Caring for people with multiple chronic conditions in the Netherlands:
policy and practices

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Key points

- In the Netherlands, chronic illness care is mainly provided in primary care. Because of the comprehensive and coordinating tasks of general practitioners, they play a key role in the management of multimorbidity.
- Experiments with integrated care are taking place to improve care delivery, and to stimulate integration of primary care services with hospital care, social and community services.
- In addition to disease-specific chronic disease management programmes, experiments with case management for patients with multimorbidity have been initiated.
- Recent reforms in long-term care aim to achieve decentralisation and to control costs, resulting in a greater emphasis on patients’ self-management and informal care.
1. Multimorbidity: a challenge for care delivery

Until recently, multimorbidity — the occurrence of more than one chronic disease within an individual — has not received much attention from European policy-makers. However, this seems to be changing, now that it has become clear that the number of people with multimorbidity is rapidly increasing. Currently, an estimated 50 million (mostly older) people in the European Union live with multiple chronic diseases¹, which deeply impacts their quality of life in many ways (physically, but also mentally and socially). This implies an increasing demand for multidisciplinary care that is tailored to the specific health and social needs of people with multimorbidity.

Yet interdisciplinary collaboration across sectors (e.g. primary care, hospital care, social care, home care, community services) is often hindered by differences in organisational and financing arrangements between sectors. Moreover, most care delivery models are based on a single disease approach, which could bring about fragmentation, gaps or overlap in care delivery for people with multimorbidity with negative consequences for the quality of care, patient outcomes, efficiency and costs.

Integrated care models have the potential to overcome these problems by taking a holistic approach while making efficient use of resources. Such models are characterised by proactive patient-centred and well-coordinated multidisciplinary care, using new technologies to support patients’ self-management and improve collaboration between caregivers. The ICARE4EU project (see Box 1) explores new models and care practices aimed at delivering integrated care for people with multimorbidity in 30 European countries. This factsheet describes how policy and practices are developing in the Netherlands.

2. The challenge of multimorbidity in the Netherlands

In 2011, among a total population of 16.7 million inhabitants, 15.6% of people were aged 65 years and older, and 4.0% were 80 years and older². Among the total EU-27, slightly higher percentages of older inhabitants were found (65+: 17.6%; 80+: 4.8%), but based on a prognosis of Statistics Netherlands the percentage of Dutch inhabitants aged 65 and over will further increase to about 17% in 2017³.

Of the population aged 16 to 64 years, an estimated 34.1% reported to have at least one long-standing illness or health problem⁴. Figure 1 shows the prevalence of some major chronic diseases.
Box 1  The ICARE4EU project

The ICARE4EU project aims to identify, describe, and analyse innovative, integrated care models for people with multimorbidity in 30 European countries, and to contribute to more effective implementation of such models.

For this purpose, country experts have been contracted (one for each country) to identify programmes at a national, regional or local level in their country that focus on providing care for adult (or older) people with multimorbidity, or contain specific elements for this target group.

Multimorbidity is defined for this project as *the presence of two or more medically (somatic or psychiatric) diagnosed chronic (not fully curable) or long lasting (at least six months) diseases, of which at least one is of a primarily somatic nature*. Programmes should involve a formalised cooperation between two or more services, of which at least one medical service, and they should be evaluated — or have an evaluation planned — in some way. For each eligible programme, the country expert or the programme manager completed an online questionnaire. In addition, country-level data were provided by the country experts and partly collected by the project team from European databases.

Based on all data available, good practices will be identified and studied in the second half of 2014. For this purpose, additional qualitative data from different perspectives (e.g. management, care providers, patients) will be gathered by site visits. Analysis of the good practices will result in knowledge about the characteristics and conditions for successful implementation of multimorbidity care practices in various European countries. For more information: [www.icare4eu.org](http://www.icare4eu.org).

Figure 1  Prevalence of some major chronic diseases in the Netherlands in 2011 (per 1000 persons), estimations based on registration data from general practices

![Prevalence of chronic diseases in the Netherlands](image)
Based on the occurrence of 14 self-reported chronic conditions, it has been estimated that approximately 35% of the Dutch population aged 50 years and older suffers from multimorbidity, i.e. have been diagnosed with at least two of these 14 conditions\textsuperscript{6}. Based on medical diagnoses (of 29 chronic diseases) as registered in general practices over the period 2002-2008, multimorbidity was found in 13% of the total Dutch population, and in 37% of the population aged 55 and older\textsuperscript{7}.

