Poster Presentations S71

PP70 Mapping Of Health Technology Assessment In China: A Comparative Study Between 2016 And 2021

Shimeng Liu, Yu Xia (xiay20@fudan.edu.cn), Yi Yang, Jian Ming, Hui Sun, Yan Wei and Yingyao Chen

Introduction: This study aimed to compare changes in the level of health technology assessment (HTA) development from 2016 to 2021, and to inform policies and decisions to promote further development of HTA in China.

Methods: We conducted a cross-sectional and anonymous web-based survey to relevant stakeholders in China in 2016 and 2021 respectively. The mapping of the HTA instrument was used to reflect the HTA development from eight domains. To reduce the influence of confounders and to compare the mapping outcomes between 2016 and 2021 groups, we performed 1:1 propensity score matching methodology in this study. Univariate analysis was performed to compare the differences in these two groups. We also compared the overall results with that of a mapping study that included ten countries.

Results: A total of 212 and 255 respondents completed the survey in 2016 and 2021 respectively. After propensity score matching methodology, 183 cases from the 2016 group and 2021 group were matched. Overall, the mean score of 2021 in most of the domains was higher than in 2016 in China (p < 0.05), matching the level of HTA institutionalization and dissemination strategy, except for the assessment domain. Although China scored significantly lower among the three developed countries, the overall HTA development score for China was comparable among the ten countries.

Conclusions: Our study suggested the level of HTA development in China has made great progress from 2016 to 2021. Prior to HTA activities, the researcher or policy makers should first formulate an explicit assessment goal and scope, and during the assessment process, more attention should be paid to the clinical effectiveness and cost-effectiveness indicator to ensure a higher quality of HTA evidence.

PP71 Hospitalization Costs Associated With Advanced Non-Small Cell Lung Cancer In China: Real World Evidence From Jiangsu

Yu Xia (xiay20@fudan.edu.cn), Yi Yang and Yingyao Chen

Introduction: Non-small cell lung cancer (NSCLC) constitutes 85 percent of lung cancer diagnoses and poses an economic threat to the sustainability of healthcare services. This study was conducted to estimate hospitalization costs associated with advanced NSCLC without sensitizing EGFR (epidermal growth factor receptor) and ALK (anaplastic lymphoma kinase) alterations in China and explore the potential predictors.

Methods: Data linked with patients with advanced NSCLC (stage IIIB—IV) without sensitizing EGFR and ALK alterations were obtained from the electronic medical record system of one general hospital and one cancer hospital in Jiangsu province, China, ranging from January 2017 to December 2020. We excluded patients with lung metastases from tumors elsewhere in the body. The socio-demographic characteristics, disease-related characteristics, and hospitalization cost of eligible patients were extracted. We used the generalized linear model (GLM) to assess the potential influencing factors of hospitalization cost.

Results: Patients with advanced NSCLC (n=7,260) were included in this study. The median hospitalization cost of advanced NSCLC was USD11,540.47. The median hospitalization examination and test costs were USD1,539.46, and the median hospitalization drug cost was USD6,351.47. GLM results showed that patients aged 60 or older (95% Confidence Interval [CI]: -1019.1,128.6), who had no gene driver (95%CI: -1,681.6,-233.6) were more likely to have relatively lower hospitalization costs for advanced NSCLC. Patients treated in cancer hospital (95%CI: 1,329.1,2,620.0) and with non-squamous carcinoma (95%CI: 171.3, 1,235.4) may have higher hospitalization costs. Compared with Urban Employee Basic Medical Insurance, patients with free medical services (95%CI: 1,248.4,6,298.7) were associated with higher hospitalization costs. Patients with higher hospitalization frequency and longer length of hospital stay (p < 0.05) were linked to higher hospitalization costs.

Conclusions: The hospitalization costs linked to advanced NSCLC is considerable for patients, with drug costs accounting for the largest. More efforts still need to be made to alleviate the direct medical burden.

PP75 Using Real World Evidence To Support The Reimbursement Of Proton Therapy Across A Broad Range Of Rare Cancers

Nimita Arora (Nimita.arora@gmail.com),

Dominic Tilden and Scott Penfold

Introduction: The Australian Bragg Centre for Proton Therapy and Research in Adelaide will be Australia's first center with the capacity to deliver proton beam therapy (PBT). PBT uses energy from protons to target cancer cells while minimizing damage to surrounding healthy tissue, including vital organs. Compared to X-ray (photon) radiation therapy (PRT), PBT reduces the risk of serious and long-term complications.