

PP383 Assessment Of The Implementation Effect Of Health Poverty Alleviation Policy: A Case Study Of Hebei Province, China.

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Introduction. Since the 18th National Congress of the Communist Party of China (CPC), remarkable achievements have been made in poverty alleviation. Over the past five years, the population of people living in poverty had decreased by 68.53million, fallen from 98.99 million in 2012 to 30.46 million at the end of 2017. As an impoverished province, Hebei province has been implementing the CPC Central Committee's guidance in the battle against poverty. In 2016, the government released the Implementation Scheme Plan for Improving the Level of Medical Security and Assistance. The plan introduces multi-layer medical security and assistance mechanisms which covers basic medical insurance, major disease insurance and medical assistance. In 2017, the government formulated the Implementation Plan for the Three-Batch Action Plan on the Health Care Program for Poverty Alleviation in Hebei Province, for people with major disease. Hebei Province has carried out many explorations on the health care program for poverty alleviation, and its effectiveness is a problem worthy of attention.

Methods. Based on data including basic medical insurance, major illness insurance, medical assistance, and other related information, we used descriptive statistics and quantitative methods to evaluate the overall expenditure of the poverty alleviation for Hebei province and the areas under its jurisdiction. Additionally, the expenditure of different levels of medical security system, the medical burden for people facing poverty and the distribution of disease in the population with assistance were evaluated.

Results. The out-of-pocket payment per capita has decreased year by year, and it has dropped to 3% of catastrophic medical expenditure and 20% below the poverty line by June 2018. An imbalanced situation occurred with the implementation, with the more impoverished areas having greater the pressure on medical care and poverty alleviation. For people with medical assistance, diseases with higher population and overall expenditure are cerebrovascular disease, malignant tumor, diabetes and some other chronic diseases.

Conclusions. The health policies for poverty alleviation in Hebei province has achieved a remarkable success, and the medical burden of the poor has been significantly reduced. However, the implementation of the policies in various cities has shown an imbalanced situation, and the poverty alleviation policies need to be further improved.

PP385 Using Common Data Models And Data Networks For Evidence Generation In Health Technology Assessment

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Introduction. Differences between healthcare datasets in structure, content, and coding systems are widely recognized as significant barriers to generating robust evidence for regulatory and medical decision making. As a result, there is a growing interest in using common data models embedded within large data networks. By standardizing the structure, contents, and semantics of disparate healthcare databases, common data models like the Observational and Medical Outcomes Partnerships common data model (OMOP-CDM) enable multidatabase studies to be undertaken at speed and in a transparent way. To date, little attention has been given to their potential role in health technology assessment (HTA).

Methods. We identify the uses of observational data in generating evidence in HTA, some common analytical challenges faced in their estimation, and the infrastructural, technical, and data reusability constraints that limit its wider use. We discuss where and how the OMOP-CDM could overcome these barriers in relation to different types of evidence requirements.

Results. The OMOP-CDM increases the interoperability of otherwise disparate datasets, allowing reliable evidence to be generated from multidatabase studies at speed and transparently. The current analytical tools are best suited for clinical characterization and population-level effect estimation. Further developments to these tools are required to support analyses common in HTA like parametric survival modeling. Differences in costing methods as well as the structure of healthcare delivery between countries may limit the feasibility and value of standardization.

Conclusions. The OMOP-CDM has the potential to support reliable and timely evidence generation in HTA. The analytical tools should be further developed to support common HTA use cases.

PP387 Budget Impact Analysis Of Adalimumab In The Treatment Of Ankylosing Spondylitis In China

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Introduction. Ankylosing spondylitis (AS) is a common disease that causes pain and affects productivity. Tumor necrosis factor- α (TNF- α) like adalimumab can bring better clinical efficacy and improve quality of life. Adalimumab is likely to be covered by health insurance. It is necessary to assess the impact of adalimumab for patients with AS on the medical insurance budget in China. Our research aims to give support evidence for policy-making.

Methods. From the perspective of medical insurance payers, a budget impact model was established to evaluate the impact of adalimumab for the treatment of adults with severe active AS that has responded inadequately to conventional therapy. The time horizon was 5 years (2020–2024). The cost of measurement included drug and treatment costs for adverse events. Scenario analysis was conducted to evaluate the results under different drug price reimbursement ratios and treatment ratios.

