

to vary by the academic centre appraising the submission, reflecting the inherent objectivity and uniform implementation of NICE methodology.

PHP118

CAN INDIVIDUAL HEALTH TECHNOLOGIES IMPROVE OVERALL CHRONIC DISEASE MANAGEMENT?

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OBJECTIVES: Chronic disease is resource intensive for health care systems. Considerable efforts have focused on the management of chronic disease in the community setting however the role of individual health technologies is often overlooked. The purpose of this analysis was to identify examples of individual health technologies that contribute to overall chronic disease management. **METHODS:** The Medical Advisory Secretariat (MAS) in Ontario has published a substantive body of evidence-based analyses on health technologies. The MAS Ontario Health Technology Assessment Series was searched for reports published between 2006 and 2011. Findings were limited to analyses that reported on health technologies with moderate to high quality evidence of effectiveness for chronic disease management. Outcomes of interest included health resource utilization, patient and clinical outcomes, and economic analyses measures. **RESULTS:** Two technologies had direct evidence of the cure of chronic disease. Bariatric surgery was effective in the resolution of diabetes among morbidly obese adults (77% resolution; 95% CI 71%-83%), with a cost of \$15,697 Canadian dollars (CAD) per quality-adjusted life year (QALY) relative to usual care. Ablation for atrial fibrillation resulted in greater freedom from arrhythmia than medical treatment alone (RR 0.30; 95% CI 0.11-0.79), and downstream cost savings. Two technologies were effective in the prevention of chronic wounds and 8 technologies were effective in the management of chronic obstructive pulmonary disease, stroke, coronary artery disease, congestive heart failure or benign prostatic hyperplasia. Among these 10 technologies, all 5 analyses that reported incremental cost-effectiveness ratios were cost-effective based on a \$50,000 (CAD) per QALY threshold. **CONCLUSIONS:** This review demonstrates that individual health technologies can be both effective and cost-effective in the overall management of chronic disease. Therefore health technologies can be a viable contributing factor to chronic disease management and should be considered as an integral component of community health care.

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SCORING INNOVATION AND CLINICAL BENEFIT FOR THE ALLOCATION OF FUNDS – A COMPARISON OF THE GERMAN AND FRENCH PRICING SYSTEMS

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OBJECTIVES: To compare the German (AMNOG) and French (ASMR) category scoring pricing systems; and to evaluate whether the two agencies have a similar interpretation of innovation and clinical benefit of the same drugs. Our results then allow us to theorize the future of European scoring systems. **METHODS:** A search of the G-BA website was conducted to identify all drug-related Health Technology Assessments (HTA) published between January 2011 and December 2012. Once a list of assessments was compiled, we searched the HAS website to identify the same drug HTAs published within the same time period. Then, for both agencies we identified and compared the methods in which they scored both innovation and clinical benefits of these drugs. To note: Germany (G-BA) provide AMNOG scorings from 1 (substantial benefit) to 6 (negative additional benefit), whilst France (HAS) provide ASMR scorings from I (major improvement) to V (no improvement). **RESULTS:** In this time period, sixteen HTAs were published by the G-BA, corresponding to 12 HTAs published by HAS. Upon observation of the scoring comparisons, only 3 of the 12 drugs were given the same scores by both agencies: Fampridine (AMNOG 5; ASMR V); Cabazitaxel (AMNOG 3; ASMR III); Linagliptin (AMNOG 5; ASMR V). For the remaining 12 drugs, there appeared to be little alignment in the scorings of innovation and clinical benefits: Vemurafenib (AMNOG 2; ASMR III), Vandetanib (5; IV), Belatacept (3; V), Apixaban (3; IV), Eribulin (6; IV), Collagenase clostridium histolyticum (5; no score), Abiraterone acetate (5; III), Fingolimod (3; IV) and Ticagrelor (2 and 5; IV). **CONCLUSIONS:** There does not seem to be a strong relationship between the criteria scoring of AMNOG and ASMR, demonstrating the heterogeneity of the European market. Whether increased HTA co-operation will align scoring more closely, or increased Value Based Pricing structures will drive divergence, is yet to be seen.

