health technologies; innovative and efficient HTA processes are needed. "Adaptive HTA", referring to the pragmatic use of HTA methods and existing (HTA) evidence, might offer solutions. We will present the results from a scoping review that mapped existing tools, methods, practices to transfer existing HTAs; and reflect on these findings given our own experiences of adaptation processes in LMICs.

Methods. We undertook a scoping review and systematically searched five electronic databases. Inclusion of articles followed strict in- and exclusion criteria. Data extraction focused on information regarding tools, methods, and practices that could aid the transferability of HTA analysis. Here, HTAs referred to full-HTAs and other HTA products, as partial HTAs, economic evaluations, or systematic reviews. Lastly, we mapped the possible overarching factors that can affect transferability.

Results. The search (November 2020) identified 2030 hits, of which 19 were included. Most HTA transfers followed five steps that closely resemble a de novo HTA process. The identified transferability tools, often checklists, were merely aids or a "catalyst" for the transfer and provided limited guidance for the whole transfer process. Contrastingly, we identified three frameworks that can support the whole process: European Network for HTA (EUnetHTA) Adaptation Toolkit, TRANSFER framework for systematic reviews, and paper series on systematic reviews for economic evaluations. Lastly, our findings pointed to various challenges and knowledge gaps; especially for transfers in low and middle income countries evidence is limited.

Conclusions. The re-use of existing evidence in HTA reports is not new; and readily part of de novo and adaptive processes. The innovative nature of adaptive HTA comes from its ability to unpack the process of adaptation and transferability. Simultaneously, this scoping review highlighted gaps in existing adaptive methods, and could aid future adaptive HTA process for experienced and new HTA-doers.

OP74 Assessing Public Confidence Towards COVID-19 Vaccines Through Social Media Insights Leveraged Using Artificial Intelligence Techniques

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Introduction. In areas where public confidence is low and there is a lack of understanding around behaviors, such as COVID-19 vaccine hesitancy, there is a need to explore novel sources of evidence. When leveraged using artificial intelligence (AI) techniques, social media data may offer rich insights into public concerns around vaccination. Currently, sources of 'soft-intelligence' are underutilized by policy makers, health technology assessment (HTA) and other public health research agencies. In this work, we used an AI platform to rapidly detect and analyze key barriers to vaccine uptake from a sample of geo-located tweets.

Methods. An AI-based tool was deployed using a robust search strategy to capture tweets associated with COVID-19 vaccination, posted from users in London, United Kingdom. The tool's algorithm automatically clustered tweets based on key topics of discussion and sentiment. Tweets contained within the 12 most populated topics with negative sentiment were extracted. The extracted tweets were mapped to one of six pre-determined themes (safety, mistrust, under-representation, complacency, ineffectiveness, and access) informed using the World Health Organization's 3Cs vaccine hesitancy model. All collated tweets were anonymized.

Results. We identified 91,473 tweets posted between 30 November 2020 and 15 August 2021. A sample of 913 tweets were extracted from the twelve negative topic clusters. Of these, 302 tweets were coded to a vaccine hesitancy theme. 'Safety' (29%) and 'mistrust' (23%) were the most commonly coded themes; the least commonly coded was 'under-representation' (3%). Within the main themes, adverse reactions, inadequate assessment, and rushed development of the vaccines as key findings. Our analysis also revealed widespread sharing of misinformation.

Conclusions. Using an AI-based text analytics tool, we were able to rapidly assess public confidence in COVID-19 vaccination and identify key barriers to uptake from a corpus of geo-located tweets. Our findings support a growing body of evidence and confidence surrounding the use of AI tools to efficiently analyze early sources of soft-intelligence evidence in public health research.

OP76 "Thunderbirds Are Go!" Rapid Response HTA Outputs For COVID-19

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Introduction. The COVID-19 pandemic has highlighted the need for rapid assessment of potential health technologies that can improve health outcomes in COVID-19 patients, as well as helping pressurized health service provision. Medical technologies play a key role in the COVID-19 pandemic, especially diagnostic tests and respiratory technologies. This study evaluates the rapid response work that the medical technology evaluation programme (MTEP) at the National Institute for Health and Care Excellence (NICE) has done in response to the COVID-19 pandemic.

Methods. Companies routinely submit medical technologies for evaluation by NICE through HealthTech Connect, which is an online portal for devices, diagnostics and digital technologies intended for use in the NHS or wider United Kingdom health and care system. During the COVID-19 pandemic, companies were able to use a designated email address if they perceived their technology may benefit the healthcare system regarding the COVID-19 pandemic. This new system bypassed the usual full registration and data submission. All technologies were reviewed that were submitted via HealthTech connect and email between March 2020 and June 2021.