Results. Based on the current price of adalimumab (CNY 3,160 [USD 446]/unit), under the reimbursement ratio of 70 percent, adalimumab will increase medical insurance expenditure by

CNY 162 [USD 22] million, CNY 152 [USD 21] million, CNY 114 [USD 16] million, CNY 100 [USD 14] million and CNY 88.11 [USD 12] million in the next 1–5 years, respectively. The increased medical insurance expenditure accounts for 0.091, 0.085, 0.064, 0.056, and 0.049 percent of the annual medical insurance expenditure in the next 1–5 years, respectively, which is assumed to be equivalent to the expenditure in 2018 of CNY 1782.2 [USD 251] billion.

Conclusions. The budget impact of adalimumab for AS on medical insurance expenditure is limited, and including adalimumab in the medical insurance catalogue can reduce the burden on individuals, enrich treatment options, and satisfy clinical needs better.

PP391 Economic Analysis Of Treatment For Spinal Muscular Atrophy: A Scoping Review

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Introduction. Spinal muscular atrophy (SMA) is a rare, life-threatening, and seriously debilitating neuromuscular disorder, which has a heavy burden on patients, caregivers and the health system. Technological advances have improved clinical effect, but have also increased the financial burden. There is limited information in the literature on the resource utilization and economic burden of SMA. Our research aims to summarize the current literature on resource use, cost and economic evaluations of treatments for SMA, to inform further research and policy decision making.

Methods. Databases, including PubMed, Embase, Cochrane Library and CRD Database, were searched from inception. Two reviewers undertook title and abstract screening followed by full-text screening, and any disagreement was resolved in consensus. Data extraction was conducted using a customized form. Included studies were summarized using narrative synthesis structured around general and economic characteristics. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were adhered to where applicable.

Results. We reviewed 552 abstracts and included twenty-six from 2015 to 2019. Four-fifths were published in the United States and Europe. Five full economic evaluations and one budget impact analysis compared nusinersen with AVXS-101 or best supportive care, and the remaining evaluated the economic burden of SMA. The most common outcomes were healthcare resource utilization and direct medical costs, only a few studies evaluated direct non-medical costs or indirect cost.

Conclusions. SMA patients have significant medical expenditures and high utilization of healthcare services, including nusinersen-treated patients. The results highlight the substantial burden of treatment for SMA, not only for patients but also for their caregivers. SMA represents a significant hidden cost that society should be made aware of, and that should be considered in the design, implementation and evaluation of support programs for people who suffer from this disease and their families, as well as in the economic evaluation of new treatments.

PP399 Analysis Of Referral Patterns To Specialized Centers In Idiopathic Pulmonary Fibrosis To Define A New Regional Care Pathway

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Introduction. Idiopathic pulmonary fibrosis (IPF) is a fatal lung disease. Due to insufficient awareness of the disease, and the lack of specificity of clinical and physiological signs, the diagnosis of IPF is often delayed. In the Lazio Region (Italy) four reference centers manage patients with IPF. The objective of this analysis is to support the definition of a new regional care and therapeutic pathway (Percorso Diagnostico Terapeutico Assistenziale [PDTA]) for IPF to anticipate the moment of diagnosis by reference centers. The delayed referral to specialized centers has clinical consequences both in terms of survival and access to treatments.

Methods. A survey collected aggregated evidence on factors associated with referral patterns to specialized centers for IPF. Its content was defined on the basis of a literature search, the experience of involved clinicians, and hospital data sources. The survey considered patients diagnosed with IPF by the network of reference centers from 2014 to 2018. Aggregated data on the pre-diagnosis pathway and evidence on organizational features of each reference center were collected.

Results. Patients with a confirmed diagnosis of IPF increased from 2014 (n = 81) to 2018 (n = 344). A similar trend emerged considering only older patients. Incidence rates reached 11.33 cases per 100,000 residents in 2018. The majority of patients had a diagnosis in time to access to available treatments (87% in 2018). The number of specialists in multidisciplinary teams didn't change in a significant way. GPs, pneumologists, and IPF centers emerged as the pillar of the de-facto PDTA.

Conclusions. A new regional care and therapeutic pathway has been proposed to improve treatment of IPF. The first goal is to improve interaction among GPs, pneumologists, and IPF centers along the natural course of the disease. Criteria for referral to IPF centers has been defined (i.e. high-resolution computed tomography) as well as for adoption of a hub-and-spoke approach based on telemedicine.

PP400 Cost-Effectiveness Analysis Of Adding Bedaquiline To Drug Regimens For Multidrug-Resistant Tuberculosis Treatment In China

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Introduction. According to the World Health Organization, there were approximately 0.5 million new cases of rifampicin-