Introduction. With the fast speed of aging, burden from non-communicable diseases (NCDs) is increasing in China, and will continue to increase to 2020 and beyond. This study aims to estimate the potential gains in health-adjusted life expectancy (HALE) after hypothetical elimination of four NCDs among Chinese elderly from 1990 to 2016, including cardiovascular diseases (CVD), cancers, chronic respiratory diseases (CRD) and diabetes mellitus (DM).

Methods. Based on data from Global Burden of Disease 2016, we generated life table by gender using Sullivan method to calculate HALE. Disease-deleted method was used to calculate cause-elimination HALE, after hypothetical elimination of specific diseases. This method could combine the impact of mortality and morbidity, which are particularly useful for estimating the impact of the disease and setting priorities for health planning to get ready for the new challenges in upcoming decade.

Results. From 1990 to 2016, HALE increased for all age groups. After hypothetically eliminating the four main NCDs, potential gain in HALE by CVD, DM and cancers increased, while CRD decreased from 1990 to 2016 for both genders. Among four main NCDs, potential gain in HALE after eliminating CVD was largest and increased most for both genders. Although elimination of DM led to the smallest gain in HALE, the increasing speed of gain in HALE by DM was faster than that by CVD and cancers from 1990 to 2016.

Conclusions. This study highlights the potential gains in HALE of NCDs among Chinese elderly from 1990 to 2016. HALE of Chinese elderly could further increase from the reduction of NCDs. Control measures and targeted prevention should be carried out to get ready for the new decade.

PP70 Identification Of Prostheses With Worse Than Expected Outcomes

Jorge Arias de la Torre (jorgeariasdelatorre@gmail.com), Olga Martínez, Kayla Smith, Miquel Pons-Cabrafiga, Daniel Prieto-Alhambra, Jose Valderas, Vicente Martin, Jonathan Evans, Raul Marcos, Marta Esteban, Susana Villabrille and Mireia Espallargues

Introduction. Monitoring the effectiveness of knee and hip arthroplasties could be useful at the clinical, economic, and patient levels. In Catalonia, there is currently no systematic monitoring of the different prostheses available. The aims of this study were to propose an approach for the systematic identification of knee and hip prostheses with the highest revision rates, and to identify those with the poorest outcomes.

Methods. Data recorded from January 2005 to December 2016 were considered from 53 out of the 61 public hospitals in Catalonia included in the Catalonian Arthroplasty Register (RACat). Specific prostheses were classified by joint, type, fixation, and, in total hip prostheses, the bearing surface. Prostheses with the worst outcomes were identified using a three-step approach, based on previous literature: (i) screening using Poisson models; (ii) comparison of prostheses using adjusted Cox models; and (iii) consensus-based

review by a panel of orthopedic surgeons to detect possible sources of bias. After this process, selected prostheses were provisionally labeled as having the poorest outcomes. This process will be repeated periodically within the RACat to definitively classify the prostheses.

Results. After first two steps, ten knee prostheses and eight hip prostheses were identified. After the panel discussion (third step), one knee and one hip prosthesis were excluded from the final list. The knee prosthesis was excluded because it was a uni-compartmental implant, while the hip prosthesis was excluded because it was a monoblock implant. Finally, nine knee prostheses and seven hip prostheses were provisionally identified as having the worst results relative to other available prostheses. These results await confirmation in subsequent analyses.

Conclusions. This study contributed to the current need to identify hip and knee prostheses whose outcomes might be worse than expected. This identification could have an impact at the patient, surgeon, industry, and stakeholder levels.

PP72 Using INTEGRATE-HTA On The Example Of Rasterstereography For Scoliosis

Barbara Buchberger (barbara.buchberger@medman. uni-due.de), Kaya Jastrzebski and Laura Krabbe

Introduction. Full health technology assessment (HTA) reports discuss not only the safety and efficacy of a technology, but also the economic, ethical, legal, socio-cultural, and organizational aspects. INTEGRATE-HTA is a completed European Union project that developed concepts and methods for a patient-centered, integrated assessment of complex technologies. Technologies can be considered complex if they are characterized by a large number of interacting components, a wide variability of outcomes, or a high degree of flexibility. In contrast to the usual linear approach of addressing individual HTA domains separately, the INTEGRATE-HTA methodology is based on the assumption that different aspects of the domains interact. From the very beginning, these interactions are captured systematically using various tools. Continuous reflection and compaction of these relations can lead to an extended perspective on a technology. As a result, complexity and mechanisms of action open up, helping to channel public discussion and implementation. We investigated whether using the INTEGRATE-HTA methodology improves the understanding of individual domains and their interactions.

Methods. According to the methodology, an initial logic model for rasterstereography in patients with scoliosis was developed and successively expanded. A synoptic table, showing multiple maps of individual aspects to domains, and a complexity checklist were used. In addition, harvest plots were created and the socio-cultural impact of the disease was highlighted as a semantic complex. A final logic model and an interaction figure were established to initiate discussion.

Results. Having been classified as slightly complex in the beginning, rasterstereography turned out to be highly complex after using a variety of tools and a final graphical representation; the multiple mapping of individual aspects to domains resulted in a high density of interactions.