In 2011, the Netherlands spent 11.9% of its Gross Domestic Product (GDP) on health care, which is an increase of almost 47% in comparison with 1998 (8.1%).\textsuperscript{8} Across the total EU, the expenditures on health care rose from 7.9% to 9.6% GDP over the same period (+21.5%)\textsuperscript{9}. So health care expenditures in the Netherlands have risen to a larger extent. See Appendix 1 for some general characteristics of the health care system in the Netherlands.

3. The Dutch response to the challenge of multimorbidity
In order to respond to the increasing number of chronically ill citizens, and people with multimorbidity in particular, the Dutch central government has formulated new policies and introduced measures to adapt the health care system and care practices to the challenge of meeting the more comprehensive needs of these people.

Policy on multimorbidity care
A national strategy on chronic disease management was launched by the Ministry of Health, Welfare and Sport in 2008\textsuperscript{10}. Health care standards for several chronic diseases have been developed by stakeholders including health and social care professionals, patient organisations and policymakers, describing an integrated approach for prevention, treatment and follow-up care for these diseases and a central role for patients’ self-management. Bundled payment was introduced to facilitate multidisciplinary collaboration in disease management programmes. However, since these programmes are disease-specific, concerns have raised that provided care might overlap for some groups of multimorbidity patients, whereas for others with multimorbidity, especially older patients, such an approach would not meet their comprehensive needs. To prevent overlap and develop generic care modules as well, the Coordination Platform Health care standards were established (2009-2012\textsuperscript{2}). Other initiatives have been taken to promote population (health) management and intersectoral collaboration at a local level (Primary focus programme; 2009-2013)\textsuperscript{11}, and recently also at a regional level by designating nine ‘pioneer sites’. Pioneer sites are formal networks of primary care organisations, hospitals, a health care insurer, other (social) care

\textsuperscript{6} The Platform has now become part of Care Institute Netherlands.
providers and patient representatives. These networks define target populations and goals, and pilot-specific interventions, which often focus on care substitution, integration of services and patients' self-management\(^\text{12}\). To provide integrated care for older people with complex health care needs, the National Care for the Elderly programme (2008-2013) was set up\(^\text{13}\), allowing regional networks to experiment with models of integrated care delivery exceeding the boundaries of existing legislation and financing structures\(^\text{14}\).

**Care practices addressing multimorbidity**

Based on expert information and snowballing, six care practices or programmes\(^d\) addressing multimorbidity patients or focusing on multimorbidity management were identified in the first half of 2014 in the Netherlands\(^e\). From all six programmes we obtained information about their objectives, characteristics and results (see Box 2). Presented below are some results of the survey, as reported by either the country expert or the programme managers.

**The programmes**

Three programmes are pilot projects [2,3,5], while the other three are characterised as more embedded [1,4,6]. Four programmes are locally implemented [1,2,5,6], one at a regional level [3] and one programme is implemented at a national level [4]. All programmes operate at the level of daily patient care, three also operate at policy/managerial level [3,4,6].

Five programmes focus explicitly on delivery of integrated care [1-5]. The AGEhIV project is somewhat different as it concerns an epidemiological study on HIV and ageing-related comorbidities, which also provides suggestions for providing care according to individual patient needs and evaluates the use of these suggestions at provider level.

**Multimorbidity orientation**

Three programmes focus on multimorbidity in general [2,4,6]. The Utrecht Proactive Frailty Intervention Trial is aimed at frailty, but the level of frailty is derived from diagnostic ICPC codes. Two programmes focus on a combination of specific chronic diseases (e.g. diabetes, asthma and/or COPD with comorbid depression or anxiety [5]) [3,5]. The CasCo programme focusses on the co-occurrence of specific diagnoses starting from a so-called 'index disease', in this case DM2.

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\(^{d}\) This term refers to care programmes, projects and interventions that have been developed or adapted for use in (a certain region or municipality of) this country, and are actually running in 2014 (e.g. as a pilot/project or already more structurally implemented), start in 2014 or had been finished in 2013.

