Active ageing with type 2 diabetes as model for the development and implementation of innovative chronic care management in Europe (MANAGE-CARE / 2013-2016)
European Practice Compendium
- Short Version -

A scientifically up-to-date and patient-centred compendium will be produced in which the state of the art, but also the needs, priorities and participation of the elderly patient with T2DM and associated comorbidities are reflected.

Abstract

This document provides the European Practice Compendium on disease management in Europe describing the challenges and needs of older people in the management of chronic diseases. This Compendium provides an integration of the information extracted from the current disease management models, recent scientific evidence and final results of the MANAGE CARE project. The combination and discussion of the main findings ensures the development of a scientifically up-to-date and patient-centred Compendium in which the needs, priorities and participation of the elderly patients are reflected.
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1. Introduction

1.1 Description of the chronic care situation
A growing number of EU citizens suffer from diabetes, posing a growing health, social and economic burden in the EU [2]. This burden is mostly driven by type 2 diabetes (T2DM), which is increasingly diagnosed at younger age and is leading to a rapidly growing group of ‘elderly people’ (65+) with diabetes [2]. An increase in average life expectancy adds to the increased number of elderly living with T2DM experiencing a number of growing T2DM associated comorbidities. Management of this growing group poses unique challenges and outcomes remain far from optimal. Although patient education has become an integral part of all disease management programs, elderly are often not able to competently follow the variety of topics comprising the standard treatment and teaching programs for patients with T2DM [3-5]. There is a growing necessity to balance clinical recommendations with the needs of elderly with T2DM. In addition, progression of renal and hepatic diseases and mental, cognitive disorders as well as an increased prevalence of multiple comorbidities mandate an individually tailored and integrated treatment strategy, which is currently hampered by the absence of innovative chronic care models and the paucity of integrated care guidelines for diabetes treatment in older adults [5, 6].

Most current care models and treatment guidelines are disease-focused (sectored medical care) and do not include specific instructions on how to prioritise diabetes treatment relative to that of other comorbidities and the functional status of patients. Patients do not feel sufficiently involved in decision about their care. Also other factors, such as increased risk of recurrent falls, movement disorders, cognitive decline, certain psycho-social factors such as isolation and depression, and non-adherence to therapy and avoiding visiting a doctor urgently need to be incorporated into the care model of these elderly in order to increase self-care and disease management, to prevent unnecessary complications, hospitalisation and increased frailty. Although the lack of an integrated care model is addressed here in the field of T2DM, care fragmentation is a major problem for most chronic diseases [7, 8]. Managed care models improve quality of care [8]. Currently numerous chronic care management concepts exist in the various European countries which can be implemented into clinical practice. These concepts may provide the basis for the development of innovative chronic care management models [9]. Nevertheless, EU-wide strategies and recommendations are still lacking. On the other hand, health care providers are very specialised in one field of expertise and therefore treat each multiple disorder separately, instead of approaching comorbid patient holistically. Also, health care and social care are poorly integrated and interconnected.

1.2 The MANAGE CARE project
The EU-funded project MANAGE-CARE aims to prevent costly complications and frailty in elderly with type 2 diabetes, enabling them to live independent, healthy and active lives as long as possible. This will be achieved by driving innovation and change in the current treatment approach, shifting from diabetes management (disease-specific care trajectory) to chronic care management (non-disease focused model). A roadmap for implementation of the model will be developed, providing also guidelines for development of chronic care models in a broader context.
The MANAGE-CARE project aims to create a shift from disease management to chronic care management. It combines applicable approaches through change in care delivery and through partnering for change, addressing in particular older patients with multiple chronic conditions and using innovative business modelling. Diabetes is used as a ‘test-case’ for developing this innovative model.

1.3 Aim and methodology of the European Practice Compendium

The European Practice Compendium was developed by summarising the core results and final products of the MANAGE CARE project. It includes all actions undertaken to assess and address the specific needs and priorities of elderly with T2DM and comorbidities. The European Practice Compendium provides reflections on priorities, needs and patient participation, which lead to the development of different tools to be used for innovations in chronic care.

The Compendium is developed to provide a holistic but compressed overview about the final products of the MANAGE CARE project. Detailed descriptions can be obtained by the respective publications, reports, toolkits and deliverables named in the respective sections.

The European Practice Compendium provides an overview about the following products of the MANAGE CARE project:

- **MANAGE-CARE State of the art**: State-of-the-art report on existing disease management models and on scientific evidence of care for elderly with T2DM
- **MANAGE-CARE patient-centre**: Identification of patients’ needs and priorities to formulate requirements for innovative and patient-centred chronic care
- **MANAGE-CARE Model & Technical Handbook**: Development of an innovative chronic care management model
- **MANAGE-CARE Pro**: e-Health portal with MANAGE-CARE PRO training curriculum for healthcare professionals
- **MANAGE-CARE Empower**: Patient empowerment booklet and e-Health portal on active ageing with T2DM
- **MANAGE-CARE Toolkit**: Development and discussion of the MANAGE-CARE Toolkit including care-standard recommendations as a roadmap to innovative Chronic Care Management.
2. Discussion of main results and need for research and innovation

The MANAGE CARE Project assesses the existing disease management programs in Europe and globally and also retrieves existing barriers and gaps within the management of chronic diseases, especially in diabetes care. Most of the existing disease management programs were planned decades ago and are based on assumptions driven by a different reality regarding prevalence and incidences of chronic diseases as well as by environmental aspects. The main objective of MANAGE CARE was to analyse this situation with respect to current real world scenarios in chronic care management, but also to project upcoming needs and challenges for chronic care management in the future.

