part of the NICE patient and public involvement (PPI) policy. To advance the development of our PPI policy in HTA and build capacity for 2020 and beyond, we took stock of knowledge on stakeholders' views of involving this cohort in HTA.