the innovative concept of Intelligent Clinical History (ICH), and to develop functional prototypes of high added-value in healthcare services.

Methods. The innovative EXCON project will take advantage of recent advances in technologies for coding, structuring and semantizing medical information. Thanks to this new structuring, the EXCON platform will be developed. Final users will be health professionals and other decision-makers. Doctors, nurses, epidemiologists and information specialists will be involved in the development and subsequent validation of the platforms.

Results. To develop the ICH platform clinical data on a highly prevalent symptom with high variability in clinical practice, such as non-traumatic chest pain in emergency services, has been collected from different electronic medical record databases. The extraction of clinical data to implement new techniques of artificial intelligence requires tasks that must be automated, which today is difficult and tedious (data is often not computerized). Through techniques applied in EXCON, such as natural language processing, relevant clinical data have been extracted and a Decision Support System has been developed and validated. This tool optimizes resources and improves clinical management, reducing errors and increasing patient´s safety.

Conclusions. In coming decades, patient management will be impacted by the application of new advanced data analytics tools. This will allow for safer and more efficient clinical management, decrease variability in clinical practice, and improve equity. That is why the development and assessment of these technologies is necessary.

PP165 Content Instead Of Orders: Experiences Of Launching A Knowledge Base

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Introduction. In Hungary, the procedure for health technology assessment of innovative pharmaceutical products allows 13 assessors 43 calendar days to evaluate reimbursement submissions. These short timelines have created a need for smart capacity building, namely, streamlining the scientific evaluation process while making sure that the quality of the critical appraisals remain high. The objective of this study was to present and evaluate the implementation of an online knowledge base to distill community knowledge, and also for management purposes.

Methods. The scope and the content-, functional-, and technical specification was developed, and information technology security requirements were identified during the pre-implementation phase. An existing platform was chosen for adaptation, ensuring that descriptive follow-up data is available on uptake for monitoring purposes. Both the adaptation and maintenance were carried out internally by the Department of Health Technology Assessment at the National Institute of Pharmacy and Nutrition.

Results. The key requirements identified when developing the specification were searchability, low maintenance need, low operating costs and attractivity for users. An already existing open-source, flat file content management system was chosen for adaptation. In terms of content, a health technology assessment handbook, process documentation, a news bulletin section was created, and corporate identity elements were added. Since the start of the service in September 2018, the number of total daily page downloads to the knowledge base varied between four and 1,193 (average 205 per day), with the assessment handbook topping the overall page visit statistics.

Conclusions. The implementation of this knowledge base enables the Department of Technology Assessment to rely more on the formalized community knowledge when carrying out critical appraisal, while enabling better knowledge and quality management. Uptake remains an issue on the long run, indicating a need for continuous content development.

PP166 A Mobile Clinical Decision Support System for Autism Spectrum Disorder

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Introduction. eHealth is a new approach for managing several health conditions, but up to now not so many interventions have shown their efficacy/effectiveness. The AUTAPP Project tries to add knowledge in eHealth interventions targeted to Mental Health disorders, specifically Autism Spectrum Disorder (ASD) management that requires complex interventions that integrate different psychosocial interventions. AUTAPP aims to develop an evidence based Clinical Decision Support System (CDSS) using mobile technology for improving the decision process on psychosocial therapies in ASD. This study aimed to identify recommendations on which the algorithm of the CDSS will be developed.

Methods. A systematic review (November 2009-November 2018) was carried out to identify the existing scientific evidence published in relation to the effectiveness of: (i) early detection protocols; (ii) assessment tools; (iii) existing non-pharmacological therapies. Main databases were consulted (PubMed, Cochrane Library, PsychoInfo). Articles were reviewed by two independent reviewers. The quality of included publications and recommendations were assessed according to SIGN criteria.

Results. A total number of 147 publications were included (477 identified): 96 for non-pharmacological therapies, 33 for assessment tools and eighteen for early detection. Regarding early detection and assessment, 12 recommendations were identified and six obtained the highest level (A), such as the convenience of multidisciplinary diagnosis teams and the usefulness of the Modified Checklist for Autism in Toddlers (M-CHAT) for ASD confirmation. For non-pharmacological therapies, 16 recommendations were collected. Those with higher levels of recommendations were family, environmental and educational (three As and one B). Interventions with lower levels of recommendation (C) were interventions which exercise, computers and neurological approaches.

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Conclusions. This systematic review allows both to identify gaps and opportunities in psychosocial interventions research and be the base for the CDSS algorithm. In the future professionals, careers and people diagnosed with ASD will validate the mobile CDSS.

