M. Vaarama. Quality of life: measuring gerontechnology outcomes. Gerontechnology 2008:7(3):230. Research and development in gerontechnology (GT) is typically user oriented and aims at enhancing the quality of life in old age. Various indicators are employed to measure the positive effects of technologies, especially effects on health, functional abilities and autonomy. Additionally, some measure of user acceptance is introduced to confirm that the technology in question does, in fact, satisfy user needs. But in spite of the claims of user orientation, the effects of technologies on quality of life (QoL) of older persons are not really assessed. We find inquiries into user preferences and corresponding user requirements (input), an acute awareness for issues of usability and practicality (process), but only general assessments of technology outcomes. Effects of technology are usually evaluated in terms of general user satisfaction or after the technology has been introduced into the practice of everyday life. What is missing is an evidence-based multidimensional measure of QoL as technology outcome that can be employed in quality management of design, production, implementation, and use of technologies and services for older persons. This requires, on the one hand, a more comprehensive ('holistic') and multidimensional concept of QoL to capture the interdependent and often unintended effects on different domains of life, and, on the other hand, a reliable and practical instrument for measurement, which can be used in quality assurance over the entire R&D process. A step in this direction has been made in the CareKeys project[1] in the case of quality management in care for frail older persons including also some measures of service quality, care environment and assistive technology. **Method** The CareKeys project (2003-2006), an EU-project with partners from five European countries, collected data on clients (N=1400) and home and institutional care services (N=68) by interviews, tests, and care documentation analyses. The data were analysed by multivariate statistical modelling to identify a set of indicators for quality management which are related to a set of measurements of objective and subjective QoL. A first prototype of a PC-supported program incorporating a set of indicators for QoL, quality of care (QoC) and quality of management (QoM) was designed and evaluated by experts and practitioners in the field. **Results and discussion** An extensive review of the literature on the QoL of older persons resulted in an integrated generic 4-dimensional model for QoL, (QoC) and (QoM) – based on social systems theory - corresponding to the structure of the data and showing explanatory power in statistical models. Prototypes of instruments for the assessment of objective and subjective QoL , QoC and QoM were developed on the basis of the analyses. The aim was not to develop alternatives to existing assessment instruments on the level of care, but to design a "tool-kit" which could be employed on a "strategic" level of care quality management. Current research is investigating and developing the instruments further. Especially the models and instruments for subjective QoL and subjective QoC provide tools for service and technology assessment in GT which support quality assurance by measuring multidimensional outcomes.

References

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