Conclusions. The INTEGRATE-HTA methodology helped to identify interactions between domains and significantly expanded the perspective on a technology. It improved patient-centered understanding and facilitated the discussion of single aspects.

PP78 Analysis Of Resource Utilization In Psoriasis Care In The Brazilian Health System

Larissa de Araujo Costa Andrade (larissa.andrade@abbvie.com), Ricardo Moreira and Vinicius Vitale

Introduction. Psoriasis is associated with metabolic disorders and has a significant negative impact on patients' quality of life. There is little information about treatment patterns and the resources used to treat psoriasis and its associated comorbidities. This study aimed to evaluate the frequency of metabolic syndrome (MetS) and estimate the costs associated with psoriasis care in the Brazilian health system.

Methods. A cross-sectional observational study was conducted of 293 Brazilian patients with psoriasis who attended selected dermatology outpatient centers in Brazil during a one-year period. Patients underwent detailed skin and rheumatologic assessments and a series of laboratory tests. The annual costs were estimated by multiplying the amount of each resource consumed by its unit cost.

Results. The prevalence rate of MetS was high in this cohort (50%). Other metabolic disorders were more common in this group than in the general population, including hypertension (62%), diabetes (31%), dyslipidemia (75%), and obesity (53%). The disease duration was, on average, 17.2 years. There were 2,713 consultations reported by 288 patients (average of nine per patient per year). The most common specialists consulted were: dermatologists (93%); general practitioners (41%); cardiologists (27%); rheumatologists (18%); and endocrinologists (13%). There were 110 non-physician visits (average of 11 per patient per year), of which the most frequently consulted specialists were nutritionists (26%), psychologists (24%), and nurses (22%). A total of 279 patients (95%) had at least one medical test (average of 18 per patient per year). Among the treatments required for other conditions, 65% (n = 149) of prescribed medicines were for the cardiovascular system and 24% (n = 5/21) of hospitalizations were due to diseases of the circulatory system; myocardial revascularization was the costliest procedure (USD 2,298).

Conclusions. MetS is frequently associated with psoriasis and directly affects health resource utilization in the Brazilian health system by increasing consultation costs. Further research is needed to evaluate the impact of a multidisciplinary treatment approach for psoriasis patients with MetS.

PP79 Impact Of Hidradenitis Suppurativa On Healthcare Resource Utilization

Larissa de Araujo Costa Andrade (larissa.andrade@abbvie.com), Ricardo Moreira and Vinicius Vitale

Introduction. Hidradenitis suppurativa (HS) is a debilitating, chronic inflammatory skin disease characterized by painful nodules and abscesses. HS has a strong impact on patient quality of life. In Brazil, the prevalence of HS is estimated at 0.4 percent. Medical and surgical treatments have low effectiveness and disease recurrence is common, which affects health system costs. This study aimed to assess how HS patients utilize medical care (emergency and inpatient care) in Brazil and to describe the all-cause costs.

Methods. Data were retrieved from a public healthcare claims database (DATASUS), which provides access to information regarding health services and costs. Data from DATASUS were used to perform a cost-identification analysis on patients with HS who used health services over a two-year period. A retrospective bottom-up approach was used to estimate direct costs, multiplying the amount of each medical resource consumed by its unit cost.

Results. Over the two-year period, 90 patients (16%) with HS received inpatient care (151 procedures) at a total cost of BRL 83,520 (USD 21,715). Surgeries were the most frequently performed (73% of total) and expensive procedures, costing BRL 73,122 (USD 19,011; 88% of total costs), followed by clinical treatments (BRL 8,354 [USD 2,172]; 10%), and physician consulting (BRL 1,659 [USD 431]; 2%). For the 500 patients treated in the emergency department (total cost BRL 3,027 [USD 787]), the most frequently received services were physician consulting (34%), nursing care (12%), and minor surgeries (11%). Each patient received, on average, three procedures over the two-year period.

Conclusions. HS is a high-burden disease, as demonstrated by the high healthcare resource utilization among patients. Since DATASUS is a public database, the costs presented reflect a government reference price and do not consider local costs, which is a limitation of this study. Health managers should be aware of this finding, although further research is needed to investigate the effect of healthcare utilization on patient outcomes.

PP80 A Systematic Review Of The Gugging Swallowing Screen For Assessing Dysphagia

Seon Heui Lee (sunarea87@gachon.ac.kr)

Introduction. Dysphagia is a clinical burden that can lead to serious complications like aspiration and pneumonia. Complications often result in longer hospital stays or an increased mortality rates. The Gugging Swallowing Screen (GUSS) assesses swallowing ability in patients by allowing separate evaluations for non-fluid and fluid textures, and is a potentially useful tool for determining the risk of aspiration and dysphagia. The purpose of this study is to analyze the validity and effectiveness of GUSS for dysphagia screening.

Methods. We conducted a systematic review by searching the following electronic databases: Medline, EMBASE, The Cochrane Library, KoreaMed, the Research Information Sharing Service, and the Korean Studies Information Service System. We included studies related to dysphagia screening with GUSS that were published in English or Korean up to November 2018.