\(^{e}\) We do not assume that all available (eligible) care practices or programmes in the Netherlands were identified.
Objectives
For all programmes, process-related objectives are described, such as improved care coordination [1-4,6], increasing multidisciplinary collaboration and the integration of different units [both 2-4,6] and the promotion of evidence-based practice [1-3,6]. Objectives related to patient outcomes mainly included decreasing morbidity [2-6], improvement of functional status [1-4,6], early detection of comorbid diseases and the delay of complications [2-4,6]. Concerning objectives related to utilisation and costs, prevention/reduction of over-use of services and reduction of acute care visits were frequently mentioned [respectively 1,3,4 and 2,3,4]. Two programmes aimed to reduce (public) costs. Objectives aimed at the improvement of patient centeredness were indicated for four programmes and mostly included improved identification of the target group [2-4,6] and better involvement of patients [1-3]. Improved access was aimed for in two programmes [2,3].

Target groups
All programmes directly target patients with multimorbidity, which means that individual patients are participating in the programme. In three programmes frail, elderly people are specifically addressed as a subgroup within the patient population [2,4,6]. Two of which exclusively target a specific age group [4,6]. In two programmes people with low health literacy are targeted [2,6]. In the AGEhIV programme, people with cognitive impairments, functional disability, from deprived areas and/or ethnic minorities are also addressed. In the Utrecht Proactive Frailty Intervention Trial informal carers are recognised as potential patients and they are targeted as such.
In four programmes medical care providers are directly targeted [2,3,4,6]; two also target non-medical care providers [2,6]. Informal carers as co-carers are described as a specific target group for three programmes [2,4,6]. Management teams are targeted in two programmes [3,6].

Level of integration of care sectors and disciplines
In all programmes, general practices are involved. In the DiMaCoDea programme for instance, the treatment of comorbid depression and anxiety takes place in general practice. In the CasCo programme trained practice nurses apply a case management in addition to a diabetes management programme. Additional care professionals are involved in the care process according to patient needs, but the CasCo programme focusses on care coordination from the general practice office. The INCA project provides a basis to develop individual care plans for patients with a combination of chronic diseases from stepped care modules (based on existing health care standards).
Hospitals are involved in three [3,4,6] and health centres in two programmes [2,3]. A patient organisation is part of the multidisciplinary team in one programme [6]. In the Utrecht Proactive Frailty Intervention Trial social and home care organisations are participating. In four programmes a research institute is actively involved [3,4,5,6].

**Experiences and results**

All programmes have been evaluated internally, one of which was also evaluated by an external organisation [3]. Process evaluation has taken place in five programmes [1-4,6]. Three programmes were evaluated on their effectiveness by means of a randomised controlled trial [2,4,5]. Long-term effects were studied in two trials [5,6], one of which also evaluated cost-effectiveness [6].

Several indicators were monitored so that quality information was available for evaluation purposes. However, no indicators were monitored in two programmes [1,3]. In the other programmes mainly structure (the enrolment and drop-out of patients and patient characteristics) and outcome (quality of life) indicators were monitored. Other indicators that were frequently monitored are clinical outcomes [4-6], hospital admissions [2,4,6] and patient satisfaction [2,4,6].

Country experts and programme managers were mildly positive about reaching set objectives. However, in just two programmes all objectives were reached and long-term effects are unknown for most programmes. All programmes resulted in improved coordination of care, improved integration of services and improved competencies of care providers. Several programmes resulted in better outcomes for patients [3-5] and satisfaction with both the staff and patients [2,3,6 and 2-4 respectively]. For two programmes cost savings are indicated [3,4].

The Guided Care programme is appropriate for the Dutch system with a GP as the gatekeeper. Both patients and care providers are positive about the holistic approach. The CasCo programme is also based on the Guided Care Model, in addition to the diabetes disease management programme; it shows no additional effect on patients' perceived quality of care, their health status and health care utilisation. The INCA project stimulates an integrated approach using existing nationally implemented health care guidelines when comorbidity occurs. However, currently only a limited number of health care guidelines are available. The Utrecht Proactive Frailty Intervention Trial led to better preservation of daily functioning compared to the control group. The stepped care treatment and monitoring in the DiMaCoDea programme show positive results in reducing symptoms of anxiety and depression. Results from the AGEhIV programme show that feedback about deviating clinical indicators can be an appropriate and structural method for signalling possible risks and adapt care according to patient needs.
## Box 2 Characteristics of programmes addressing multimorbidity in the Netherlands and results