PP170 Quantifying the Life-Cycle Value of Second Generation Antipsychotics

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Introduction. We estimate the life-cycle value of risperidone – Second-Generation Antipsychotics (SGA) – to balance the view that cost per Quality-Adjusted Life Year (QALY) estimates at launch are enough to guide access decisions. Study results will also drive discussion on access and price to recognize the dynamic nature of pharmaceutical pricing over the long-run.

Methods. We estimated number of patients treated for schizophrenia with risperidone in Sweden and the United Kingdom (UK) between 1994-2017 based on usage data form national statistics and volume sales data from IQVIA. We collected data from literature on the effectiveness (QALYs) and costs (EUR 2017) of risperidone (SGA) and haloperidol – First-Generation antipsychotic (FGA). We estimate the life-cycle value added by risperidone versus haloperidol, and the life-cycle distribution of the social surplus between the payer (consumer surplus) and the innovator (producer surplus).

Results. We estimated the consumer surplus, the producer surplus, the Net Monetary Benefit (NMB) and Incremental Cost-Effectiveness Ratio (ICER) at each year and in aggregate terms (1993-2017). For the UK the producer surplus was ~28 percent out of the total surplus before patent expiration and five percent after patent expiration. In Sweden, producer surplus was around 6 percent out of the total surplus before patent expiration and one percent thereafter. In both countries, during the life-cycle of risperidone, the NMB per patient increased and the ICER decreased as a response to: (i) the launch of Risperidone Long-Acting Injectable (RLAI); and (ii) the generic entry.

Conclusions. The value added by risperidone increased during the life-cycle due to the launch of RLAI and the generic competition. This suggests that, considering the entire life-cycle, the value added by SGAs to the system is higher than the expected value estimated using cost-effectiveness analysis at launch. Pricing and reimbursement decisions should take into account the dynamic nature of pharmaceutical markets and the value added by innovative medicines over the long-run.

PP171 Cost And Effectiveness Of Chronic Hepatitis C Treatment In Brazil

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Introduction. With the discovery of new direct-acting antivirals, the cure for hepatitis C appears to be a reality, but its high price and the availability of new antivirals are a major obstacle. In Brazil, treatments for hepatitis C have been available in the public health system since the 1990s, and in 2015 were made available the antivirals sofosbuvir, daclatasvir and simeprevir. The calculation of the budgetary impact of this merger estimated expenditures between 467 and 666 million Reais (USD 121 and 172 million) per year. This study aims to present and discuss the cost and effectiveness of hepatitis C treatment with direct-acting antivirals with or without alfapeginterferon and ribavirin, based on real-life data, and compare it with the world scenario.

Methods. We analyzed the treatment data and outcomes of 253 patients from a retrospective cohort performed in a Specialized Care Service, in the city of Porto Alegre. In relation to costs, the direct costs of antiviral drugs, per unit (tablet), were considered according to financial receipts from public purchases. The total cost of the medications used by each individual in each treatment and the cost per cure obtained, expressed in Sustained Viral Response (SVR), were calculated.

Results. Most patients (66.8 percent) had genotype 1 of the hepatitis virus and 92.9 percent achieved SVR. The mean total cost of treatment of patients with genotype 1 was USD 5,862.31 and USD 6,310.34 per cure; while in patients with genotype 3 the cost was USD 5,144.27 and USD 5,974.76 per cure. The cost with the most commonly used treatment regimen, sofosbuvir, daclatasvir and ribavirin was USD 5,961.25 and USD 6,536.46 per cure. These values were 30 percent lower than the values estimated at the time of drug incorporation.

Conclusions. Cost and effectiveness data contextualize a real-life scenario in Brazil. The evaluated treatments presented good effectiveness, but high costs.

PP173 Is Early Modelling Too Late? Preventing Pitfalls And Optimizing Value

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Introduction. Drug development is a risky business. Manufacturers are faced with the dilemma of whether or not to invest at any stage in the development process. Even once marketing authorization has been attained, payers are becoming increasingly demanding of evidence to justify price premiums in the face of increasing budgetary pressures. Cost-effectiveness is a critical decision-making criterion for many payers, and restrictions to sub-populations is common. Early economic modelling at very early phases of the development pathway can inform optimal investment decision-making, including go/no-go decisions and clinical trial design, particularly in population selection. To test the hypothesis of changing payer requirements, we carried out a study on the trends in reimbursement submissions where payers approved but ultimately restricted the population compared to the marketing license or the company's target population.

Methods. A systematic literature review of all single technology appraisals (STAs) by the National Institute for Health and Clinical Excellence (NICE) was carried (01/01/2006- to 16/11/

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