Identification of best practices for care-dependent elderly by Benchmarking Costs and outcomes of community care

Identification of best practices

The IBenC method

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Abstract

Background
The need for cost effective health systems is imperative in the context of increasing care demands of a rapidly aging population and a shrinking working force. High quality community care may prevent costly institutionalisation. There is ample evidence on what type of community care provides best outcomes against reasonable costs.

Objective
The aim was to identify best practices of community care for care-dependent elderly by benchmarking their efficiency, taking into account costs of care utilisation from a societal perspective and quality of care.

Figure 1 Design of IBenC study

Approach
IBenC capitalises on a standardised instrument (interRAI-HC) that is widely used across Europe in routine care to assess patient outcomes, care use and quality of care. In total 38 community care organisations from six European countries participated in the study. From these organisations 2884 patients were enrolled in the study. To determine organisations’ performance and estimate costs of care utilisation, patient data from baseline and six month follow-up assessments were used. Quality of care was displayed by two summary scales, each ranging from 0 to 10. The Independence Quality Scale (IQS) reflects care associated with maintenance of functioning and prevention of functional decline, while the Clinical Balance Quality Scale (CBQS) gives an overview of quality of care that is aimed at improvement of functioning. Costs of formal and informal care utilisation were estimated using Dutch standard costs. Quality of care outcomes and costs of care utilisation estimates were case-mix adjusted. To perform benchmarking of efficiency of community health care practices, the IQS and CBQS were integrated with the societal costs of care into two new costs-quality indexes: the
IQS index and the CBQS index. To enable an in-depth interpretation of best practices, the characteristics of community care organisations were related to the IQS index and the CBQS index.

**Results**

Mean adjusted societal costs were €21,004 for a community care client over a six month period, ranging from €14,300 to €24,209 across organisations. Scores for individual organisations on the IQS ranged from 2 to 7, scores on the CBQS ranged from 4 to 8 (see Figure 2 and 4). Combining the quality of care and cost of care information into one measure, led to the development of the IQS index and the CBQS index. Both reflecting the organisational efficiency on respectively care directed at maintenance or prevention of functional decline and improvement of functioning. Five out of the 14 organisations included in the benchmark scored >1 on the IQS index, indicating better than average efficiency. All, except one organisation scored > 1 on the CBQS (see Figure 3 and 5).

![Figure 2](image1.png) Independence Quality Scale plotted against mean adjusted societal costs over six months per organisation

![Figure 3](image2.png) IQS index scores per organisation and care mode; organisational efficiency with regard to maintenance of status and prevention of deterioration of functioning

![Figure 4](image3.png) Clinical Balance Quality Scale plotted against mean adjusted societal costs over six months per organisation

![Figure 5](image4.png) CBQS index scores per organisation and care mode; organisational efficiency with regard to maintenance of status and prevention of deterioration of functioning
Predictors for efficiency related to maintenance, and prevention of decline in functioning were lower levels of predictability at work, emotional demands at work, influence at work, patient centred care delivery, and availability of specialised care professionals, higher levels of physical workload, and monitoring quality of care, and working full time. Higher levels of experienced influence at work, and predictability at work, lower levels of monitoring quality of care, and availability of specialised care professionals, working part-time, and having a permanent contract were found to be predictors for efficiency related to improvement of functional status.

Conclusion

The benchmarking method developed in this study is a new and powerful method to compare organisational efficiency, taking into account quality and costs of care. The method helps to gain more insight into the functioning of health care systems. The method capitalises on the interRAI-HC instrument, which is used in numerous organisations in many countries in routine care at a client level. Therefore this method does not require additional, burdensome assessments for care organisations. A wide implementation of this method gives a rigorous view of the functioning of the European care system and can help organisations and policy makers identify and learn from best practices in terms of efficiency. The method can support health care policy makers in their search for sustainable health care systems.

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