established the selected hospitals provide the technology according to a common protocol and register outcomes until the required sample size is reached.

Methods. The PLEG studies are prospective, observational and single arm studies on safety, effectiveness and cost-effectiveness of a technology in real practice. The technology is selected because of the identification of an evidence gap, usually through a health technology assessment (HTA) report made by an agency of the Spanish Network of HTA Agencies (RedETS). The execution of a PLEG is assigned to one of the RedETS Agencies, which is responsible of delivering annual reports and a final report when the objectives are reached.

Results. The following six PLEG studies, all of them on medical devices, have been launched in Spain so far, i) Endobronchial valve for patients with persistent air leak; ii) Biodegradable esophageal stent; iii) Percutaneous mitral valve repair system by clip; iv) Left Atrial Appendage Closure Device; v) Sensor-based glucose monitoring systems for children with type 1 diabetes mellitus; vi) Left ventricular assist devices for destination therapy. Five studies will finish their data collection by the end of 2020 or during 2021.

Conclusions. A new national procedure using PLEG has been made available in Spain facilitating the use of real-world evidence to inform national decision-making on the financing of selected technologies due to uncertainties about their effectiveness, safety, cost-effectiveness and organizational impact. The studies are requiring a high amount of coordination tasks, as they are involving an average of 21 hospitals each. The usefulness and suitability of this procedure to achieve its objectives must be evaluated once their results are available.

OP196 Clinical Decision Support Systems (CDSS) For Antibiotic Management: Factors Limiting Sustainable Digital Transformation

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Introduction. Clinical decision support systems (CDSS) are being developed to support evidence-based antibiotic prescribing and reduce the risk of inappropriate or over-prescribing; however, adoption of CDSS into the health system is rarely sustained. We aimed to understand the implementation challenges at a macro (policymakers), meso (organizational) and micro-level (individual practices) to identify the drivers of CDSS non-adoption.

Methods. We have adopted a mixed-method study design which comprised of: (i) systematic review and meta-analysis to assess the impact of CDSS on appropriate antibiotic prescribing, (ii) Online survey of clinicians in Australia from hospitals and primary care to identify drivers of CDSS adoption and (iii) in-depth interviews with policymakers to evaluate policy-level challenges and opportunities to CDSS implementation.

Results. CDSS implementation can improve compliance with antibiotic prescribing guidelines, with a relative decrease in mortality, volume of antibiotic use and length of hospital stay.

However, CDSS provision alone is not enough to achieve these benefits. Important predictors of clinicians' perception regarding CDSS adoption include the seniority of clinical end-users (years), use of CDSS, and the care setting. Clinicians in primary care and those with significant clinical experience are less likely to use CDSS due to a lack of trust in the system, fear of comprising professional autonomy, and patients' expectations. Lack of important policy considerations for CDSS integration into a multi-stakeholder healthcare system has limited the organizational capacity to foster change and align processes to support the innovation.

Conclusions. These results using multiple lines of evidence highlight the importance of a holistic approach when undertaking health technology management. There needs to be system-wide guidance that integrates individual, organizational and system-level factors when implementing CDSS so that effective antibiotic stewardship can be facilitated.

OP199 From Pilot Studies To System-Wide Innovation: Challenges And Opportunities For Clinical Decision Support Systems (CDSS) Implementation In Australia

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Introduction. The clinical data is increasing at a considerably higher rate than the capacity of the healthcare system and clinicians to manage this data. Digital tools such as clinical decision support systems (CDSS) provide opportunities for evidence-based patient care by intelligently filtering and presenting the information required for clinical decision making at the point of care. Despite the success of pilot projects, CDSS have had limited implementation in broader health systems. We aimed to identify challenges faced by policymakers for CDSS implementation and to provide policy recommendations.

Methods. We conducted eleven semi-structured interviews with Australian policymakers from state and national committees involved in digital health activities. The data were analyzed using reflexive thematic analysis to identify policy priorities.

Results. Our findings indicate that fragmentation of care processes and structures in the digital health ecosystem is one of the main impediments to delivering coordinated care using CDSS. Five themes for policy action were identified: (i) establishing a shared conceptual framework for user-centered design of CDSS that is aligned with stakeholders' priorities, (ii) maintaining the right balance between the customization and standardization of systems, (iii) developing mutually agreed semantic interoperability standards at the local, state and national level, allowing generation and exchange of information across the health system without changing its context and meaning, (iv) reorienting organizational structures to build capacity to foster change, and (v) developing collaborative care models to avoid conflicting interests between stakeholders.

Conclusions. Findings highlight the importance of developing system-wide guidance to establish a clear vision for CDSS implementation and alignment of organizational processes across all levels of health care. There is a need to build a shared policy