Results of the MANAGE CARE Project

To fulfill the above objectives, MANAGE CARE has assessed existing disease management programs and provides an overview of systematically analysed disease management programs worldwide. This analysis showed, besides a large number of existing disease management programs, that there is an enormous gap in terms of systematic analysis regarding outcome, quality, evaluation, process and structure of chronic care management. MANAGE CARE has taken this analysis and assessed most commonly existing gaps, barriers and unmet needs for chronic care management. These results were translated into recommendations of how to improve existing disease management models. With Delphi-like procedures these recommendations were weighted and validated through a large number of colleagues representing patients, health care providers and other health care related stakeholders in Europe. Based on this analysis, MANAGE CARE has developed a new chronic care model, which represents challenges of today’s health care structure and addresses upcoming needs in the future.

To support this strategy, MANAGE CARE developed two highlight products – a curriculum to train e-Health Managers and a patient booklet representing integrated care diabetes management. Both deliverables should support the new MANAGE CARE Model and should subsidise the most burning gaps in existing disease management structures. A state-of-the-art position paper on how to use modern technology for e-communication in medicine accompanies the MANAGE CARE unique deliverables. Finally, MANAGE CARE has produced a compendium including all its analyses and deliverables free to be used by the health care community.

Conclusion and scientific summary

The above analysis was time-consuming, exhaustive and included contacts with many stakeholders in the field, but also explored a large number of materials in the field. The new MANAGE CARE Model as well as 11 recommendations on how to close gaps and address unmet needs will hopefully have an impact on current chronic care management in Europe. Implementing those will per se improve quality and outcome for disease management structures and, by this, will generate substantial added value for patients with chronic diseases in Europe.

One of the main gaps identified by MANAGE CARE is the missing scientific evaluation of disease management and chronic care management in Europe in its structure, process, outcome and overall
quality of care. A large number of reports were identified without comparison, adequate evaluation and systematic analysis. A systematic quality management, and even better, an independent systematic outcome evaluation should accompany every chronic care management in Europe. The fact that this does not exist is the most burning gap identified throughout the MANAGE CARE project.

The findings of MANAGE CARE illustrate that future research and program development should also include information on prevention, health promotion, social support, aspects of the social system and community engagement. This is a totally new and dynamic field as there is only limited evidence on such complex primary care regimes. However, such evidence is strongly needed to provide implications on cost-effectiveness and quality. Other barriers including transportation issues, finances and lack of services are also new to the medically driven field of chronic care management. There also needs to be a debate about the relation of chronic care to other comorbidities, like oral health care in older type 2 diabetics and the implementation of screening programs for T2DM in other medical departments (e.g. dental care) [27-29]. Another issue to be discussed is the implementation of vaccination policies for elderly type 2 diabetics [30].

The implementation of telemedicine in chronic care models will play an important role to foster the care of elderly people with chronic diseases like diabetes [31-33]. According to research done in Israel there is a digital divide between the general population and the elderly which might enlarge the disparities in health care among the age groups. The elderly, who are the main consumers of health services in developed nations, report concerns and challenges regarding the use of e-health technology [34]. Telemedicine and mobile devices will have to be carefully integrated and monitored with the help of systematic quality control and evaluation. This will help to improve prevention and health care while reducing social and health-related inequality.

Specific unmet needs identified by MANAGE CARE

On micro- and meso-level MANAGE CARE identified 13 dimensions of unmet needs in disease management. These unmet needs similarly address patients’ unmet needs, but also include health care professionals and health stakeholders simultaneously. Most of them are related to inter-professional and inter-sectorial communication, but also the inclusion of patient needs and policy determinants. The adequate use of modern technology, but also the inclusion of the potential of social network technology are two examples of unmet needs throughout chronic care management. The surveys performed within the project duration underlined the importance of patient education and education of healthcare professionals. This is very encouraging and shows the potential of chronic care and lifestyle interventions. At the same time it underlines the urgent need to broaden the view of health care and connect with stakeholders, health insurances and communities to support health promotion and all kinds of prevention.

11 Recommendations to improve chronic care management

MANAGE CARE summarises its findings in 11 recommendations on how to improve chronic care management. These recommendations are a roadmap to improve existing disease management models. The implementation of each of the recommendations per se will improve processes and
structures of disease management. To include all of them will be of high value for patient management and will subsequently improve chronic care management outcome. The MANAGE CARE project enabled a systematic analysis of existing chronic care management programs throughout Europe and worldwide and performed an in-depth analysis regarding unmet needs, gaps and barriers. This information was translated into a new chronic care management model followed by road map recommendations on how to improve existing chronic care management models. The MANAGE CARE deliverables can be combined into a strategy, which will act as a catalyst to improve disease management programs in Europe, but by including cultural and environmental adaptations also worldwide.

The MANAGE CARE Model

The MANAGE CARE Model is based on three requirements:

1. The MANAGE CARE Model includes health promotion and all kinds of prevention, without being limited to citizens who have risk factors, but also people who have a chronic disease and who will benefit by adapting to a more preventive lifestyle.
2. The model includes an individualised planning, treatment and evaluation process. The MANAGE CARE Model is based on the requirement that care should be initiated by individualised assessment of personal needs of the patient. Planning, monitoring and evaluating treatment regimens have to be dynamically adapted to the individual health competence, readiness to change lifestyle and individual preferences of the individual.
3. Successful treatment and improved outcome is not only evaluated based on singular medical parameters, it also includes individual lifestyle, awareness, as well as psychological and social components and everyday competences.
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References


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