

products; 67 percent of interviewees delivered less than 30 percent of products to hospitals, and only eight percent delivered about 70 percent of the products to hospitals. The providers' infrastructure (warehouses, transport, information technology, cold chain, gross domestic product) were adequately regulated and they adopted a wide list of indicators for monitoring performance. Private providers showed high interest in investing in the hospital sector. On the demand side (56 hospitals from 28 regions) the main weaknesses of SC are related to infrastructure, information technology, human resources, a lack of financial resources and inadequate process control.

Conclusions. The study highlighted extremely limited outsourcing in the hospital field to date, weaknesses in the public system and a high interest of private providers in investing in public hospital SC.

PP156 Reimbursement Of New Treatment Methods In Hospitals: Status In Germany

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Introduction. Since 2005, new treatment and diagnostic methods (NUBs) were reimbursed by individual supplementary fees. The assessment procedure for NUBs is induced by hospitals submitting a request for additional compensation of healthcare treatment to the Institute for the Fee System in the Hospital (InEK). In 2016, the legal norm §137h SGB V was introduced to evaluate medical devices (MD) of high risk classes by the Federal Joint Committee (G-BA). InEK grants a status that is valid for twelve months and impacts additional compensation as well as assessment required by G-BA. The effects of this rating seem to differ between hospitals and Statutory Health Insurance (SHI).

Methods. The published InEK decisions on NUBs were analyzed according the decision criteria and possible impact on price negotiations with SHI.

Results. In 2018, 705 NUB requests were assessed by InEK. NUB Status 1, granting negotiation of additional coverage, was assigned to 171 procedures. Status 2 – no additional reimbursement possible – was given in 472 cases, the remaining had not sufficient information. Most NUBs (n = 368) requests did not fall under §137h; however, those with sub-Status “B” (allocated to 12) led to controversies; no participant had requested an evaluation according to §137h for the NUB. Two consultation requests receiving Status 1 B were regarded as not eligible according to § 137h by the G-BA. To avoid price negotiation delays, early consultations according to § 137h are recommended by G-BA during the NUB application.

Conclusions. The NUB process enables hospitals to receive a supplemental payment when using innovative technologies not listed in the existing German healthcare system. The question of which requirements must be fulfilled to guarantee the reimbursement should be asked at an early stage. Consultation requests to the G-BA in due time are strongly recommended. Contact between manufacturers and hospitals are advisable to support the NUB application.

PP159 Is Community Paramedicine A Safe/ Effective Alternative To Usual Care?

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Introduction. Due to an aging population, shortage of healthcare staff, and escalating healthcare costs, there has been a recent shift in the professional roles and responsibilities in acute care settings to help bridge the care gap. Paramedics, whose primary responsibilities have been in emergency/transportation services, are increasingly involved in the management of chronic diseases in the community setting. However, even with additional training, there are concerns about the safety and effectiveness of this expanded role. The objective of this presentation is to highlight some of the key findings from a health technology assessment report on the safety and effectiveness of community paramedicine in assessing and managing conditions/diseases with low acuity.

Methods. A systematic review was conducted to identify studies that evaluated the safety and effectiveness of different community paramedicine programs.

Results. Four systematic reviews and 20 primary studies (one randomized controlled trial (RCT) and 19 observational studies) were identified. Of these, two systematic reviews and 14 primary studies focused on the safety and effectiveness of Emergency Care Practitioner (ECP) programs – widely implemented programs whereby a paramedic or nurse undertakes activities traditionally performed by physicians, such as the initial assessment of patients, provision of simple treatment, or referral of patients to other clinical care. Limited evidence showed that ECP programs are promising in reducing repeated emergency calls, emergency department visits, hospital admissions/readmissions, and emergency transport charges. While the majority of included studies did not report any safety outcomes, no significant safety issues were identified from the cluster RCT. Evidence for other types of community paramedicine is limited.

Conclusions. Evaluation of the impact of community paramedicine programs remains methodologically challenging. Additional cluster RCTs may help determine the effectiveness of community paramedicine programs; safety outcomes should be a key element of future observational studies.

PP164 Improving Medical Diagnosis Through Advanced Data Analytics Tools

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Introduction. Current clinical practice is based on guidelines and local protocols that are informed by clinical evidence. This means that clinical variability is reduced, but can lead to inefficient clinical decision-making, and can increase medical errors, decreasing patient's safety. The aim of the EXCON project is to investigate

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