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and feasibility of involvement as well as ethical and methodological considerations.

CONCLUSIONS:

Users, caregivers, and citizens must participate in the activities of regional HTA units. Each of them have different roles and can contribute to evaluation processes. Their involvement in HTA activities is warranted for co-producing better evaluation more adapted to users' needs in healthcare and social services.

PP43 MACBETH In Brazilian Hospital-Based HTA: Thrombosis Prophylaxis

AUTHORS:

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INTRODUCTION:

Instituto Nacional de Traumatismo-Ortopedia (INTO) administers the Enoxaparin drug to prevent deep vein thrombosis (DVT) after extensive orthopedic surgeries. Nevertheless, new oral anticoagulants that offer more comfort and efficacy, but present higher risk of bleeding, have been putting in question the use of Enoxaparin. Making use of the MACBETH method, this study develops a Multicriteria Value Measurement model to evaluate such drugs.

METHODS:

MACBETH was applied in helping INTO to evaluate two drugs (Rivaroxaban and Enoxaparin), taking into account drug benefits and risks, through a series of interviews and decision conferences attended by INTO stakeholders that acted as evaluators in the model-building process, supported by M-MACBETH DSS (www.m-macbeth.com). Following MACBETH preference elicitation process, the evaluators were asked to make qualitative pairwise comparison judgements of difference in value between stimuli for constructing quantitative value and weighting scales. These scales allow measuring the relative value of the drugs on each evaluation criterion, separately and globally. The value measurement process was informed by a literature review and meta-analysis of randomized clinical trials with a critical appraisal of the evidence.

RESULTS:

We report a model-structure with eight criteria, hereafter presented by decreasing order of their weighting: Death from any cause, Clinically significant bleeding, Proximal DVT, Distal DVT, Existence of antidote, Thrombocytopenia, Costs, and Comfort. From the value model developed and after performing sensitivity and robustness analyses, Rivaroxaban was considered a robust option for thrombosis prophylaxis, under the MACBETH value framework and at the light of a simple additive aggregation of those eight criteria.

CONCLUSIONS:

This study shows how a value measurement socio-technical framework, combining MACBETH with scientific evidence within a participatory group evaluation process, can support health technology assessment in a user-friendly and effective way. MACBETH facilitates transparent and robust decision-making in the face of complex evaluation problems that the hospital often faces.

PP44 Effectiveness Of Insulin Glargine Versus Detemir In Type 1 Diabetes

AUTHORS:

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INTRODUCTION:

The use of long-acting insulin analogues have been reported in patients with type 1 diabetes mellitus who exhibit important oscillations of their daily blood glucose, although the therapeutic benefits are lacking. The aim of this study was to evaluate the effectiveness and safety of the insulin analogue glargine compared detemir to support health decision-making.

METHODS:

We performed a systematic review with meta-analysis of observational studies (cohort and registry), available in the MEDLINE (Pubmed), Latin American and Caribbean Health Sciences (LILACS), EMBASE and Cochrane Library databases (accessed August 2017), including research in

the electronic journal Diabetes Care and gray literature. Several combinations of terms were used, including disease terms, interventions and type of study. The results evaluated were: glycated hemoglobin; weight gain; occurrence of severe hypoglycemia; total insulin dose; and, fasting capillary glycemia. Methodological quality was assessed using the Newcastle scale. The meta-analyses were performed in Review Manager® 5.2 software using a random effects model. Protocol number CRD42017054925 (International Prospective Register of Ongoing Systematic Reviews).

RESULTS:

A total of 705 publications, eight cohort studies were included. The quality of included studies was classified as high. In the meta-analysis, the results for episodes of severe hypoglycemia ($p = 0.002$), measurements of fasting capillary glycemia ($p = 0.01$), and weight gain ($p = 0.001$) were favorable for detemir. The glycated hemoglobin endpoint ($p = 0.49$, heterogeneity = 89 percent) revealed high heterogeneity and no statistically significant difference between groups, showing no difference between the interventions for glycemic control.

CONCLUSIONS:

Although some results are favorable to detemir, it was not possible to identify significant differences in effectiveness and safety between the two analogues evaluated, requiring new long term studies and better quality of methodological studies.

PP46 When Composite Measures Or Indices Fail: Data Processing Lessons

AUTHORS:

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INTRODUCTION:

Index mining is a new discipline that aims to search for the composite measures or indices most relevant to the contexts or outcomes. After reviewing three frailty indices and principal component (PC)-based indices, we hereby show certain occasions that can lead to ineffective indices, which consist of bias or fail to represent the theories.

METHODS:

We reproduced and reviewed the three frailty indices and the 134,689 PC (principal component) -based indices from previous publications. The impact of aggregating the input variables on the final indices was analyzed using forward stepwise regression.

RESULTS:

Several methods to combine the input variables were related to ineffective projection of information onto the indices. The most common causes leading to ineffective summation of input variables were shown in three examples involving different types of input variables, which were positively or negatively correlated or uncorrelated to the outcome. Ineffective indices were created often because of the summation of redundant information or uncorrelated variables.

CONCLUSIONS:

The creation of ineffective indices can be avoided if the relationships between input variables and outcomes are properly scrutinized. The creation of composite measures and indices is still a discipline under active development. The three examples we identified are the mistakes that may be repeated unintentionally and need to be addressed with explicit rules. A reporting guide for the creation of composite measures has been proposed. A proper review of index objectives, data characteristics, and data limitations before creating composite measures or indices is recommended.

PP47 Defining The Needs And Preferences Of Patients With Dry Eye Disease

AUTHORS:

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INTRODUCTION:

Dry eye disease (DED) is a common condition that significantly impacts patients' quality of life. Previous studies have explored the impact of DED on patients' lives qualitatively; however, patients' preference structures have not been thoroughly explored quantitatively.