

CARING FOR PEOPLE WITH MULTIPLE CHRONIC CONDITIONS IN EUROPE

By: Verena Struckmann, Sanne Snoeijs, Maria Gabriella Melchiorre, Anneli Hujala, Mieke Rijken, Wilm Quentin and Ewout van Ginneken

Summary: Until recently, multimorbidity has not received much attention from European policy-makers. This is changing now that it has become clear that the number of people with multimorbidity is rapidly increasing. The ICARE4EU project will help to improve, analyse and disseminate innovative patient-centred multidisciplinary care programmes or practices for people with multiple chronic conditions in Europe. Early project results show that although policy-makers are increasingly aware of the challenge of multimorbidity, national policies and strategies focusing on these patients have not yet been developed. Nevertheless, various types of multimorbidity programmes or practices have been implemented in all four countries under study.

Verena Struckmann is a Researcher, **Wilm Quentin** is Senior Researcher and **Ewout van Ginneken** is Senior Researcher, Department of Health Care Management at the Berlin University of Technology, Germany. **Sanne Snoeijs** is a Researcher and **Mieke Rijken** is Programme Coordinator, Care Demand for the Chronically Ill and Disabled at The Netherlands Institute for Health Services Research (NIVEL), The Netherlands. **Maria Gabriella Melchiorre** is a Senior Researcher, the Centre of Socio-Economic Research on Ageing, at the Italian National Institute of Health and Science on Aging (INRCA), Italy. **Anneli Hujala** is a Senior Researcher, Faculty of Social Sciences and Business Studies at the University of Eastern Finland. Email: icare4eu@nivel.nl

The ICARE4EU project (2013–2016) aims to support the European Innovation Partnership on Active and Healthy Ageing and is co-funded by the Health Programme 2008–2013 of the European Union. More information on the project and its partners can be found at: <http://www.icare4eu.org>



Keywords: Multiple Chronic Conditions, Multimorbidity, Integrated Care Practices, Finland, Germany, Italy, The Netherlands, ICARE4EU

Multimorbidity – the challenge for care delivery in Europe

Currently, an estimated 50 million (mostly older) people in the European Union (EU) live with multiple chronic diseases.¹ This deeply impacts on their quality of life, not only physically, but also mentally and socially. Until recently, multimorbidity – the occurrence of more than one chronic disease within an individual – has not received much attention from European policy-makers. This is changing, now that it has become clear that the number of people with multimorbidity is rapidly increasing. Indeed, the European Commission started a European Innovation Partnership on Active and Healthy Ageing in 2012, in

which care integration and multimorbidity are explicitly addressed, while the World Health Organization recently launched a roadmap on a framework for action towards coordinated/integrated health services delivery.

The ICARE4EU (*Innovating care for people with multiple chronic conditions in Europe*) project² is an initiative co-funded by the EU's Health Programme 2008–2013, which will help improve, analyse and disseminate innovative patient-centred multidisciplinary care programmes for people with multiple chronic conditions. In a previous article published in the 2013 *Eurohealth* Gastein edition,³ we discussed the multifactorial challenges that chronic illness care places on European health

systems. The key question is how to respond to this increasing demand for comprehensive multimorbidity care. Integrated care models have been seen by many as a solution to overcome this question by taking a holistic approach while making efficient use of resources.

This article describes some early results from our project.^{7 8 9} We first describe whether national policies exist for chronic illness care, and more specifically multimorbidity care, and/or integrated care in four countries: Finland, Germany, Italy and the Netherlands. Furthermore, we introduce some first results of our survey among country experts by providing some examples of innovative integrated care programmes for patients with multiple chronic conditions in these four countries.

“lack of national policies”

The policy response to multimorbidity

While policy-makers across Finland, Germany, Italy and the Netherlands are aware of the challenge of chronic diseases and multimorbidity, national policies specifically focusing on patients with multimorbidity have not yet been developed. Italy is the only country, where regional policies on multimorbidity management have been formulated (e.g. by the Chronic Related Group, and by the Expanded Chronic Care Model).^{7 8 9} In Germany, Italy and the Netherlands disease specific policies focusing on chronic diseases exist; however, these may not meet the special needs of multimorbidity patients. All four countries have developed policies aiming at better integration of care. While these do not explicitly target patients with multimorbidity, they often contribute to improved care for these patients as well.

