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THE SELFIE FRAMEWORK

FOR INTEGRATED CARE FOR MULTI-MORBIDITY

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Summary: There is an increasing prevalence of multi-morbidity, which is associated with lower quality of life and higher expenditures, and constitutes a challenge to current, often fragmented, care provision. Integrated care programmes appear to be a promising solution. However, the dialogue on such programmes needs to be streamlined to ensure continuation, wider implementation and sustainable financing. The SELFIE framework provides a means to ensure such a dialogue by structuring relevant concepts of integrated care for multi-morbidity. The framework can be used to describe, develop, implement and evaluate integrated care programmes for multi-morbidity.

Keywords: Multi-morbidity, Integrated Care, Sustainable Financing, SELFIE Framework

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Introduction

With the rapid increase in the prevalence of multi-morbidity there is a need for appropriate care provisions. People with multi-morbidity are often confronted with care providers from different disciplines, organisations, or even sectors. Subsequently, individuals with multi-morbidity have been found to have a lower quality of life and greater health care utilisation. Multi-morbidity has also become a serious challenge for policy makers responsible for the organisation, financing and provision of care. Integrated care, defined as coordinated, pro-active, person-centred, multidisciplinary care provided by well-communicating and collaborating providers, can offer the solution to providing multi-morbidity care. SELFIE (Sustainable intEgrated chronic care modeLs for multimorbidity: delivery, FInancing, and performancE) is a Horizon2020 funded EU project that aims to contribute to the improvement of person-centred care for people with multi-morbidity by proposing evidence-based, economically sustainable, integrated care programmes that stimulate cooperation across health and social care and are supported by appropriate financing and payment schemes. More specifically, SELFIE aims to:

- Develop a taxonomy of promising integrated care programmes for persons with multi-morbidity;
- Provide evidence-based advice on matching financing/payment schemes with adequate incentives to implement integrated care;
- Provide empirical evidence of the impact of promising integrated care on a wide range of outcomes using Multi-Criteria Decision Analysis;
- Develop implementation and change strategies tailored to different care settings and contexts in Europe, especially Central and Eastern Europe.

The SELFIE consortium includes eight organisations in the following countries: the Netherlands (coordinator), Austria, Croatia, Germany, Hungary, Norway, Spain, and the UK. www.selfie2020.eu [Grant Agreement No 634288]

Increasingly, integrated care programmes for multi-morbidity are being implemented across Europe. A basic and essential starting point, however, is to understand these programmes, e.g., what does such a programme consist of, how does it work, how has it been implemented, is it effective, what can others learn from it? In order to have a successful dialogue on these programmes it is important to use a consistent framework that aids the description, development,

implementation and evaluation thereof. Such a framework has been developed within the Horizon2020 EU-funded project SELFIE: Sustainable Integrated Chronic Care Models for Multi-Morbidity: Delivery, Financing and Performance. The SELFIE framework for integrated care for multi-morbidity was developed through a scoping review of scientific and grey literature and expert discussions in eight European countries. Specifically five types of experts were involved in these discussions: Patients (individuals with multi-morbidity), Partners (informal caregivers), Professionals, Payers and Policy makers (the 5Ps).

The SELFIE framework structures relevant concepts to consider in integrated care for multi-morbidity into a 'core' and micro-, meso-, and macro-levels of the six slightly adapted WHO health system components (see Figure 1). Each is described below. The framework has been extensively described elsewhere.

The core: the individual with multimorbidity

At the core of integrated care for people with multi-morbidity is the holistic understanding of this individual in his or her environment. Attention to the individual's health, well being, capabilities and self-management abilities is needed. The basis for ensuring person-centred and tailored care is a focus on his or her needs and preferences. There is also a focus on several 'environmental' factors that interplay with the aforementioned factors: their social network, financial and housing situation, their community and the transport and welfare services available to them. A holistic understanding is something that is often made concrete through a formal assessment at multiple points in an integrated care trajectory.

Service delivery

At the micro level, service delivery pertains to person-centred, pro-active and tailored care provision, with attention for all that comes out of the holistic understanding/assessment. It is especially relevant in the case of multi-morbidity that continuity is ensured, which includes smooth and monitored transitions

between professionals and organisations and attention to potential treatment interactions.

At the meso level there should be recognition for continuous quality improvement systems, which are a challenge in the case of multiple chronic diseases – appropriate indicators still need to be developed. Furthermore, to increase the sustainability of integrated care programmes, organisational and structural integration across sectors is beneficial. This can be realised not only through formal alliances or mergers but also through informal cooperative agreements.

holistic understanding of the individual in his or her environment

However, at the macro level policies that stimulate the integration of care across organisations and sectors are needed, meaning that market regulation that permits such collaboration needs to be in place. Policies that ensure service availability and access are also important to protect vulnerable groups – such as people with multi-morbidity, e.g., acceptable waiting times and reasonable travel times.

