Strengthening the evidence-base of integrated care for people with multi-morbidity in Europe using Multi-Criteria Decision Analyses (MCDA)

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The evaluation of integrated care programmes for individuals with multi-morbidity requires a broader evaluation framework and a broader definition of added value than is common in cost-utility analysis. This is possible through the use of Multi-Criteria Decision Analysis MCDA.

This paper describes the seven steps of an MCDA approach to evaluate 17 different integrated care programmes for individuals with multi-morbidity in 8 European countries that partake in the SELFIE project, a four-year EU-funded project.

In step one, qualitative research is undertaken to better understand the decision-context of these programmes. The programmes face decisions related to their sustainability in terms of their reimbursement, continuation, extension, and/or wider implementation. In step two, a uniform set of decision criteria was defined in terms of eight outcomes measured across the 17 programmes: physical functioning, psychological wellbeing, social relationships and participation, enjoyment of life, resilience, person-centeredness, continuity of care, and total health and social care costs. These are supplemented by programme-type specific outcomes. Step three describes the quasi-experimental studies designed to measure the performance of the programmes on the decision criteria. Step four gives the details of the two methods...
Discrete Choice Experiment and Swing Weighting to determine the relative importance of the decision criteria among five groups of stakeholders in each country. Step five describes the value-based method of MCDA by which the performance of the programmes on each decision criterion is combined with the weight of the respective criterion, to come to an overall value score. Step six describes how we deal with uncertainty and introduces the Conditional Multi-Attribute Acceptability Curve. Step seven addresses the interpretation of results in stakeholder workshops.

By discussing the challenges involved in creating a uniform MCDA approach for the evaluation of different programmes, this paper provides guidance to future evaluations and stimulates debate on how to properly evaluate integrated care for individuals with multi-morbidity.

**Keywords:** integrated care; multi-morbidity; outcomes; evaluation; multi-criteria decision analysis