Care practices addressing multimorbidity

Despite the lack of national policies specifically addressing multimorbidity, care practices focusing on multimorbidity care or management have been developed and implemented within the four countries. Overall 25 care practices or programmes* have been identified in the study so far. In **Box 1** we provide two examples from each country in the study so far. Most are limited to the local or regional level, focusing on daily patient care. Regarding the multimorbidity orientation, several programmes in Finland, Germany and the Netherlands focus on multimorbidity in general. Other programmes are aimed at a specific diagnosis with a variety of possible co-morbidities or at a combination of specific chronic diseases.

The programmes display similarities with regard to process and quality related objectives, such as improved care coordination, increasing multidisciplinary collaboration and the promotion of evidence-based practice. In Germany, Italy and the Netherlands programme objectives were similar and focused on utilisation and costs, prevention/reduction of over-use of services and reduction of acute care visits. Most programmes address patients and/or medical care providers as target groups. The main care providers involved in the programmes across all four countries are general practitioners (GPs) and medical specialists. Overall, the number and disciplines of medical specialists participating in the programmes vary greatly. In Finland, multi-professional development groups have been established to enhance integration and collaboration at a practical level. Most programmes involve hospitals and primary care practices. Overall, the programmes vary according to the level of integration of care, especially with respect to the number of medical specialists and health care professionals involved.

So far, the impressions of country experts and programme managers regarding programme outcomes are generally positive and some programmes have

already been evaluated. For instance, in Germany the programme *Gesundes Kinzigtal* had been evaluated on its processes, outcomes, long-term effects and cost-effectiveness. For the programmes that have not been evaluated thus far, evaluations are planned. For this purpose data on several indicators are collected regularly within the programmes (monitoring), so that quality information will become available for evaluation purposes.

“programme outcomes are generally positive”

Conclusion

While policy-makers across Finland, Germany, Italy and the Netherlands are aware of the challenge of multimorbidity, national policies specifically focusing on multimorbidity care or management have not been developed as yet. Nevertheless, the implementation of multimorbidity care practices is increasingly considered to be an important issue in these four countries. The current care practices or programmes addressing multimorbidity that we described in this article vary with regard to their target groups, care providers involved and especially their level of collaboration and integration. There is great value in making an inventory of such integrated care programmes addressing multimorbidity for all European countries and by doing so providing a rich dataset to better study their features, factors and conditions for successful outcomes and implementation, as well as their transferability to other European regions or contexts (e.g. patient groups, health care systems). The next step in the ICARE4EU project aims to do so by identifying good practices, based on survey data from 31 European countries and related to four main perspectives, namely their patient centredness, the use of e-health technology, their ways of financing and management and professional integration issues.

* We do not assume that all available (eligible) care practices or programmes in Finland, Italy, Germany and the Netherlands were identified.