<table>
<thead>
<tr>
<th>ID NR</th>
<th>Programme Description</th>
<th>Main Objectives</th>
<th>Target Group</th>
<th>Care providers / organisations</th>
<th>Results</th>
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<tbody>
<tr>
<td>1</td>
<td>CasCo - The effectiveness of case management for comorbid T2DM patients in addition to diabetes management.</td>
<td><strong>Process</strong>&lt;br&gt;Improving care coordination&lt;br&gt;<strong>Patient Outcomes</strong>&lt;br&gt;Improving functional status&lt;br&gt;<strong>Utilisation and cost</strong>&lt;br&gt;Prevent/reduce over-use of services</td>
<td>DM2 patients with specific comorbidities (chronic ischemic heart disease, stroke, depression, rheumatoid arthritis, osteoarthritis, cancer or COPD).&lt;br&gt;Within this target group no specific subgroups are specifically addressed.&lt;br&gt;Patients aged 18 years or older.</td>
<td>Involves primary care practices (general practice).&lt;br&gt;Additional (medical/non-medical) care sectors are involved according to patient needs.</td>
<td>Additional case management for comorbid T2DM patients, who already participate in a disease management programme (DMP) seems to have no additional effect on patients’ perceived quality of care, patients’ health status and health care utilisation.&lt;br&gt;There are no conclusions yet on the implementation process.</td>
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<tr>
<td>2</td>
<td>Guided Care Model - A disease seldom stands alone.</td>
<td><strong>Process</strong>&lt;br&gt;Promoting evidence-based practice, improving professional knowledge, improving care coordination, improving integration of different units, increasing multi-disciplinary collaboration&lt;br&gt;<strong>Patient outcomes</strong>&lt;br&gt;Early detection of comorbidities, improving functional status, decreasing complications, decreasing morbidity, decreasing mortality&lt;br&gt;<strong>Utilisation and cost</strong>&lt;br&gt;Reducing hospital admissions, reducing emergency care visits&lt;br&gt;<strong>Access</strong>&lt;br&gt;Improving accessibility&lt;br&gt;<strong>Patient centeredness</strong>&lt;br&gt;Identification of target group, improving patient involvement, involvement of informal carers</td>
<td>Patients aged 65 or older suffering from more than one disease or problem (physical, social, psychological, functional).&lt;br&gt;Within this target group the following subgroups are specifically addressed: frail elderly, low health literacy, low income groups and people from deprived areas.</td>
<td>Involvement of primary care practice, health centre and centre of expertise in long term care.</td>
<td>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. Care providers feel they can pay more attention to the patient and his/her situation as a whole. Patients are positive about the increase in attention towards their personal health goals and the active support they feel to receive in reaching these goals.</td>
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| 3 | INCA - the Integrated Care program | Process | Promoting evidence-based practice, improving professional knowledge, improving integration of different units, increasing multi-disciplinary collaboration  
Patient outcomes  
Early detection of comorbidities, improving functional status, decreasing complications, decreasing morbidity  
Utilisation and cost | Patients suffering from diabetes, COPD and/or vascular risk management.  
Within this target group no specific subgroups are specifically addressed.  
Patients aged 18 years or older.  
Involves primary care practices (general practice).  
Additional (medical/non-medical) care sectors are involved according to patient needs.  
Research institute. | 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. |
| 4 | Utrecht Proactive Frailty Intervention Trial | Process | Promoting evidence-based practice, improving care coordination, improving integration of different units, increasing multi-disciplinary collaboration  
Patient outcomes  
Early detection of comorbidities, improving functional status, decreasing complications, decreasing morbidity  
Utilisation and cost | Frail patients aged 60 or older.  
Within this target group the following subgroups are specifically addressed: frail elderly, informal carers as clients.  
Involves primary care practice, university hospital, nursing home, social care organisation, community/home care organisation, pharmacy, insurer, ICT dept., research institute and government.  
A frailty screening intervention (U-PRIM) followed by nurse-led care (U-CARE) led to better preservation of daily functioning compared to the control group. Both U-PRIM and U-CARE together have a high probability to be cost-effective compared to usual care. |
<table>
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<tr>
<th>Identification of informal carers</th>
<th>Patient outcomes</th>
<th>Process</th>
<th>Involved organisations</th>
<th>Description</th>
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<tr>
<td><strong>5</strong> DiMaCoDeA - Disease Management for Co-morbid Depression and Anxiety</td>
<td>Decreasing morbidity</td>
<td>Promoting evidence-based practice, improving professional knowledge, improving care coordination, increasing multidisciplinary collaboration</td>
<td>Involves primary care practices (general practice) and research institute.</td>
<td>The intervention including stepped care treatment and monitoring after remission reduced symptoms of anxiety and depression, showing large effect sizes, although most findings for depression were not significant at the 95%-significance level. This effect was still present after 18 months (which is 6 months after completion of the 12-month programme).</td>
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<td><strong>6</strong> AGEhIV Cohort Study - Aging and comorbidity with HIV infection</td>
<td>Early detection of comorbidities, improving functional status, decreasing complications, decreasing morbidity</td>
<td>Promoting evidence-based practice, improving professional knowledge, improving care coordination, increasing multidisciplinary collaboration</td>
<td>Involves university hospital, primary care practice, policlinic/outpatient clinic/ambulatory care, patient organisation and a research institute.</td>
<td>The epidemiological study showed increased age related comorbidities in HIV-infected patients versus non-HIV patients (75% versus 60% had one or more comorbidities). Feedback about deviating clinical indicators of individual patients is provided to the medical care providers (GPs and specialists), who can adapt the treatment and care plan based on this feedback. The feedback is a structural method for signalling possible risks and adapting care according to patient needs.</td>
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Appendix 1  Some characteristics of the health care systems in the Netherlands

