

CONFERENCE ABSTRACT

Assessing the Methodological Quality of Economic Evaluations in Integrated Care: Evidence from a Systematic Review

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Introduction: In an era of fiscal constraint, economic evaluations are increasingly playing a role in resource allocation decisions to invest in integrated care IC approaches. Posing significant ethical concerns are healthcare investments informed by misleading or biased evidence due to poor methodological quality. We conducted a systematic review to assess the quality of economic evaluations in IC interventions, and identified the challenges associated with the evaluations.

Theory/Methods: English publications that reported the concepts of “integrated care” and “economic evaluations”, were searched from the period 2000 to August 2017 in the following databases: PubMed, EMBASE, CINAHL, Web of Science and Scopus. The methodological rigor of the studies was assessed independently by two reviewers using a 30 item-check list adapted from the Consolidated Health Economic Evaluation Reporting Standards CHEERS. Descriptive statements about the challenges experienced when evaluating IC interventions, as reported by authors, were also thematically analysed.

Results: We included 40 studies in this review, however, approximately half were considered full economic evaluations; often as part of randomized control trials. Four studies that stated that their research objectives were to examine the cost-effectiveness of the IC interventions, did not perform an incremental cost-effectiveness ratio or a net benefit regression analysis. Of the cohort studies that performed cost comparisons, only one study controlled for potential confounding differences between the intervention and standard care. Valuation of the effects of the IC intervention in the full economic evaluations was often measured using quality-adjusted-life years. In some scenarios where this was challenging to ascertain; particularly in large cohort studies, natural units were used, such as estimated depression-free days. There was variability in the perspectives used, with a minority of the evaluations considering the societal impacts, such as cost shifting between sectors or the economic burden on caregivers. The long-term costs and effects of the interventions were limited in the analyses due to the short observation periods range of 3 months to 5 years. However, some

studies attempted to address this through modelling estimated lifetime costs and health outcomes associated with the intervention.

Discussions: The complex nature of IC can challenge the application of traditional economic evaluation, making it important to identify these methodological gaps and learn from best-practices. However, other factors may explain the heterogeneous quality of the studies. These may include; the need for further guidance on the methods, the substantial human and financial resources required for data collection and conducting the evaluations, and a lack of economic evaluation culture.

Conclusions: This review intended to highlight some of the gaps and opportunities for applying the fundamentals of economic evaluation to IC interventions. Benchmarking economic evaluations against guidelines such as the CHEERS checklist can be a potential catalyst for more consistent and higher quality evidence for decision makers.

Limitations: A limitation is the subjective interpretations of the quality of the studies by the reviewers, which could influence how they were rated based on the criteria. However, a major strength is that two-blinded reviewers assessed the studies and based the quality scoring on a consensus.

Keywords: integrated care; economic evaluation; cost-effectiveness; cost-benefit; cost-utility; critical appraisal
