PD67 Real-World Evidence To Inform Reflexive Practice And Create Value In Lung Cancer Care

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Introduction: Health technology assessment (HTA) agencies assess the value of innovative therapies and publish recommendations for practice. However, is publishing HTA products sufficient to generate value in the real world? The objectives of our work were to: (i) determine whether innovative therapies for lung cancer produce the expected results in the real-world setting; and (ii) assess whether recommendations are followed in real-world practice.

Methods: Clinical administrative data were used in this two-phase project. In the first phase, a descriptive portrait of the use of epidermal growth factor receptor tyrosine kinase inhibitors (EGFR-TKIs) for treating lung cancer was produced. Their value was assessed by comparing overall survival of treated patients observed in the province of Québec to the published literature. The second phase focused on the initial evaluation of patients diagnosed with lung cancer and treated first by surgery. The delay between first evidence of cancer and surgery was assessed, and the utilization of 27 healthcare services was analyzed and assessed according to our recommendations (algorithms) for lung cancer management.

Results: From the date the first EGFR-TKI was listed, it took about five years before these drugs were fully integrated into clinical practice. The median overall survival of patients in Québec who used an EGFR-TKI (three indications) was similar to that in most published studies, supporting previous reimbursement decisions. The median delay between first evidence of cancer and surgery was longer than the 60-day consensus target. Utilization of most healthcare services was heterogeneous between regions. Bronchoscopy on its own seemed overused in many regions, whereas non-surgical approaches as a first method for invasive mediastinal evaluation should have been more systematically applied.

Conclusions: At a relatively low cost, real-world evidence can serve as a powerful tool to validate reimbursement decisions and measure the state of clinical practice. By sharing results with stakeholders, it will enable clinical teams to reflect upon their practice and implement local improvement strategies.

PD68 A Cross-Cultural Validation Study Of The German And English Versions Of The ICEpop CAPability measure for Adults (ICECAP-A)

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Introduction: Proponents of the capability approach argue that the effect of health technologies should be measured in terms of capabilities, that is, the freedom to live as desired. The ICECAP-A, initially developed in the UK, has been used internationally to measure capability wellbeing. This study examined whether participants from Australia, Canada, Germany, the UK, and the USA similarly interpret and respond to the ICECAP-A.

Methods: A multigroup confirmatory factor analysis was conducted. Four types of measurement invariance were tested: configural invariance, metric invariance, scalar invariance, and residual invariance. Measurement invariance was assessed by studying the comparative fit index (CFI) and the root mean square error of approximation (RMSEA) and standardized root mean squared residual (SRMR) fit indices. For this study, data from the multi-instrument comparison database were used to compare response patterns of participants from Australia (n=1,430), Canada (n=1,330), Germany (n=1,269), the UK (n=1,356), and the USA (n=1,460).

Results: The configural invariant model showed adequate fit (CFI 0.992, RMSEA 0.076, SRMR 0.016), and metric invariance was established (change in variables: CFI -0.002, RMSEA -0.014, SRMR 0.015). Scalar invariance (and consequently residual invariance) was not established (change in variables: CFI -0.036, RMSEA 0.046, SRMR 0.018). Post-hoc analysis indicated that full measurement invariance could be established by excluding the German sample, with improved fit index values for configural invariance (CFI 0.994, RMSEA 0.069, SRMR 0.015), metric invariance (change in variables: CFI-0.000, RMSEA -0.020, SRMR 0.006), scalar invariance (change in variables: CFI -0.007, RMSEA 0.011, SRMR 0.006), and residual invariance (change in variables: CFI -0.002, RMSEA 0.009, RMR 0.006).

Conclusions: Response patterns to the German and English versions of the ICECAP-A differed. Caution should be exercised when using these two versions in the same study. Further research is required to determine whether these differences are due to linguistic variations from translation, or whether they indicate fundamental differences in participant understanding and responses to the different versions of the ICECAP-A.