In the Netherlands, the central government sets the objectives and the total budgets for health and social care. Health and social care are financed by a mixed tax/insurance-based system. Curative care is provided on the basis of the Health Insurance Act (HIC), which entails an obligatory private basic insurance for all people in the Netherlands. Long-term care is provided on the basis of the Exceptional Medical Expenses Act (EMEA), which is a tax-based social insurance. Home help and social support are provided by the municipalities on the basis of the Social Support Act (SSA), to which the central government allocates tax incomes. So, traditionally there are segregated delivery and financing systems for curative health care and long-term care and support.

Health care
Health care in the Netherlands has been divided traditionally into primary care and specialised care. Based on characteristics of its structure and delivery of care services, the strength of the primary care sector in the Netherlands was labelled as strong in a European comparative health systems study. General practitioners function as ‘gatekeepers’, i.e. specialised care is only accessible upon referral from a general practitioner. Since 2011, arrangements with hospitals and health insurers have been made to support concentration of highly specialised care. Hospitals should meet volume and quality norms to be contracted by health care insurers for certain medical interventions. This has led to fewer hospitals offering specific types of specialised care.

As in many European countries, (almost) the total population of the Netherlands has health care coverage, and costs and benefits are comprehensive. In 2011, 85.6% of the total health care expenditures was funded by public sources, which is well above the average of 72.2% in OECD countries. The increasing health care expenditures have led to more patient cost sharing in the last five years. For instance, apart from the premium for the basic insurance that the insured pay from their net incomes, there is an obligatory deductible, which has risen from 150 € in 2008 to 350 € in 2013 (+233.3%). This deductible does not apply to consultations with general practitioners and maternal care, to guarantee access to basic care. In addition, co-payments are imposed for certain types of care, such as several medicines, medical aids and transport to a medical service.

Social care, home care or care for the elderly
Substantial reforms are taking place regarding long-term care (LTC) and social support. Political decisions have been made towards further decentralisation and a reduction of public expenditures. In 2010, public LTC expenditures were among the highest in Europe: 3.8% of GDP compared to 1.8% across the EU. To diminish the increase of LTC expenditures, the purpose of the EMEA was redefined in 2009/2010 and eligibility criteria restricted (now only for people with moderate to severe ADL problems). Home help was already transferred to SSA in 2007, which is also the basis for the provision of supportive aids (e.g. wheelchairs), home adaptations and arrangements for transport of older and disabled citizens. Municipalities are required to offer support for citizens with ADL problems, but have a high freedom of action on how they organise care and support. Moreover, they
have a limited budget.

Recently, the parliament adopted the Long-term Care Act (LCA), which will replace the EMEA in 2015. The LCA will exclusively finance care for people who are in need of intensive LTC or supervision for 24 hours a day, such as frail, elderly people or the severely disabled. Other types of care now covered by EMEA will be transferred to the HIC, the new SSA 2015 or will no longer be publicly financed. Informal care and patients’ self-management are nowadays emphasised by the government to improve patient/citizen involvement, but definitely also to reduce public expenditures.