

Accepted Manuscript

Title: Tackling the challenge of multi-morbidity: Actions for health policy and research

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PII: S0168-8510(17)30336-6
DOI: <https://doi.org/10.1016/j.healthpol.2017.11.011>
Reference: HEAP 3826

To appear in: *Health Policy*

Received date: 24-11-2017

Please cite this article as: Tsiachristas Apostolos, van Ginneken Ewout, Rijken Mieke. Tackling the challenge of multi-morbidity: Actions for health policy and research. *Health Policy* <https://doi.org/10.1016/j.healthpol.2017.11.011>

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Editorial

Tackling the challenge of multi-morbidity: actions for health policy and research

Apostolos Tsiachristas, Ewout van Ginneken, Mieke Rijken

In 2002, the World Health Organization (WHO) described chronic conditions as *the* challenge of the 21st century for health systems worldwide and urged countries to change the reactive approach of their health systems, originally designed to cure acute illness, to a proactive approach that integrates prevention, cure and care of chronic conditions [1]. To support policy-makers and other stakeholders in this process, WHO developed the Innovative Care for Chronic Conditions (ICCC) Framework, which is an extended version of Wagner's Chronic Care Model [2]. Many countries in Europe and other regions have indeed developed integrated care approaches, such as chronic disease management programmes and integrated care pathways for specific diseases. The evidence so far shows that these approaches improve the quality of care for specific chronic conditions (e.g. diabetes type II and COPD) [3, 4]. However, soon awareness was rising that disease specific approaches to integrate care were ill equipped to meet the needs of people with multi-morbidity, questioning therefore the quality of care for these groups [5-7].

The rapidly growing population with multi-morbidity now poses an additional and significant challenge to health systems. Indeed, the complexity of care for multi-morbidity requires integration of services across medical specialties and disease areas, which goes beyond the integration of care needed to address single chronic conditions. As ambulatory specialist care and hospital care have traditionally been organized around specific medical conditions, countries around the world need to overcome fragmentation and inefficiency in the organisation and delivery of health and social care for people with multi-morbidity, and shift to more person-centred models of care. This is a multifaceted challenge that cannot be overcome by a single effort.

This challenge is widely recognized and sharing good practices of integrated care for multi-morbidity is encouraged by several international organisations (e.g. European Commission and WHO). However, international experience from integrated care programmes addressing multi-morbidity and in particular evidence about their impact is still limited. In response, the European Commission has funded several research projects to explore and assess innovative integrated care programmes for people with multi-morbidity. Among others, these projects found that most of these programmes are implemented at the local level and lack support from national policies. Together with the lack of conclusive evidence about the effectiveness of integrated care for people with multi-morbidity, this precludes the structural implementation of integrated care programmes for multi-morbidity. Systematic reviews have shown that adopting (elements of) integrated care have led to improvements in patient satisfaction and perceived quality of care among people with multi-morbidity and frailty, but not in clinical outcomes and mortality [8-11]. More evidence, based on well-designed evaluation studies, could support (further) implementation of integrated care for multi-morbidity.

To develop effective and efficient integrated care programmes for multi-morbidity at a local or regional level, more knowledge is needed about the key elements of an effective approach for people with multi-morbidity, how these elements could be developed and implemented in a specific context, who should be involved and how national and regional authorities could support implementation. To roll out these programmes and achieve their large-scale implementation, various stakeholders (e.g. care providers, purchasers, and patients and their families) need to be convinced about their benefits. Unfortunately, most local or regional integrated care initiatives that target people with multi-morbidity in Europe do not incorporate evaluation studies, either because the necessity to perform such evaluations is not recognised or because of lack of funds. This clearly signals a need for an overall national (or regional) framework that not only fosters implementation of such integrated care programmes but also requires the systematic evaluation of their results.

