

evaluate the strengths/weaknesses of the new technology, potential population and role in the pathway, and barriers/facilitators to adoption. The CPA forms the basis of economic modeling that helps assess the monetary value of the new technology.

**Results:** The application of CPA from two recent projects will be presented: an innovative diagnostic test for respiratory tract infections and a medical device for treating cataracts. Additionally, the value of CPA in eHTA will be described from the technology developers' perspective. In both projects, CPA was used to inform the potential value propositions of the new technology and its positioning in the care pathway. It also helped to optimize the structure of the early economic model and to identify evidence generation needs. The early model identified the pathway that was more likely to be cost effective in the future.

**Conclusions:** CPA is a valuable method within the context of eHTA. Alongside identifying the potential role and positioning of the new technology, test developers found the assessment useful for informing internal strategy decisions and discussions with potential external investors. The developers were able to demonstrate the clinical perspective around the value of the test, elicited through an independent and rigorous methodology.

## PP03 Investigating Technological Strategies In The Hospital Setting: Insights From The Dutch Context

Maria Pinelli ([maria.pinelli@polimi.it](mailto:maria.pinelli@polimi.it)), Emanuele Lettieri, Marcia Tummers and Janneke Grutters

**Introduction:** Rapid advancements in technology are significantly impacting the healthcare system, and decision-making regarding technology adoption occurs at multiple decentralized levels within hospitals. National bodies seek to standardize this process, yet differing visions and strategies hinder centralization. This study explores the relationship between technological innovation and hospital strategies, focusing on scanning and assessment, aiming to assess the feasibility of centralized decision-making.

**Methods:** To do this, we performed a qualitative analysis through 23 semistructured interviews in seven hospitals in the Netherlands, a country characterized by strong healthcare innovation and decentralization. We interviewed different actors involved in technological innovation, on different levels in the organization: CEOs, medical doctors, medical physicists or similar roles, and innovation managers. Ethics approval was obtained, and interviews were conducted, recorded, transcribed, and shared with participants for accuracy confirmation. Thematic analysis via grounded theory methodology and ATLAS.ti software generated insights on technological innovation's relationship to hospitals' strategies. Initial codes were refined into themes relevant to the research question.

**Results:** Hospitals primarily aim to provide optimal patient care, with academic hospitals emphasizing research and education. Some hospitals aspire to be pioneers in adopting new technologies, while patient-centric healthcare is a shared goal. Technological strategies are not precisely designed in hospitals, being shaped by factors like

people, financial constraints, or external environments. Hospitals' scanning of technologies lacks systematization, and evaluations before and after technology adoption are not univocally performed. The need for systematic scanning and assessment practices is recognized by some interviewees, while others emphasize the importance of experimenting without the constraint of evaluation, perceiving it as a hurdle delaying innovation.

**Conclusions:** Centralization could represent a benefit for hospitals, allowing them more streamlined decision-making, but it could also be perceived as a barrier. Involving hospitals' stakeholders in centralization would be crucial to achieve it through a joint effort. Suggestions for future research could include focusing on a specific hospital, involving more stakeholders, and exploring other decentralized healthcare systems.

## PP04 Assessing The Utility Of Natural Language Processing In Generating A Granular Estimated Indication For A Horizon Scanning Database

Caitríona Ní Choitir, Marie Harte ([mharte@stjames.ie](mailto:mharte@stjames.ie)), Daisy Duell, Irina Odnoletkova, Anna Bergkvist Christensen, Marie Persson, Helle Bräuner, Marcus Guardian, Alzbeta Alzbeta Tuckova, Brian Wilkinson, Beth Kuzmak, Roisin Adams, John Shaw, Craig Boyce, Prashanth Palakollu and Eileen Erinoff

**Introduction:** Detailed, precise information on a pharmaceutical's projected therapeutic use is required for horizon scanning. Inferring an estimated indication from trial protocols is a key skill of horizon scanners. The International Horizon Scanning Initiative (IHSI) database utilizes semi-automated data collection. This pilot aimed to verify that the extraction of relevant word sets to generate an estimated indication could be semi-automated.

**Methods:** Ten drugs approved in Europe in 2021 were selected as the pilot test set. The test set included drugs approved for the treatment of rare diseases (n=4), haemato-oncology (n=3), and non-oncology conditions (n=3). Eight of the drugs were approved based on phase III trials. The assessment comprised a review of the pivotal trial that supported product registration for these drugs. We undertook a comparison between a human curator and a natural language processing (NLP) algorithm in generating granular tags relating to key aspects of the drugs' estimated indication (stage of disease, patient-specific subgroup, and place in treatment).

**Results:** In 50 percent of cases, the NLP accurately tagged a word or word set related to stage of disease, patient-specific subgroup, or place in treatment, which was also tagged by human curators. In 50 percent of cases, the NLP did not identify words or word sets tagged by human curators. Where relevant, the NLP successfully tagged the same word sets relating to stage of disease for all drugs in the test set. The same word sets relating to patient-specific subgroup were