Results. During this period, 20 technologies were submitted to MTEP. Most of these technologies were submitted via email. These technologies consisted of a mix of digital, diagnostic, and respiratory

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technologies. Seven technologies were selected for a rapid COVID-19 MedTech innovation briefing (MIB), with one specifically addressing issues around waiting lists because of knock-on effects of COVID-19 restricting normal clinical work. A further six technologies were not selected because of limited evidence, while one was not selected because it was not perceived as innovative. The other five technologies were progressed as normal MIBs as there was not enough evidence of potential benefits related to COVID-19 to expedite to a rapid COVID-19 MIB. In total, two technologies were selected for medical technology guidance (myCOPD and Anaconda) and are currently in development.

Conclusions. MTEP has responded to the COVID-19 pandemic by prioritising and producing rapid COVID-19 MIBs on technologies to improve health and social care.

OP78 Taking A Societal Perspective In Health Technology Assessment: Is Environmental Impact A Special Case?

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Introduction. A source of debate among the health technology assessment (HTA) community is what perspective should be taken in health economic evaluations. Many stakeholders advocate that a societal perspective is taken in order to include a comprehensive range of costs and outcomes and (in theory) make societally optimal decisions. The Second Panel on Cost-Effectiveness in Health and Medicine recommended that a societal perspective be presented alongside a health sector one. The Second Panel included environment as one item on its impact inventory—alongside productivity, education, and others—intended to support the use of a societal perspective. However, many HTA agencies, including the National Institute for Health and Care Excellence (NICE), have continued to use health sector-specific evaluations to inform decision-making. The presentation seeks to examine whether consideration of the environmental impact of healthcare requires/implies the formal adoption of a societal perspective in health economic analyses.

Methods. The presentation will provide an overview of the societal perspective, explaining how it differs from a health sector perspective and describing its main strengths and weaknesses. We then present policy analysis undertaken by NICE's Science Policy and Research team to identify reasons for measuring environmental impact in HTAs and examine whether these align with the broader arguments for or against adopting a societal perspective in economic analyses.

Results. Three reasons for considering environmental impact are identified: (i) to support parallel policies which demand healthcare system transformation against emissions targets; (ii) to ensure planetary and human health, in the future as well as the present; and (iii) to offset future healthcare resource use. We show that only the third reason aligns with arguments related to the choice of perspective for economic analyses. Moreover, this reason is arguably better aligned to maintaining a (potentially modified) health sector perspective. The implications of the results will be discussed with reference to updating reimbursement decision-making frameworks, such as those used by NICE, to account for the environmental consequences of healthcare.

OP79 Incorporating Environmental Impacts Into Health Technology Assessment: An Examination Of Potential Approaches And Challenges

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Introduction. In light of government and healthcare system commitments to reducing the carbon footprint of healthcare, health technology assessment (HTA) agencies are increasingly motivated to investigate how to consider environmental sustainability in their assessments and guidance. This constitutes a major departure from the existing remits and objectives of most agencies, which typically focus on improving population health outcomes. This presentation seeks to identify options for incorporating environmental impact data into HTA and to examine the main challenges, focusing on the National Institute for Health and Care Excellence (NICE) as a case study.

Methods. We present four broad approaches that could be pursued, informed by policy analysis undertaken by NICE. The strengths, weaknesses and implications of each approach are assessed.

Results. The first option is to act as an 'information conduit', aggregating and distributing in a standardized format environmental impact information that is provided voluntarily by health technology manufacturers. The second is to present complementary analyses of environmental impact data, separately but alongside results from established health economic analyses ('parallel evaluation' model). The third is to incorporate environmental impact data into health economic analyses, for example by monetizing environmental outcomes, so that quantitative estimates of treatment value are directly affected by environmental benefits and costs ('integrated evaluation' model). The fourth is to create new decision-making frameworks for evaluating healthcare interventions that are not expected to improve health-related outcomes, but claim to have relative environmental benefits.

Conclusions. We conclude that these approaches are not mutually exclusive, and all involve some degree of benefit and risk. We explain why the parallel evaluation model may be the most appropriate approach for NICE as a first response to the increased demand for guidance on the environmental impact of health technologies. We also outline activities being undertaken by NICE and other agencies such as the Canadian Agency for Drugs and Technologies in Health to develop new methodologies for incorporating environmental impact data into their HTAs.

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