Measuring the value of elderly care

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Summary

THE DESIGN AND ORGANIZATION of elderly care services have changed over time. For example, homecare services in people's homes have become more common, whereas shared housing, so-called nursing homes, has become less common. An ongoing change concerns the introduction of welfare technology, such as camera surveillance and drug dispensing robots.

There are several reasons for these changes; however, we cannot rule out that they are at least partially the result of financial considerations and efficiency demands. First, the costs for elderly care may rise as the proportion of elderly individuals increases while the proportion of working people is expected to decrease. Second, there are limited prospects for increased productivity growth as there is a limit to the amount of elderly care that staff can provide per hour. Third, elderly care competes with other sectors in which municipalities are required to provide services, such as education.

Other reasons for changes over time include adapting to the preferences of those receiving elderly care. For example, the principle that the elderly individual as far as possible should remain and receive care in his or her own home is sometimes justified with the argument that many elderly people want to stay in their own home, whereas the introduction of welfare technology is justified by the argument that this might increase the independence of the elderly. Currently, however, there is no method for determining what current and future recipients of elderly care actually value. Without this knowledge, there is a risk that the restructuring of elderly care is carried out in a way that reduces the well-being of the elderly in the long run.

Based on a literature review, the aim of this research report is to discuss how individual preferences regarding elderly care may be identified in order to understand what offers the most value. The report highlights the following issues:

- How are individual preferences analyzed in other areas?
- What are the problems and possibilities of using similar methods in relation to elderly care?
- What does the available literature indicate in terms of what individuals value in elderly care?

The report examines how individuals value elderly care but not how interventions in elderly care should be evaluated.

Methods for analyzing value from an individual perspective

From an economic perspective, value is defined as the maximum amount of money an individual is willing to pay for a service or good – his or her so-called willingness to pay. One method for analyzing the value of products, services and initiatives not sold in the free market is thus to examine individuals' willingness to pay by using, for instance, surveys. This method is used by the Swedish Transport Administration to determine how the population values reduced travel time and the risk of accidents.

Another method is used for analyzing value in health care. The outcome measure of quality-adjusted life years (QALYs) combines time and quality of life in relation to a certain health condition and has become the dominant measure in health economics.

In elderly care, however, there is still no established method for analyzing value based on individual preferences. Nevertheless, several countries have initiated processes aimed at creating methods for producing a QALY in the area of elderly care, which is partially motivated by the fact that elderly care and health care may be seen as integrated sectors. Just as in the transport sector, the aim of elderly care is also multidimensional, which justifies using willingness to pay. There is also a relatively extensive research literature having utilized this method to analyze the value of initiatives in the field of elderly care.

A QALY for elderly care?

The traditional way of developing QALYs in the health care sector does not work when it comes to elderly care, since traditional QALYs are confined to health-related quality of life. In terms of elderly care, quality of life not related to health may also be affected, such as social contacts, independence and control.

All new methods used for deriving QALYs in elderly care are based on the same principles currently used for deriving a quality-of-life weight through a so-called indirect method in the field of health care. This means developing questionnaires to be filled out by recipients of elderly care and developing so-called preference-based quality of life weights for various combinations of responses in the questionnaires. These preference-based quality of life weights are typically estimated by means of a survey of elderly individuals (above the age of 65) in the population.

However, the methods differ greatly in terms of the questions (dimensions) asked, the definition of response levels and the method used for developing preference-based quality of life weights. However, a question found in all questionnaires is that of control and independence. This question is also prioritized by elderly individuals in the population when estimating preference-based quality weights. More recently proposed methods also include health when measuring quality of life, which was previously not included. This means that the instrument for measuring quality of life is made more comprehensive as well as possible to use in several sectors. However, there is a problem in that it may also create an overlap between different dimensions.

Willingness to pay for elderly care

Simultaneous with the attempts to analyze the value of elderly care by using new ways of deriving QALYs, several studies instead seek to determine the value by using willingness to pay. A reason for this is that willingness to pay for an initiative may be determined directly rather than indirectly via pre-defined dimensions. Assume, for example, that there is an increase in regular care providers in elderly care, meaning that the elderly individual is assisted by a specific team consisting of a smaller number of employees. In order to derive the value of this using

the QALY method, it would have to be captured in the dimensions included in the questionnaire, such as social interaction. However, there is a risk that aspects not included in the questionnaire are affected. By instead analyzing the value via willingness to pay, the individual can decide for him- or herself what he or she includes in his or her valuation. In addition, this method enables estimating preferences for interventions not yet introduced, such as a new welfare technology.

