

**Methods.** Literature was searched by three different methods. First, a search strategy was used in six different databases. Second, the Database of Instruments for Resource Use Measurement (DIRUM) was hand-searched. Third, experts from six different European Union countries within the field of health economics were asked to provide relevant studies. Data was analyzed according to the Resource Use Measurement Issues (RUMI-) framework, which was developed for this study.

**Results.** Of the 3,478 articles provided in the initial search, 77 were fully analyzed. An overview with evidence is provided for every resource use measurement issue. Most research focused around the issue ‘how to measure’, in particular the effect of self-reported data versus administrative data. In contrast, little to no research has been done on issues ‘what to measure’ and ‘for which purpose to measure’.

**Conclusions.** Results of this study provide insight in the effect of a chosen measurement method. The results stress the importance of measuring the true quantities of resources utilized for generating valid costing estimates. Furthermore, this article highlights the lack of evidence in appropriate resource use measurement methods.

## OP123 A Cost-Effectiveness Registry For Prioritization In Emerging Markets

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**Introduction.** Decision-makers in low- and middle-income countries (LMICs) often must prioritize health spending without quantitative benchmarks for the value of their purchases. The Tufts Global Health Cost-Effectiveness Analysis (GH CEA) Registry ([healtheconomicvaluation.org/GHCEARegistry/](http://healtheconomicvaluation.org/GHCEARegistry/)) is a freely-available, curated and standardized dataset designed to address this need.

**Methods.** All indexed English-language articles published between 1995 and 2017 are currently included in the GH CEA Registry. Studies are limited to those reporting cost-effectiveness in terms of cost per disability-adjusted life years (DALYs) averted, a commonly-employed metric in global health. Abstracted data include intervention type, comparator(s), country, funding source, study characteristics (e.g., perspective, time horizon), primary study findings, sensitivity analyses, and disaggregated data on costs and DALYs. Study quality is assessed using a numerical scoring system (from 1-7, higher scores indicating better quality) based on accuracy of findings and comprehensive reporting of methods and results.

**Results.** To date, 620 articles have been included in the GH CEA Registry. Among LMICs, studies have been conducted primarily in Sub-Saharan Africa (41 percent) or South Asia (34 percent), have focused on communicable diseases (67 percent), and have involved immunization, educational, or pharmaceutical interventions (67 percent). As a priority-setting example, seven percent of interventions from higher-quality studies (ratings of 5 or higher) were reported to be cost-saving (i.e., lower costs and greater DALYs than standard care), two-thirds of which involved primary disease prevention (e.g., immunization, educational or behavioral interventions).

**Conclusions.** The GH CEA Registry is a new tool for decision-makers in LMICs, particularly those without a formal health technology assessment infrastructure but with a remit for providing access to essential, cost-effective health interventions. New functions are under development, including league tables for priority ranking, a repository for shared models, and tools for enhancing transferability between settings.

## OP124 Disinvestment – A Global Challenge Requiring Collaboration?

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**Introduction.** Australia has had some success at utilizing Health Technology Assessment (HTA) to disinvest and reassess medical services. This has been achieved through a range of methods including identifying services through initiatives such as ‘Choosing Wisely’, examining real world service data and seeking expert clinical opinion. This presentation will discuss how better international collaboration in disinvestment and reassessment methods using HTA could lead to more efficient health care systems.

**Methods.** Both the Australian and South Korean governments have a particular interest in disinvestment and reassessment in their health care systems. These countries have been sharing information over the past two years with a common goal of improving their health systems through a rigorous reassessment process. The Australian Government is in the process of reviewing all publicly funded services utilizing expert clinical committee advice, often referring the reassessment of services to a HTA process. A similar process is also being undertaken in South Korea.

**Results.** Australia has disinvested in a wide range of services using HTA, including hip arthroscopy, lipectomy and hyperbaric oxygen therapy. It is also undertaking an extensive reassessment of 5,700 services. Reassessment may not lead to HTA, but it often includes an examination of whether a service should be subjected to HTA to remain publicly funded. Australia and South Korea have similar approaches in undertaking disinvestment and reassessment. HTA disinvestment and reassessment strategies have generated good outcomes for consumers, health care providers and funders in both countries.

**Conclusions.** Disinvestment and reassessment of medical services require funders that support the continual improvement of health care systems. Disinvestment and reassessment HTA can be difficult, mainly due to external interests - an issue experienced by many countries. Further international collaboration in this area may provide a more supportive environment to undertake HTA for disinvestment.