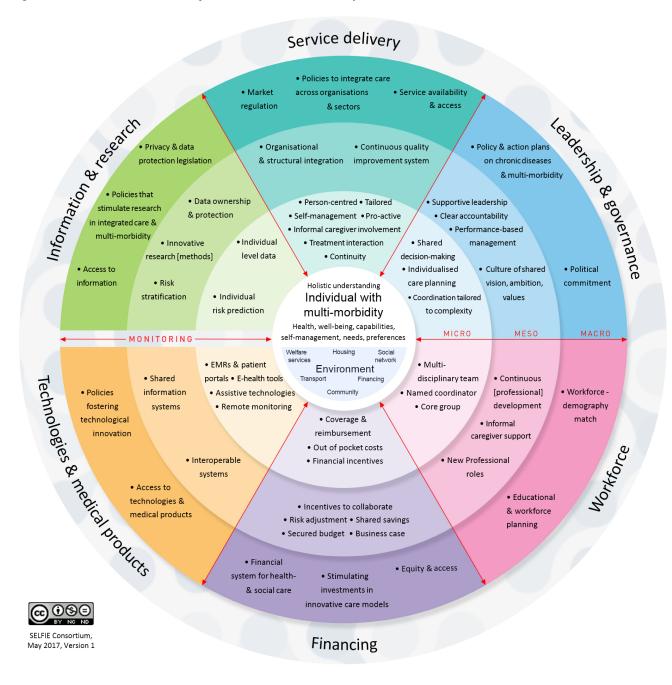
Leadership and governance

For persons with multi-morbidity different problems often occur simultaneously; thus prioritisation, individual care planning and tailoring are necessary. These should all occur throughout a process of shared decision-making between formal providers, informal caregivers and the individual with multi-morbidity.

At the organisational, meso level, integration can be facilitated by supportive leadership, organisational transparency and clear accountability. Collaborations that have a culture of shared vision, ambition, and values are more likely

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Figure 1: SELFIE Framework for Integrated Care for Multi-Morbidity



Source: SELFIE Consortium, for more information see

to succeed in the long run. Integrated care programmes could be supported by performance-based management on all levels, dis-incentivising opportunistic behaviour. Political commitment at the macro level can also facilitate the success of integrated care programmes.

Workforce

Integrated care for people with multimorbidity requires teamwork that is multidisciplinary and, when needed, crosses organisational- and sectoral boundaries. Often, however, it is beneficial to distinguish a core team and a named coordinator that is the central contact point for the individual with multi-morbidity. Professionals with a specialist background can benefit from continuous education and further development to help enhance their skills in managing people with multimorbidity, e.g., teamwork, providing truly person-centred care, conducting holistic assessments, creating individualised care plans, and navigating the health- and social care systems. Professionals also need to focus attention on the informal caregiver and should organise the necessary support

for him/her. At the more organisational level it is also important to systematically consider new professional roles that are arising in the context of integrated care for multi-morbidity, such as physician assistants, specialised nurse practitioners, or social district support teams that take on case management.

The above requires educational and workforce planning, whereby new skills are taught early on in the curriculum. With an ageing society and an ageing care workforce, there is also a need to create a workforce-demography match, supporting sustainable employment of care providers and informal caregivers, who also need to remain in employment alongside their caregiving roles for longer.

Financing

Coverage and reimbursement of integrated care programmes or interventions need to be generous enough to ensure equity in financial access. Attention to out-ofpocket costs is also needed when it comes to financial access; these can take the form of co-payments, co-insurance, deductibles, and in some contexts also informal payments. On the other end, experiments with financial incentives to motivate persons with multi-morbidity to partake in integrated care programmes are also arising-for example, providing vouchers or free gym memberships. Reimbursement should allow professionals to spend enough time with individuals with multimorbidity, whereby multiple issues at hand need to be addressed in a holistic manner.

Fragmentation not only occurs in service delivery, but also through the silo structure of financing of care for people with multi-morbidity. Dominant existing payment schemes lack incentives to stimulate multidisciplinary collaboration and actually dis-incentivise addressing patients' needs. New payment systems are being introduced to tackle these issues, such as pay-for-coordination and bundled payments. The most comprehensive form to date is population-based payment, usually involving the definition of a virtual budget that is based on the case mix of the catchment population. When actual costs are lower than expected, these types of payments also allow for shared

savings between organisations. For multimorbidity it is essential that there is a risk adjustment in place to counter adverse selection and cream-skimming. For innovative integrated care programmes organising a basic secured budget may be an important facilitator to ensuring the sustainable commitment of all involved.

Such payment schemes, specifically for multi-morbidity and/or integrated care, need to be embedded in a supportive national or regional system that recognises their necessity and supports the further development of innovative schemes. Also at the macro level, attention is needed to safeguard access and equity for vulnerable groups in the payment system, such as those with multi-morbidity.

Technologies and medical products

Information and communication technology (ICT) can act as a key facilitator in integrated and coordinated care, although this is not necessarily a prerequisite. ICT applications relevant at the micro level include electronic medical records (EMRs) and patient portals. EMRs allow for information exchange between professionals, patients, and informal caregivers that link information and thus improve communication. This is, however, very complex for people with multi-morbidity that deal with different organisations across sectors. E-health tools, telemedicine, and assistive technologies also play a role here as they can allow individuals with multi-morbidity to live independently for longer.

