successfully tagged for three drugs in the set. NLP successfully tagged word sets relating to place in treatment for two drugs.
Conclusions: The NLP algorithm is successful in extracting relevant word sets, which can be used to generate an estimated indication in an automated or semi-automated process. The pilot highlighted that further testing is required to advance the sensitivity of the algorithm. Further piloting exploring both unsupervised and supervised modeling approaches (named entity recognition and deep neural networks, respectively) is planned.

PP06 Incentives To Incorporate Innovation Into Care Delivery Processes: A Scoping Review And SWOT Analysis

Madeleine Haig (m.haig@lse.ac.uk), Caitlin Main and Panos Kanavos

Introduction: This study investigated the various incentives employed in Organisation for Economic Co-operation and Development (OECD) and European Economic Area (EEA) countries to enhance access to innovative medical technologies. The literature review encompasses real and theoretical models, offering an overview of strategies to bridge the gap between innovation and access. A strengths, weaknesses, opportunities, and threats (SWOT) analysis was conducted to analyze incentives in health system and therapeutic area context.
Methods: The review methodically examined peer-reviewed articles, reports, and policy documents published between 2000 and 2023. Databases searched include PubMed, Scopus, Web of Science, and EconLit. Grey literature was searched from international organizations' websites, including the World Bank, World Health Organization (WHO), OECD, Pan American Health Organization (PAHO), and European Commission. Inclusion criteria focused on relevance of financial and non-financial mechanisms to effective implementation of innovative medical technologies, and their application within OECD and EEA countries. COVID-19 research, vaccines, cost-effectiveness studies, and studies that did not discuss implementation were excluded. A SWOT analysis was utilized to categorize the mechanisms by therapeutic area and health system design.
Results: The review identified diverse mechanisms, including reinsurance, impact bonds, outcomes-based agreements, annuity payments, and risk-sharing agreements. Financial mechanisms, such as outcomes-based agreements, were prominent but highlighted implementation obstacles, including a lack of data infrastructure capable of linking outcomes to payments, which ultimately undermines the effectiveness of these strategies. Non-financial mechanisms, such as population health management, were also identified. The effectiveness varied, with some models showing significant improvement in technology accessibility, while others faced implementation and affordability challenges. Comparative analysis highlighted differences in efficacy dependent on the therapeutic area and type of health system in which the incentive is applied.
Conclusions: The review underscores multifaceted approaches to improve access to innovative medical technologies. While financial incentives play a crucial role, non-financial strategies are also vital. This study provides insights into which incentives are most effective in certain health systems and therapeutic areas. Policymakers can benefit from these insights, leveraging successful models and addressing challenges to ensure equitable access to medical innovations.

PP07 One Bad Apple Can Spoil The Barrel: Are We Effectively Evaluating Software As A Medical Device?

Luc Curtis-Gretton and Robert Malcolm (rob.malcolm@york.ac.uk)

Introduction: There are many differences between medical devices, pharmaceuticals, and Software as a Medical Device (SaMD). This should impact the way SaMDs are evaluated in health technology assessment (HTA). SaMD technologies often target multiple indications, are regularly updated, and often result in non-quantifiable benefits. The objective of this research was to identify problems and potential solutions when evaluating SaMDs in England.
Methods: This research took the perspective of the HTA process in England. We conducted a pragmatic review of publicly available grey literature, such as National Institute for Health and Care Excellence (NICE) guidelines and processes, government schemes, funding mechanisms, and other published reports and opinion pieces, to summarize how SaMDs are currently being evaluated. This included an overview of the current systems and funding structures (inclusive of recent developments), where potential issues may lie, and what is currently being done to address these issues. We concluded by making recommendations to improve the evaluation of these technologies.
Results: Difficulty quantifying outcomes of SaMD technologies, alongside the preference of decision-makers to evaluate technologies for single indications, causes a bottleneck of unevaluated technologies to build. HTA bodies then group many non-identical technologies into single appraisals, resulting in a range of SaMD technologies with varying quality being implemented through managed access agreements. Some schemes and funding mechanisms led by public bodies in England aim to improve efficiency and encourage technological development. However, the HTA process in England remains characterized by long evaluation processes and high clinical evidence requirements, which many SaMD providers find difficult to navigate.
Conclusions: Although progress has been made, there is clear incentive to improve the way in which SaMD technologies are assessed in HTA. We recommend that a more rapid mixed-method approach be implemented. This should draw on quantitative economic analysis supplemented with qualitative clinical, patient, and expert opinion. SaMDs should be evaluated either individually or within smaller groups than current evaluation systems.

https://doi.org/10.1017/S026646232400179X