

**CONCLUSIONS:**

These findings revealed an implicit prioritization pattern at the pCPA, as well as the evolving role of health economics in Canada’s two-stage reimbursement process.

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## PP88 Intravenous Medication Delivery System Cost-Effectiveness Analysis

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**INTRODUCTION:**

Medication delivery is one of the most common interventions in clinical practice. It requires the direct involvement of nurses and high precision infusion pumps in order to increase the infusion accuracy. Any mistake in the medication delivery process can lead to a medication error, resulting in adverse events with considerable increases in hospital length of stay and cost. Research studies should analyze this area more in emerging countries, as their realities differ from the realities of developed countries, where most of the literature of this area has been developed. This research study analyses this area in Brazil, a leading emerging country. The incorporation of these technologies in health services have caused two major problems: uncertainty around its effectiveness in reducing adverse drug event rates related to infusion dose errors, and the high cost of their inputs. The objective of this study was to analyze the cost-effectiveness of intelligent drug library infusion pumps to reduce adverse drug events during intravenous medication delivery in pediatric and neonatal patients.

**METHODS:**

Cost-effectiveness was evaluated using a decision-tree framework, considering two scenarios as the base case: the reference one, which uses conventional infusion pumps for intravenous medication delivery with a volume greater than 60 mL, and an alternative one, which uses the drug library infusion pumps. The analysis is with the Unified Health System (Brazil’s publicly funded health care system) perspective. The Monte Carlo simulations addressed the uncertainties of the

framework. The effectiveness measure was avoidance of adverse drug events.

**RESULTS:**

The probabilistic analysis showed the drug library infusion pumps to be more cost-effective than conventional pumps. This ratified what had already been revealed by acceptance curve, which demonstrated that the drug library infusion pumps are more likely to be cost-effective compared to the conventional infusion pumps (with a minimum of the incremental cost-effectiveness of USD 1,501.28).

**CONCLUSIONS:**

The study demonstrated that the use of the drug library infusion pumps in the pediatric and the neonatal intensive care unit can improve the results of the adverse drug event reduction strategy.

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## PP89 Living Lab Concept: An Innovation Hub For Elderly Residential Care

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**INTRODUCTION:**

Many countries face the challenge of an aging population. Development of suitable technologies to support frail elderly living in care homes, sheltered housing or at home remains a concern. Technology evaluation in real-life conditions is often lacking, and randomized controlled trials of ‘pre-designed’ technologies are expensive and fail to deliver. A novel alternative would be ‘living labs’-real-life test and experimentation environments where users and producers co-create innovations and large-scale data can be collected.

**METHODS:**

The goal of the living labs and Data Driven Research and Innovation (DDRi) Programme is to use data driven analytics and insights to support technology development for independent living, healthy aging and more cost-effective care. This involves a cluster of