

long-term residential care facilities providing 24/7 living lab settings, linked to an embedded innovation hub. DDRI also encompasses private vehicles (e.g. sensors in cars) to enable elderly to drive safely for longer. Collaborations have been established with Universities in England, Scotland and Ireland and with international industry partners.

**RESULTS:**

Several projects are underway: (i) develop machine learning algorithm from non-intrusive sensor data to build a well-being representation for individual residents/citizens; (ii) evaluate innovative interventions for good sleep environment and nutritional support; and (iii) establish ethics framework to ensure that needs of residents, families and staff are embedded in design, communication, and evaluation of future DDRI projects. In addition, fifteen interdisciplinary doctoral fellowships are in place, six universities are working closely with individual living lab settings, and an innovation hub has been established in one care home for horizon-scanning and strategic technology selection and implementation.

**CONCLUSIONS:**

Over the next five years, a national network of 20 residential living labs with over 1,500 participants will be established. Generation of new user-led technologies, blueprints for capture of individual data at significant scale, and ethical and organizational guidelines will be developed. Intelligent mobility via data capture/feedback in vehicles will be established.

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## PP90 The Value Of Multi-Criteria Decision Analysis Use On Health Technology Decision Making Process

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**INTRODUCTION:**

The use of multi-criteria decision analysis (MCDA) in health technology assessment (HTA) studies has become more common due to the fact that MCDA offers a comprehensive technique for decisions that involve multiple criteria and stakeholders. How MCDA contributes to the HTA decision making process is an

issue to be investigated. A systematic review was carried out in order to provide an overview of the benefits identified in MCDA applications for the strategic HTA decision making process.

**METHODS:**

A systematic review developed by Philip Wahlster et al. (2014) was updated. The papers were analyzed in order to determine how MCDA is connected with traditional HTA, and to identify opportunities through the application of MCDA. In total 965 papers were found, and 43 articles were included in the review. The included articles detailed MCDA applications oriented to tactical and strategic decision making processes. The review was conducted by two researchers.

**RESULTS:**

Of the available studies published on MCDA, 76 percent were published between 2014 and 2017, and 24 percent were published prior to 2014. Regarding the MCDA methodology defined in the included studies, 10 used the analytical hierarchy process, four used multi-attribute theory, and others refer the methodology only as "MCDA". Seventeen studies also included health technology economic analysis, in special cost-effectiveness, safety and technological innovation. The studies suggest MCDA adds value since it allows different stakeholders to be engaged in the decision making process.

**CONCLUSIONS:**

The increase in studies on MCDA and healthcare point to the possibility to add different criteria, engage people with different knowledge levels, and make the decision-making process more transparent. In comparison with other technical areas, the use of MCDA in healthcare is more focused on achieving the decision about adding the new technology, and to show how to engage stakeholders than to explain how to develop the algorithms and methodologies.

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## PP93 HTA Role In CoreHEM, A Multi-Stakeholder Core Outcome Set Project

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