This Special Section of Health Policy seeks to address some of the knowledge gaps listed above. Several models have been developed to specify the key elements that need to be addressed in clinical practice and highlight the conditions to be met in the wider local and national context in order to implement and evaluate integrated care for people with multi-morbidity. The first two papers describe two of such models; the Multi-morbidity Care Model, which was developed as part of the EU funded Joint Action CHRODIS [12], and the SELFIE framework, which was developed as part of the EU funded SELFIE project [13]. Although these models have been developed by different consortia, there are common elements in their development process as well as in their content. For instance, both models combine the (limited) scientific evidence with theoretical insights and opinions of various experts and groups of stakeholders, to ensure alignment of research, policy and clinical practice. The key elements of the JA-CHRODIS Multi-morbidity Care Model were based on Wagner's Chronic Care Model, while in the SELFIE framework the WHO health system building blocks were used. In both models, the starting point to develop integrated care for people with multi-morbidity is patient-centeredness (or person-centeredness). Besides the similarities, each one has distinctive characteristics that contribute to the current efforts towards integration of care for people with multi-morbidity. The JA-CHRODIS Multi-morbidity Care Model provides starting points for the development and improvement of practices at the clinical level, while the SELFIE framework is less detailed in the operationalisation of its elements but addresses the importance of the contextual conditions more explicitly. The theoretical basis of the SELFIE framework is provided in the third paper, which is a scoping review of theoretical models underlying integrated care programmes and the identification of their key elements [14].

The final three papers discuss more specific elements of integrated care for multi-morbidity and all come from the ICARE4EU project. Van der Heide et al. conducted a large survey among managers of integrated care programmes for people with multi-morbidity in 24 European countries and identified several barriers to the delivery of patient-centred care [15]. Based on the same survey, Rijken et al. compared integrated care programmes that target patients with a specific combination of chronic conditions with programmes that target patients with any combination of chronic conditions [16]. They conclude that the latter type of programme is more suitable to provide person-centred care, as they put more emphasis on patient involvement and provide more comprehensive care. The final paper discusses the important role of eHealth in supporting integration of care and patient-centeredness, which is also a key element in both the JA-CHRODIS and SELFIE models. Melchiorre et al. provide several

examples of how eHealth could be used to support care integration and strengthen person-centeredness and conclude that the full potential of eHealth is yet to be realised [17].

The papers published in this Special Section further pave the way for the integration of care for people with multi-morbidity at the national level by highlighting action points for policy and research.

Policy:

1. The development and implementation of integrated care for people with multi-morbidity should be coordinated and based on theoretically and methodologically rigorous models that incorporate the perspective of multiple stakeholders, similar to the models presented in this Special Section.
2. It is crucial to create a context in which integrated care programmes can be successfully implemented. This can be done by introducing policies at national level that support the development of key elements of integrated care as specified in the models presented in this Special Section. These include, among others, training/education of professionals, adequate financial incentives in funding and payment methods, and integrated information systems that secure data privacy.

Research:

3. Well-designed studies should provide robust evidence about the mechanisms and drivers of cost-effective integrated care programmes for multi-morbidity, and how they could be successfully implemented at the national level.
4. Research should be embedded in the development and implementation of integrated care for people with multi-morbidity similar to what is suggested by the Medical Research Council in the UK [18]. Considering the complexity of integrated care, real-world evidence based on large observational studies may be preferred to small experimental studies. In any case, a set of outcomes that measures whether policy goals (e.g. high-quality care that is effective, in line with patient preferences, and at reasonable cost) are achieved should be agreed.
5. There is a growing recognition that more collaboration is needed among national and international funding bodies but also among research groups. Only then large cross-country/cross-system studies could be undertaken and large international databases could be created to provide health policy makers with a variety of options and evidence to improve care for people with multi-morbidity.

Hopefully, these action points will draw the attention of health-policy makers and help them address the multi-faceted and complex challenge of providing high quality care to people with multi-morbidity. An increasingly large part of the population is awaiting this attention.

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