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AN INVESTIGATION INTO THE KEY DRIVERS INFLUENCING THE DECISION MAKING OF THE SCOTTISH MEDICINES CONSORTIUM

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OBJECTIVES: The main aim of this study was to identify significant implicit and explicit factors which play a role in decision making of the Scottish Medicines Consortium (SMC). Once these factors have been identified, the degree to which they influence the final decision will be ascertained. **METHODS:** A retrospective sample of submissions was taken from the SMC website. A bivariate statistical analysis was performed on the data extracted, allowing identification of the most fundamental drivers of an SMC decision. **RESULTS:** Between January 2006 and September 2011, 577 appraisals were made by the SMC. Of these appraisals, 27% accepted for full use, 30% were accepted for restricted use, whilst 43% of submissions were not recommended for use in Scotland. During this time period, the mean ICER for drugs accepted for use is £30,013 and for those that were not

recommended for use the value was £38,132. Analysis of over 500 submissions to the SMC showed that a number of explicit, key drivers in line with SMC criteria were significant, including: the unofficial £30,000 ICER limit, the use of appropriate economic and clinical comparators, as well as robust demonstration of the economic case. Other key drivers which are more implicit, yet critical to decision making, were also shown to be significant. These included; the orphan status, submissions targeting paediatric populations and restrictions on the therapeutic scope of submissions placed by manufacturers. **CONCLUSIONS:** From a manufacturer point of view understanding the tendencies of the SMC is critical, as a firmer understanding of the key determinants of the SMC decision may lead to improved quality and robustness of future submissions. From the perspective of the SMC and the wider society, these insights will allow the public and the SMC to review the drivers of the decisions to establish whether they are in line with official criteria.

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EXCITE – A NEW COLLABORATIVE MODEL OF PRE-MARKET EVALUATION OF HEALTH TECHNOLOGIES

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OBJECTIVES: Many non-drug technologies with regulatory approval fail to be recommended for reimbursement. Reasons include low quality evidence or lack of relevance Excellence in Clinical Innovation and Technology Evaluation (EXCITE) is a collaboration between industry, government and academia to develop a harmonized pre-market evaluation that mitigates risk, improves adoption, and responds to system needs **METHODS:** EXCITE works with industry to evaluate evidence of efficacy and safety, cost effectiveness and adoption realities. It builds on Ontario's field evaluation experience. Structure: 1) Management board representing industry, government, academia and the Ontario Health Technology Advisory Committee (OHTAC); 2) Scientific collaboration of 7 Methodological Centres (MC) and 24 Academic Health Science Centres and a Quality Assurance Committee; and 3) Chief Scientific Officer and secretariat. Process: The management board prioritizes applications based on innovation, relevance, and commercialization. MCs develop a protocol and budget for clinical evaluation, systematic review, and an economic analysis. Human factors and usability analysis, and preference studies are offered. Consideration is underway for conditions of early adoption. Studies are funded by industry through MaRS, which fosters and commercializes innovation. **RESULTS:** Of 17 applications (year 1), 3 have commenced evaluation, 3 are in protocol development, discussions ongoing in 3 and one declined. Studies are designed to satisfy regulatory and reimbursement requirements and reflect complexities of adoption while maintaining high academic standards. Lessons learnt include a better understanding of the complexities of adoption and the benefit of endorsement in mitigating risk; limited funding for evaluations; tension between needs of industry and independence and objectivity of MCs; and intricacies of contract structures. **CONCLUSIONS:** EXCITE is a potential alternative to post-market HTA in Ontario, and may improve adoption in other jurisdictions. Expansion to a national and international scale will provide global reach for evaluated technologies. This is a potentially innovative and powerful model of early HTA.

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ROLE OF SUBGROUP ANALYSES FOR HEALTH TECHNOLOGY ASSESSMENTS

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OBJECTIVES: Cost effectiveness analyses play a critical role in determining coverage of novel drugs and devices. Increasingly, payers are demanding subgroup analyses to determine indications which would be covered by the national health system or insurance agency. **METHODS:** To understand and review trends in the use of subgroup cost effectiveness analysis, we analyzed NICE HTAs for products approved between 2011-2012. Manufacturer submissions for CEA were compared to final review and decision by HTA agency. Analogs were identified and case studies were developed to further understand the use of subgroup analyses and cost effectiveness models. **RESULTS:** Decisions made by NICE in 2011-2012 show increasing trends towards the use of subgroup analysis for determining indications for coverage by national payer bodies. Between 2011-2012, 80% of the assessments included subgroup analyses. Approximately half of them included cost effectiveness analyses for various subgroups. Interestingly, the ICER values estimated by NICE for the same subgroups showed a large variation (1X-3X fold difference) compared to ICER values estimated by manufacturers. Selected case studies highlighted that for several products, NICE is recommending treatments only for subgroups whose ICER values are within the cost effectiveness threshold. **CONCLUSIONS:** New products need robust broader population and subgroup analyses for insurance coverage.