A shared information system that is accessible by multiple professionals can facilitate care processes. A prerequisite is interoperable, or linked, information systems. At the macro level policies that foster technological development and innovation in the field of ICT and e-health can aid integrated care for multimorbidity. Furthermore, equitable access to technological and medical products is important.

Information and research

Individual level data, as often automatically collected via ICT, can effectively be used in the care process. This includes automated notifications in information exchange (e.g., notifying primary care upon hospital discharge). Collected data can be used for individual risk prediction. Individual and group level information can also be used to apply risk stratification. Innovative research methods are needed and being developed that allow such data to be successfully used to increase the evidence-base of complex integrated care programmes for people with multi-morbidity.

Issues surrounding data ownership and protection come to the forefront in ICT, in all care fields, but perhaps even more so in multi-morbidity, again due to the different organisations and sectors (e.g., health- and social care) involved: what information can be shared with what professionals? These issues should not hamper the care process.

smooth and monitored transitions between professionals and organisations

Also at the macro level privacy and data protection legislation is important to consider. Policies that stimulate research can also benefit the status quo. Lastly, patient- and informal caregiver-access to information is especially relevant for multi-morbidity, as disease-specific information can easily be found online, but information on navigating different fields within the health- and social care sector (e.g., what is covered in an insurance package) is much more difficult, as well as information on treatment interactions.

Information and research can also be used as inputs for *monitoring* integrated care for multi-morbidity with a three pronged: improving population health, patient experience, and reducing costs. The evidence-base for integrated care

programmes for multi-morbidity needs to be expanded in order to ensure wider implementation and sustainability of programmes.

Curious to see how the framework has already been used? In the SELFIE project, 17 promising integrated care programmes for multi-morbidity have been extensively described in 'thick description' reports. These reports are based on document analyses and interviews with key stakeholders, and are structured according to the framework. The reports can be found on the SELFIE website (publications). www.selfie2020.eu

Conclusion

This framework structures relevant concepts and elements of integrated care for multi-morbidity. By grouping these into six components and three levels, the comprehensive framework can be applied in different contexts. Integrated care is not a noun but rather an active process that spans across different sectors and grows through time – the framework will also grow and change. It can be used as a starting point to develop and systematically describe programmes for multi-morbidity (micro-meso), and their target groups (the core) within their respective contexts (meso-macro). These descriptions can aid comparison and understanding that in turn can translate into other implementation processes. The framework can subsequently be used to evaluate programmes.

References

- Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet* 2012;380(9836):37–43.
- Fortin M, Bravo G, Hudon C, et al. Relationship between multi-morbidity and health-related quality of life in patients in primary care. *Qual Life Res* 2006;15(1):83–91.

- Hopman P, Heins MJ, Rijken M, Schellevis FG. Health care utilization of patients with multiple chronic diseases in The Netherlands: Differences and underlying factors. *Eur J Intern Med* 2015;26(3):190–6.
- WHO. *Key components of a well functioning health system*. Geneva: WHO, 2010.
- Leijten FRM, Struckmann V, van Ginneken E, et al. The SELFIE Framework for Integrated Care for Multi-Morbidity: development and description. *Health Policy* forthcoming.
- Struckmann V, Quentin W, Busse R, van Ginneken E. How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe? *Policy Brief* 24 European Observatory on Health Systems and Policies, 2017.
- Berwick DM, Nolan TW, Whittington J. The triple aim: Care, health, and cost. *Health Aff* 2008;27(3):759–69.
- de Bruin SR, Versnel N, Lemmens LC, et al. Comprehensive care programs for patients with multiple chronic conditions: A systematic review. *Health Policy* 2012;107(2–3):108–45.

The former Yugoslav Republic of Macedonia: health system review

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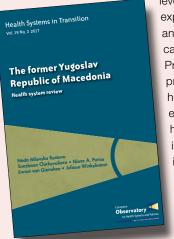
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Since its independence in 1991 population health in the former Yugoslav Republic of Macedonia has improved significantly, with life expectancy and mortality rates for both adults and children reaching similar levels to those seen in ex-socialist EU Member States. However, death rates caused by unhealthy behaviour remain high.

The country has also made important progress in transitioning from a centrally-steered to a more market-based health system. Having inherited a large health care infrastructure, good public health services and well-distributed health service coverage,

the country after independence reverted to a social health insurance system. Despite the broad benefit package, the



levels of private health expenditure are still quite high and satisfaction with health care delivery is very mixed. Primary care providers were privatised and new private hospitals were allowed to enter the market. The public hospital sector in particular is characterised by inefficient organisation and service delivery. However, significant efficiency gains were achieved through the introduction of a pioneering health

information system that has reduced waiting times and led to the better coordination of care.

More broadly, the impact of professionals moving to other countries and to the private sector is being felt. This is also why future reforms will need to focus on sustainable planning and management of human resources, as well as enhancing quality and efficiency of care.