pressing concern, including: workforce requirements; education, training and literacy for the medical workforce and community; infrastructure; data; and ethical, legal and social implications (ELSI). HealthPACT recommended a national coordinated approach to policy development across jurisdictional boundaries to ensure appropriate adoption of genomics. Stakeholder consultation confirmed overwhelming support for greater national coordination of the application of genomic knowledge in healthcare. Five strategic priorities were developed to support appropriate integration of genomics into health care for Australians: person-centered approach; workforce; financing; services; and, data. Three principles underpin strategic priorities: i) application of genomic knowledge is ethically, legally and socially responsible and community trust is promoted; ii) access and equity are promoted for vulnerable populations; and, iii) application of genomic knowledge to health care is supported and informed by evidence and research.

CONCLUSIONS:

HS identified significant policy, workforce, funding and sustainability issues already facing state and territory governments that would, in time, face the federal government. The National Health Genomics Policy Framework outlines an agreed high-level national approach to policy, regulatory and investment decision-making for genomics and was approved by all Australian health Ministers in November 2017.

OP66 Tumor Profiling Tests In Early Breast Cancer: A Systematic Review

AUTHORS:

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INTRODUCTION:

Tumor profiling tests can help to identify whether women with breast cancer need chemotherapy due to their risk of relapse, and some may be able to predict benefit from chemotherapy. We focused on four genetic tests: Oncotype DX (O-DX), MammaPrint (MMP), EndoPredict and Prosigna, and one immunohistochemistry test, IHC4, for the National Institute of Health and Care Excellence as part of their Diagnostic Appraisal Programme.

METHODS:

A systematic review was undertaken, including searching of nine databases in February 2017 plus other sources including a previous review published in 2013. The review included studies assessing clinical effectiveness of the five tumor profiling tests, with or without clinicopathological factors, to guide decisions about adjuvant chemotherapy in people with ER-positive, HER-2 negative, Stage I-II cancer with 0 to 3 positive lymph nodes (LN). The PROBAST tool and Cochrane risk of bias tools were used to assess risk of bias.

RESULTS:

A total of 153 studies were included; the strength of evidence base for individual tests was varied. Results suggest all tests are prognostic for risk of relapse, though results were more varied in LN positive (+) patients than in LN negative (0) patients. Evidence was limited about whether tests can predict benefit from chemotherapy (available for MMP and O-DX only). Studies that assessed the impact of the tests on clinical decisions indicate that the net change in chemotherapy recommendations or decisions pre-/post-test ranged from an increase of one percent to a decrease of 23 percent among UK studies, and a decrease of zero percent to 64 percent across European studies.

CONCLUSIONS:

The studies included in the review suggest that all of the tests can provide prognostic information on the risk of relapse; however results were more varied in LN+ patients than in LN0 patients. There is limited and varying evidence for prediction of chemotherapy benefit.

OP68 Methods For The Economic Evaluation Of Precision Medicine

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INTRODUCTION:

Methods that accommodate heterogeneity in outcomes are not widely used in economic evaluation. With the growth of precision medicine (PM), where choice of treatment is informed by the molecular characteristics of the patient or disease, we expect to see greater heterogeneity in effectiveness and cost of interventions. Our objective was to compare analytical frameworks for valuing heterogeneity in economic evaluation, and consider their strengths and weaknesses for applications in PM.

METHODS:

We conducted a literature review to identify papers that proposed an analytical framework for economic evaluation of a health intervention, and that placed a value on heterogeneous effects. We compared the frameworks considering the purpose of the analysis, including where in the product lifecycle the framework could be used, the types of PM interventions where the framework could be applied, and its ability to address methodological challenges of evaluating PM.

RESULTS:

Five analytical frameworks were identified: covariate adjustment methods, value of stratification, value of heterogeneity (VoH), expected value of individualized care (EVIC), and loss with respect to efficient diffusion (LED) metrics. Each framework addresses a slightly different research question, and is suited to different settings and interventions. With the exception of covariate adjustment, all focus on maximizing net benefit within certain constraints and quantify the opportunity cost of ignoring heterogeneity. Only VoH considers the relationship between heterogeneity and uncertainty, and no framework explicitly includes the cost or uncertainty associated with identifying subgroups.

CONCLUSIONS:

The ability to value heterogeneity is a critical component of economic evaluations of PM. The choice of an appropriate analytical framework will help strengthen the quality of economic evidence available to support health technology assessment of PM technologies, informing PM adoption decisions, and supporting efficient allocation of health care resources.

OP71 Evidence Grading Systems Used In Health Technology Assessment Practice

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INTRODUCTION:

To facilitate moving from research findings to conclusions when conducting systematic reviews (SRs) and health technology assessments (HTAs), evidence grading systems (EGSs) have been developed to assess the quality of bodies of evidence and communicate (un) certainty about the effects of evaluated technologies. Use of EGSs has become an essential step in conducting SRs and HTAs and those relying on review conclusions should be aware of EGSs' potential limitations.

METHODS:

This study aims to identify EGSs used in SR and HTA practice, and summarize findings on their inter-rater reliability (IRR). Relevant sources were searched to identify EGSs used in recently published SRs and IRR studies of available EGSs. Members of the International Network of Agencies for Health Technology Assessment were surveyed regarding their current approaches.

RESULTS:

Preliminary results indicate that only two conceptually similar EGSs are currently used by several organizations in SR and HTA practice: (i) the Grading of Recommendations Assessment, Development and Evaluation (GRADE) and (ii) the Agency for Healthcare Research and Quality Evidence-based Practice Center Program (AHRQ-EPC). Both approaches emphasize a structured and transparent method. However, results from published IRR studies suggest there is a risk for variability in their application due to researchers' diverse levels of training and experience in using them, and the complexity and heterogeneity of evidence in SRs.

CONCLUSIONS:

Validated EGSs can play a critical role in whether and how research findings are eventually translated into practice. However, our results indicate a low level of uptake of EGSs in HTA practice. Both currently used EGSs are susceptible to misuse that allows different researchers to grade the same body of evidence differently, and their performance has not been robustly

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