# Chapter 16 Elderly Care Cost Control using Observation, Assessment, and Decision–Making

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# ABSTRACT

Municipal and regional best practices for strategic planning and management of ageing is achieved by developing accurate socio-economic modelling tools based on rigorous design of information and processes. Demographic models enable analysis and prediction of demographic change, and socio-economic modelling, based on ageing information and process design, is sensitive and specific in particular concerning variables related to demographic change. Service forms based on observation, assessment, and decision-making are typically used in home care, adult day care centres, residential care, nursing homes, and/or wards. The suggested approach to socio-economic modelling-based strategic planning is both customer-centric with respect to information and process design as well as care-centric with respect to care management.

### INTRODUCTION

The lack of regional strategies together with scattered and unstructured guidelines for prevention, detection, and intervention related to older persons decline in cognitive and functional capabilities is the most serious threats against a sustainable development of supportive environments for the elderly. Further, the lack of well-structured guidelines and well-organized utility of assessment and, in particular, rigorous assessment based decisionmaking and care provisioning, leads to overlaps and inefficiency, and even worse, to subjective decision-making and care processes that cannot be measured nor evaluated.

Socio-economic modelling of the social welfare effect due to demographic change is therefore of utmost importance, on the one hand, for municipality resource planning and objective decision making, and on the other hand, for enabling required accuracy of business models as used by public and private actors in the social sector.

The objective of the chapter is to point the importance of management of assessment scales in elderly care. Further, efficient use of assessment scale information with decision support for diagnosis and intervention are key factors to optimal socio-economic management of health and social care in regions and municipalities.

## OBSERVE-ASSESS-DECIDE (OAD)

### Background

The cost of elderly care is inevitably increasing, and financing models must adapt accordingly. Financing sources are basically central and local government, social security funds and insurance, and even out-of-pocket financing. Public financing relying mostly on central and local government are still the cornerstones in Northern European countries, whereas a mixture between, on the one hand, central and local government, and, on the other hand, social security funds and insurance, is adopted elsewhere in Europe. As private stakeholders enter the scene, finding the balance becomes strategically more and more important, regardless of respective financing priorities.

Elderly care also in East Asia is more and more in focus. In Korea, the new system of longterm care insurance for the elderly, which has chosen the route of national solidarity to fund the system, clearly needs to be considered in the decision-making dimension of assessment scales. The cost of elderly care is inevitably increasing, and financing models must adapt accordingly. In Korea, social security is increasing rapidly, and out-of-pocket financing diminishes correspondingly. This implies a shift of OAD customer focus from individual to society, and further from municipality to region/area. Elderly care and OAD usage happens in municipalities, but the monitoring of it all happens typically on regional level, and thus the customer is the region, whereas the municipality becomes the customer of the region. This is very important in answering the question 'Who pays, for what, and why?'. The long-term care insurance system in Japan clearly shows the need for socio-economic modelling based on demographic change analysis. Elderly care is managed on national, prefectural and city level. Laws and regulations, and care insurance scheme are all in the picture. Community care usually has an own system of assessments which is a basis for regular reporting.

Care cost and labour cost are fairly easy to calculate, but their distribution over the changing picture of health conditions, including function decline and the increasing problems related to cognitive disorders, are non-trivial. This is mostly due to fact that monitoring of demographic change and medical condition based function decline is not organized systematically, and therefore, there is basically no socio-economical framework into which cost-related structures can be mapped.

# Early Detection of Dementia

Exact cost-saving figures are hard to produces in the overall picture of disease and decline, and related intervention needs. However, in the area of cognitive decline, estimations of the effect on early detection can be given with some precision. For an Alzheimer's disease at an early stage, a pharmacological intervention (Wimo, et al., 2003) can counteract decline and maintain the patient at a certain capability level for up to two years, at average for 9 months. There is no evidence that such treatments prolongs life, it merely adds quality of life, and in fact reduces the economic burden at later and last stages of the disease. The annual care cost in nursing/dementia homes and hospital wards for a patient with severe dementia is up to 8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/elderly-care-cost-control-using/77149

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