Box 1: Characteristics of programmes addressing multimorbidity in four countries

Programme	Main objectives	Target group	Care providers / organisations	Results
<p>Finland</p> <p>PIRKKA-POTKU incl. care pathway for patients with multimorbidity, A regional sub-programme of POTKU (see above) in Pirkanmaa area.</p>	<p><i>Process</i></p> <p>e.g. Improving care coordination, improving integration of different organisations, increasing multi-disciplinary collaboration</p> <p><i>Patient outcomes</i></p> <p>Improving functional status</p> <p><i>Utilisation and cost</i></p> <p>e.g. Preventing or reducing over-use of services, reducing emergency/acute care visits, reducing (public) costs</p> <p><i>Access</i></p> <p>Reducing inequalities in access to care and support services</p> <p><i>Patient centredness</i></p> <p>e.g. Identification of target group patients, improving patient involvement</p>	<p>Patients with multimorbidity or patients who use a lot of services from many organisations or clinics.</p> <p>In particular patients whose needs are not met by the services, who need proactive care planning or who need long-term care.</p>	<p>Health centres, patient organisations, GPs, informal carers, district/community nurses, physiotherapists/ exercise therapists.</p>	<p>Evaluated internally; objectives mainly reached.</p> <p>The programme has supported integration of care services, collaboration between care providers, competencies of care providers, patient centredness, patient involvement, involvement of informal carers, use of e-health tools and cost-effectiveness.</p> <p>Closer collaboration between public health care and patient associations and patients are now included in the development of care.</p>
<p>Finland</p> <p>Chronic Care Model for Patients with Multiple Diseases in Primary Care.</p>	<p><i>Process</i></p> <p>e.g. Improving professional knowledge on multimorbidity, improving care coordination, increasing multi-disciplinary collaboration</p> <p><i>Patient outcomes</i></p> <p>e.g. Improving early detection of additional/ comorbid diseases, decreasing/delaying complications, decreasing mortality</p> <p><i>Utilisation and cost</i></p> <p>e.g. Preventing or reducing misuse of services, reducing hospital admissions, reducing (public) costs</p> <p><i>Access</i></p> <p>Reducing inequalities in access to care and support services, improving accessibility of services</p> <p><i>Patient centredness</i></p> <p>Identification of target group patients, improving patient involvement</p>	<p>Patients with multiple chronic diseases and patients with cardiovascular diseases dementia, asthma/COPD, rheumatoid arthritis, depression, atrial fibrillation, osteoarthritis, etc.</p>	<p>Primary care practices, health centres, patient organisations.</p> <p>GPs, many medical specialists, district/ community nurses, physiotherapists/ exercise therapists, dieticians, psychologists/ psychotherapists.</p>	<p>Evaluated internally; objectives mainly reached.</p> <p>The programme has promoted integration of care services, collaboration between care providers, competencies of care providers, patient-centredness and patient involvement.</p> <p>The care model is a useful tool for staff. From one portal the professionals can find everything they need to follow up with a patient with chronic diseases. The model is multidisciplinary and provides patient empowerment.</p>

Box 1: Characteristics of programmes addressing multimorbidity in four countries (continued)

Programme	Main objectives	Target group	Care providers / organisations	Results
Germany Gesundheitsnetz Qualität und Effizienz eG Nürnberg Health network quality and efficiency eG in Nürnberg, the federal state of Bavaria	<i>Quality of care</i> Improving integration of different organisations, increasing multi-disciplinary collaboration <i>Patient outcomes</i> Improving early detection of additional/ co-morbid diseases <i>Utilisation and cost</i> Preventing or reducing over-use of services <i>Improving patient centredness</i> e.g. patient involvement	Patients with multi-morbidity in general, medical care providers, non-medical care providers and management.	General hospitals, primary care practices, nursing homes, policlinics, patient organisations, social care organisations, physiotherapy, self-help and GPs and several medical specialists, namely: cardiologists, surgeons, internists, E.N.T. specialist, pulmonologist, etc.	The programme suggests improved coordination of care, improved cooperation between medical and non-medical care, staff and patient satisfaction, better patient involvement, changes in utilisation of resources, cost savings and it is transferable. The objectives set in the programme were said to be completely reached.
Germany Gesundes Kinzigtal in Haslach in the federal state of Baden Württemberg	<i>Quality of care</i> e.g. Promoting evidence-based medicine, improving professional knowledge on multi- morbidity, increasing multi-disciplinary collaboration <i>Patient outcomes</i> Improving early detection of additional/ co-morbid diseases, decreasing complications, morbidity, mortality <i>Utilisation and cost</i> Reducing hospital admissions, (public) costs <i>Improving patient centredness</i> e.g. patient involvement.	The programme refers to patients with multi-morbidity in general, medical care providers, non-medical care providers and the population.	General hospitals, primary care practices, nursing homes, policlinics, patient organisations, social care organisations, pharmacy, insurer and management company. The programme involves several care providers such as GPs, cardiologists, internists, neurologists, etc., social workers, physiotherapists, dieticians and psychologists.	The programme improved integration of services, the collaboration of care providers and cost effectiveness. The objectives of the programme were said to be almost completely reached.
Italy ARIA Project	<i>Quality of care</i> Improving care coordination/integration <i>Patient outcomes</i> Decreasing complications/morbidity/mortality <i>Utilisation and cost</i> Preventing misuse of services <i>Improving patient centredness</i> Improving patient/informal carers involvement	Patients, informal carers and medical care providers. The programme specifically addresses people with physical disabilities (e.g. neuromuscular diseases, and chronic respiratory failure as comorbidity.	University and general hospitals, patient organisations. Care providers involved in the programme are medical specialists (pulmonologists) and physiotherapists/ exercise therapists.	Results seem to suggest mainly improved integration/ collaboration of care services/providers, coordination of care, involvement/ satisfaction of patients/informal carers, etc. The programme seems also to be transferable. The results also suggest that the remote monitoring of fragile outpatients brings out physiological tranquility for patients and their caregivers.