The results of studies on willingness to pay for elderly care show that the value is context-dependent and depends on aspects such as the nature of disabilities and living conditions; for example, whether or not the individual has a partner. However, aspects linked to control and independence appear to be important regardless of context. These aspects primarily include regular care providers and transportation services for disabled individuals. Sheltered accommodation is preferred by a relatively large portion of people even with minor disabilities, whereas nursing homes are only preferred by those with more severe disabilities. One explanation may be that customized housing is linked to increased independence, whereas the opposite applies when it comes to nursing homes.

The results from the studies also show that the value is dependent on the individual's perspective (i.e., whether you indicate your willingness to pay for yourself or for someone else). This illustrates the importance of examining preferences from an individual perspective. Whose willingness to pay is being analyzed is also an important issue. Does it concern recipients of elderly care, their relatives, the elderly in the population or the population as a whole? In the review, we find examples of studies on all groups. In this context, it is important to emphasize that elderly care is not only valued by recipients of such services. Several studies show that those who do not currently utilize elderly care also value such services since they know that they may need this type of care in the future and that they want others to have access to such care. Hence, it is only possible to achieve a complete picture of the value when these components are considered as well.

Conclusions and recommendations

Research is currently under way in several countries aimed at analyzing the value of elderly care by using both QALY and willingness to pay. These methods involve various advantages and drawbacks, which is why they both likely have a future in this area. The results raise some issues in the current design of elderly care. First, there is a preference for sheltered accommodation even in cases of minor disabilities, which may indicate that the principle that the elderly as far as possible should remain and receive care in their own homes should not be the universal approach. It could also be seen as supporting the introduction of "aid-assessed assisted living facilities" (Swedish: biståndsbedömt trygghetsboende in), a simpler form of nursing home since 2018 permitted under the Social Services Act. Second, there is a preference for regular care providers – something having deteriorated in recent years. In this context, it is important to emphasize that this does not necessarily mean that elderly care should be altered in accordance with these preferences. Evaluating how elderly care should be designed also requires considering the costs and other consequences of possible changes. However, having knowledge of individual preferences may offer a basis for assessing how the organization of elderly care affects individual well-being. So far, only a very small number of studies have examined preferences regarding the introduction of welfare technology. Given the stated objective of increasing the use of welfare technology in elderly care, there is clearly a need for further research in this area.

SOME RECOMMENDATIONS:

Study the current situation in the elderly care sector – how well do recipients of elderly care in Sweden realize the aspects most valued?

There are few studies on the quality of life of recipients of elderly care in Sweden. The ones that exist indicate shortcomings in terms of autonomy and control, which has proved to be one of the most important factors with regard to quality of life. There are currently two questionnaires designed specifically for elderly care that can be used to generate a preference-based index. These have been disseminated relatively widely and are accepted by government agencies in the United Kingdom and the Netherlands. It might be interesting to use these questionnaires in Sweden to examine the quality of life of elderly care

recipients. One possibility is to include the new questionnaires as part of the annual national survey of elderly care recipients carried out by the Swedish National Board of Health and Welfare.

Study alternative ways of taking individual preferences in elderly care into account.
One method might be to modify the supply of elderly care based on the results of preference studies, which could potentially lead to a partially altered supply. Another method is to in advance let individuals choose from a number of ready-made publicly funded package solutions. A third method is that people in need of elderly care are allocated an amount of money enabling them to buy the kind of care they want; that is, an entirely free market solution based on public funding, such as the German insurance system. Additional methods include allowing individuals to top up their service based on their willingness/ability to pay. This is currently possible to varying degrees in relation to dental care, health care and various aids. However, it should be pointed out that these different routes also exhibit different equity profiles. Assessing which variant is to be preferred could be based on analyses of systems introduced in other countries and on interviews with stakeholders in the Swedish elderly care sector.

Study preferences for different aspects of elderly care in a Swedish context.
In order to measure quality of life, the United Kingdom and a few other countries have developed quality of life weights (so-called value sets) for questionnaires, which are used for measuring quality of life in elderly care. Since we can assume that preferences regarding different aspects of elderly care differ between countries, it may be a good idea to develop quality of life weights for these instruments in Sweden as well. This means using a preference-based method in a study based on a representative sample of elderly individuals in the population. One drawback of the questionnaires used to measure quality of life in elderly care is that they do not include aspects specifically linked to different ways of organizing elderly care, such as who provides care and how care is provided. An alternative or supplementary way of estimating individual preferences for elderly care is thus to analyze (monetary) preferences by analyzing willingness to pay which allows the attributes that are included in the questionnaire to be customized. It is particular-

ly important to examine preferences in the field of welfare technology, as this field is assumed to grow and form a larger part of elderly care in the future. Without knowledge of what individuals value, there is a risk that the organization of elderly care leads to reduced well-being.

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