## OP127 Sugar And Spice And All Things NICE - Managed Access Agreements

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**Introduction.** The National Institute for Health and Care Excellence (NICE) has increasingly agreed to reimburse innovative products with high levels of uncertainty as part of managed access agreements (MAAs) while additional data are collected, through the new Cancer Drugs Fund (CDF) or highly specialized technology (HST) pathways. This research aimed to review the data collection stipulations of current MAAs.

**Methods.** We reviewed all current MAAs entered into between NHS England and manufacturers as of 29 October 2018 and key data were extracted.

**Results.** Twenty-two MAAs were identified (19 through the CDF; three through HST). All MAAs involved an observational data collection component. The source of observational data collection was existing NHS databases (19/22 MAAs: 86.5 percent), existing independent registries (one MAA: 4.5 percent [ataluren]); bespoke MAA registry maintained by manufacturer (1/22 MAA: 4.5 percent [asfotase alfa]), and registries developed as a part of regulatory approval and maintained by the manufacturer (1/22 MAA: 4.5 percent [elosulfase alfa]). Only eight MAAs (asfotase alfa, ataluren, elosulfase alfa, brentuximab vedotin, venetoclax, ibrutinib, daratumumab, and pembrolizumab) had observational data collection as the primary method of data collection. Additionally, 17/22 MAAs (77 percent; all from the CDF) also required ongoing data collection from clinical trials as a key component of the data collection arrangement.

**Conclusions.** This research identified observational data collection as a requirement in all MAAs, which is primarily through existing registries (except ataluren, which required development of a bespoke registry), while ongoing trial data collection was limited to the CDF. The relatively low cost of using existing registries to fulfil data requirements, with the ability to achieve reimbursement whilst still collecting data from ongoing RCTs, make MAAs an attractive proposition for manufacturers. NICE reportedly plan to increase use of MAAs, with ongoing NICE consultation for changes in the appraisal process potentially allowing expansion to include all indications, which would mean increased opportunities to explore innovative MAAs to support access in the future.

## OP129 Healthcare Utilization After Bariatric Surgery

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**Introduction.** Bariatric surgery has become one of the fastest growing operative procedures due to its sustained results and the increasing prevalence of obesity worldwide. Despite this fact, bariatric surgery carries the usual risks and threats of surgical interventions and therefore its benefits might be undermined by its mid and long-term complications.

**Methods.** This retrospective study included obese patients requiring bariatric surgery from January 2004 to December 2017 provided by a private healthcare organization in Belo Horizonte, Brazil. Data regarding healthcare utilization were extracted from an administrative database (software Oracle Business Intelligence). Continuous variables were expressed as mean and standard deviation. Log-Rank test was used to adjust the survival curve (software STATA 13.1, Stata Corp, USA). This historical cohort resulted in no interventions, neither during the instituted treatment nor after the observed outcome. Privacy of subjects and the confidentiality of their personal information were handled in accordance with the ethical principles of the Declaration of Helsinki.

**Results.** In total, 16,786 patients were included in the study (mean age  $37.2 \pm 10.2$  years; female 79.2 percent; mean body mass index  $42.4 \pm 5.5$  kg/m<sup>2</sup>). Patients were followed for up to seven years before and after surgery (total of 78,113 patients/year). For this group, the hospitalization rate was 0.099 / patients-year before versus 0.151 / patients-year after the bariatric surgery ( $p < 0.001$ ). There were 224 deaths (1.33 percent) identified during the follow-up period, 0.4 percent in the first 30 postoperative days. The average costs for hospitalization were USD 3,339.36 and USD 4,305.04 for open and laparoscopic surgery, respectively.

**Conclusions.** Bariatric surgery has been an increasingly popular choice in the management of obesity. In our sample, it did not reduce the overall mid-term healthcare utilization rate.

## OP130 Evidence-Informed Policy For Biologic Medicines In Brazil

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**Introduction.** The Department of Sciences and Technology (Decit) of the Brazilian Government has played a vital role in drafting of the National Policy for Biologic Medicines. Decit has provided methodological support to the working group, conducting a rapid review and a rapid evidence synthesis to subsidize decisions and recommendations.

**Methods.** We used the Methodological Guidelines for the Elaboration of Evidence Synthesis for Health Policies, which is a product of our own team, based on the SUPPORTing Policy relevant Reviews and Trials (SUPPORT) Tools for evidence-informed health Policymaking.

**Results.** The Decit team participated in the key steps to develop an evidence-informed policy. Our product, "Barriers to Access to Biologic Products: a Rapid Review" was used for the prioritization of health problems and the description of the problem. We then proceeded to the evidence synthesis planning and definition of the research question from an acronym. Together with the coordination of the working group, we decided to tackle the problem of interchangeability of biologic products motivated solely by economic factors in a synthesis of policy evidence. Our evidence synthesis went so far as to describe policy options. The working group used this product to inform a Policy Dialog.