Box 1: Characteristics of programmes addressing multimorbidity in four countries (continued)

Programme	Main objectives	Target group	Care providers / organisations	Results
<p>Italy</p> <p>Renewing Health</p> <p>REgioNs of Europe WorkINgtoGether for HEALTH *</p> <p>* Multicentre Project involving the following European countries: Italy, Denmark (Lead partner), Norway, Finland, Sweden, Spain, Greece, Austria and Germany</p>	<p><i>Quality of care</i></p> <p>Improving care coordination/integration</p> <p><i>Patient outcomes</i></p> <p>Decreasing complications/mortality</p> <p><i>Utilisation and cost</i></p> <p>Preventing over-use/misuse of services</p> <p><i>Improving access</i></p> <p>Reducing inequalities and Improving accessibility in/to care and support services</p> <p><i>Improving patient centredness</i></p> <p>Improving patient/ informal carers involvement</p>	<p>Patients, informal carers and medical care providers. The programme generally addresses people with chronic diseases (e.g. heart failure, COPD, diabetes) aged 18+ years, and more specifically frail elderly people aged 65+.</p>	<p>University and general hospitals, primary care practices, nursing home, policlinic/ outpatient/ambulatory care, patient organisations, community/home care organisations, ICT departments, research institutes, regions and external providers.</p> <p>Care providers involved in the programme are GPs, medical specialists (cardiologist, pulmonologist, geriatrician and diabetologist) and different health professionals.</p>	<p>Results show mainly integration/ collaboration of care services/providers, patient/informal carers' involvement, staff/ patients/informal carers' satisfaction, changes in utilisation of resources (e.g. reduced hospitalisations), use of e-health tools and cost savings/ effectiveness.</p> <p>The programme is also transferable.</p>
<p>The Netherlands</p> <p>Guided Care Model – A disease seldom stands alone.</p>	<p><i>Process</i></p> <p>e.g. Improving professional knowledge, improving care coordination, increasing multi-disciplinary collaboration</p> <p><i>Patient outcomes</i></p> <p>Early detection of comorbidities, improving functional status, decreasing complications</p> <p><i>Utilisation and cost</i></p> <p>Reducing hospital admissions, reducing emergency care visits</p> <p><i>Access</i></p> <p>Improving accessibility</p> <p><i>Patient centredness</i></p> <p>Identification of target group, improving patient involvement, involvement of informal carers.</p>	<p>Patients aged 65 or older suffering from more than one disease or problem (physical, social, psychological, functional).</p> <p>Within this target group the following subgroups are specifically addressed: frail elderly, low health literacy, low income groups and people from deprived areas.</p>	<p>Involvement of primary care practices, health centres and centres of expertise in long-term care.</p>	<p>The Guided Care Model is an appropriate method for general practices. It enables care providers to manage the care for multimorbidity patients in a different way. Patients are positive about the increase in attention towards their personal health goals and the active support they feel they are receiving in reaching these goals.</p>
<p>The Netherlands</p> <p>INCA – the Integrated Care programme</p>	<p><i>Process</i></p> <p>e.g. Improving integration of different units, increasing multi-disciplinary collaboration</p> <p><i>Patient outcomes</i></p> <p>e.g. Early detection of comorbidities, decreasing morbidity</p> <p><i>Utilisation and cost</i></p> <p>Preventing over- and misuse of services, reducing hospital admissions, reducing (public) costs</p> <p><i>Access</i></p> <p>Reducing inequalities in access to care and support services</p> <p><i>Patient centredness</i></p> <p>Identification of target group, improving patient involvement</p>	<p>Patients suffering from diabetes, COPD and/or vascular risk management.</p> <p>Within this target group no specific subgroups are specifically addressed.</p> <p>Patients aged 18 years or older.</p>	<p>Involves primary care practices (general practice).</p> <p>Additional (medical/ non-medical) care sectors are involved according to patient needs.</p> <p>Research institute</p>	<p>The evaluation showed that the INCA approach helps to realise the shift from disease orientation to patient orientation. The harmonisation across health care standards/ disease management programmes (DMPs) provides a base for a more individualised (tailored) approach. The modular approach is key for further elaboration and application.</p>

References

- 1 Rijken M, Struckmann V, Dyakova M, Melchiorre MG, Rissanen S, van Ginneken E, on behalf of the ICARE4EU partners. ICARE4EU: Improving care for people with multiple chronic conditions in Europe. *Eurohealth* 2013; 19(3):29–31.
- 2 Innovating care for people with multiple chronic conditions in Europe web site. Available at: www.icare4eu.org
- 3 Caring for people with multiple chronic conditions in Finland. Available at: http://www.icare4eu.org/pdf/Country_Factsheet_Finland_ICARE4EU.pdf
- 4 Caring for people with multiple chronic conditions in Germany. Available at: http://www.icare4eu.org/pdf/Country_Factsheet_Germany_ICARE4EU.pdf
- 5 Caring for people with multiple chronic conditions in Italy. Available at: http://www.icare4eu.org/pdf/Country_Factsheet_Italy_ICARE4EU.pdf
- 6 Caring for people with multiple chronic conditions in the Netherlands. Available at: http://www.icare4eu.org/pdf/Country_Factsheet_The_Netherlands_ICARE4EU.pdf
- 7 Sorlini M, Perego L, Silva S et al. The chronic related groups (CReG) model for ensuring continuity of care for chronically ill patients: pilot experience of the planning stage in Bergamo (Italy). *Igiene e Sanita Pubblica*. 2012; 68(6): 841–61. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/23369997>
- 8 Ministry of Health. Criteria for clinical, technological and structural appropriateness in caring for complex patient. *Papers of the Ministry of Health* 2013; 23: XVIII-XXII [*Criteria di appropriatezza clinica, tecnologica e strutturale nell'assistenza del paziente complesso. Quaderni del Ministero della Salute, 2013; 23: XVIII-XXII*]. Available at: <http://www.quadernidellasalute.it/download/download/23-settembre-ottobre-2013-quaderno.pdf>
- 9 Chronic diseases in Tuscany Region, 2013 [*Le malattie croniche in Toscana, 2013*]. Available at: www.ars.toscana.it/it/aree-d'intervento/problemi-di-salute/malattie-croniche.html

Policy Summary on what is the evidence on the economic impacts of integrated care?

By: Ellen Nolte and Emma Pitchforth

Copenhagen: World Health Organization/European Observatory on Health Systems and Policies, 2014

Number of pages: 45, **ISSN:** 2077-1584, Policy Summary 11

The rising burden of chronic disease, and the number of people with complex care needs in particular, require the development of delivery systems that bring together a range of professionals and skills from both the cure (health-care) and care (long-term and social-care) sectors. Failure to better integrate or coordinate services along the care continuum may result in suboptimal outcomes.

This Policy Summary analyses published reviews on the economic impacts of integrated care approaches. Given the wide range of definitions and interpretations of the concept, it proposes a working definition that builds on the goal of integrated care and which considers initiatives seeking to improve outcomes for those with (complex) chronic health problems and needs by overcoming issues of fragmentation through linkage or coordination of services of different

providers along the continuum of care. The review covers three economic outcomes: utilisation, cost-effectiveness and cost or expenditure and also looks at data on core health outcomes such as health status, quality of life or mortality, as well as process measures.

Available evidence of integrated care programmes points to a positive impact on the quality of patient care and improved health or patient satisfaction outcomes. However, uncertainty remains about the relative effectiveness of different system-level approaches on care coordination and outcomes, with

particular scarcity of robust evidence on the economic impacts of integrated care approaches. In addition, it is important to come to an understanding as to whether integrated care should be considered an intervention or whether it should be interpreted, and evaluated, as a complex strategy to innovate and implement long-lasting change in the way services in the health and social-care sectors are being delivered and that involve multiple changes at multiple levels.

