Summary

The world's population is aging. Aging is associated with an increased risk of chronic diseases, multimorbidity, geriatric syndromes, disability, and loss of independence. As a result, older adults are more likely to have complex health and care needs, be high users of health and social care services and require care from multiple providers simultaneously. In addition, they are more likely to experience care transitions and are at high-risk of suboptimal care transitions that might result in poor quality of care and errors.

At present, patients and their informal caregivers often experience suboptimal care transitions in long-term care systems. Care transitions can be defined as patient transfer between different locations (e.g. hospital to home) or different levels of care within the same location (e.g. change in the department in the hospital). Poor quality and avoidable care transitions but also avoiding care transitions that are necessary might result in compromised patient safety, outcomes, rehospitalizations, and increased costs for health and care systems. For the reasons given above, optimization of care transitions and, specifically, improving quality of health services and patient safety has been a priority worldwide. Therefore, this dissertation focuses on the organizational and financial aspects that affect the transition in LTC systems, and the challenges related to care transition in selected European countries.

Currently, knowledge of the organizational and financial aspects of care transitions in European countries is scant and inconclusive. Understanding which organizational and financial aspects influence care transitions in LTC systems is crucial for the development of tailored strategies and for the optimization of care transitions. Therefore, this dissertation aims to identify which organizational and financial aspects affect care transitions and to inform the improvement of care transitions by identifying good practices as well as challenges that need to be addressed, in particular in the LTC systems of Germany, the Netherlands and Poland. Moreover, this dissertation aims to develop an assessment tool for assessing the performance of LTC systems in relation to care transition. The research presented in this dissertation was conducted alongside the project Transitional Care Innovation in Senior Citizens (TRANS-SENIOR), funded by the European Union under Horizon 2020, Marie Curie Innovative Training Networks (grant agreement No 812656). The dissertation contains 7 chapters.

Chapter 1 presents the background, main concepts, and rationale for the dissertation. It discusses the trends in aging of the population worldwide and associated with aging geriatric syndromes, chronic diseases, and disabilities. The chapter also presents care transitions of older

adults and their vulnerability to suboptimal care transitions, which has become a policy priority. Further, the chapter provides definitions of main concepts that are either the focus of this dissertation or relate to care transition and transitional care. Specifically, concepts of transitional care, integrated care and care provision aspects are presented, and their relations to care transitions are elaborated. To outline the context of this dissertation, Chapter 1 also outlines the key features of LTC systems in Europe by presenting their key similarities and differences. Subsequently, the context and characteristics of the LTC systems of Germany, the Netherlands and Poland are presented and briefly compared. Finally, the chapter presents the research gap in care transitions in Europe and defines the dissertation aim, objectives and methodology approach. As outlined in Chapter 1, it has been widely recognized that organizational and financial aspects might influence care transitions and care coordination.

Chapter 2 of this dissertation presents the protocol and preliminary findings of the systematic search for literature on care transition in the LTC systems. This chapter aims to gain insight into care provision aspects that might affect care transitions in the LTC system. Two hundred twenty-nine studies were included for further deliberation. Subsequently, publications were divided into: general organizational aspects, organizational disease/condition-specific aspects and financial aspects. The findings suggest that among care provision aspects, particularly organizational and financial aspects influence care transitions. Based on the preliminary results, a model of care provision aspects that affect care transitions is proposed in this chapter. Organizational aspects include communication among involved professional groups, transfer of information and care responsibility of the patient, coordination of resources, training and education of staff, education and involvement of the patient and family, e-Health and social care. Financial aspects include provider payment mechanisms, rewards and penalties. Overall, organizational aspects are more researched than financial aspects. Among organizational aspects, most of the studies discussed the role of coordination of resources and transfer of information. The number of publications on care provision aspects has been steadily increasing over the years. The highest number of publications can be found in North America, specifically the United States, and the lowest number is in Africa and South America. The chapter provides a base for the subsequent chapters. In particular, the model proposed in this chapter is used to frame the subsequent data collection and analysis. However, the chapter is relevant for future full systematic reviews on this topic.

Chapter 3 presents the review of evidence identified in the preliminary systematic literature search that can be related to financial aspects of care transitions among older adults. The aim of the systematic literature review presented in this chapter is to gain insight into financial aspects affecting care transition of older adults in LTC systems and also to identify the settings in which financial aspects play an important role. Nineteen publications are included in the review. The results suggest that financial incentives influence care transitions either positively by facilitating or negatively by hampering care transitions. Further, review findings suggest that particularly three types of financial incentives are relevant for care transition and care coordination, namely, reimbursement mechanism, reward, and penalty. The results in this chapter also suggest that financial incentives in primary care settings are of particular interest to the researchers focused on care transitions. In addition, most of the publications included in the review measured the impact or influence of reported financial incentives, settings, and indicators, it is impossible to draw firm conclusions on their impact on care coordination and care transition.

Chapter 4 outlines arguments for and against integrating programs and policies that encourage informal care in European LTC systems. To achieve this aim, the chapter analyses policy documents and reports, as well as academic literature. Moreover, this chapter elaborates on the importance of supporting informal caregivers and its influence on care transition experienced by older adults. In doing so, the chapter presents different strategies that may remediate the negative effects of informal caregiving and ultimately improve the quality of life of informal caregivers. Besides, this chapter elaborates on the importance of supporting informal caregivers and its influence on care transition experienced by older adults. The findings in this chapter suggest that even though often favored, encouraging the provision of informal care requires throughout consideration of many aspects, such as the negative impact on informal caregivers and care recipients. Moreover, the chapter reports on strategies for supporting informal caregivers, which are classified into three broad areas: carer compensation and recognition, labor market policy, and carers' physical and mental wellbeing. According to the findings, cash benefits are the most common method of supporting informal caregivers. The chapter also observes that countries in Europe vary considerably in terms of support provided to informal caregivers. Supporting informal caregivers is important not only to remediate the negative effects of caregiving but also to optimize care transitions.

Chapter 5 presents a qualitative study on organizational and financial aspects that affect care transitions in LTC systems in Germany, the Netherlands and Poland. This study aims to explore organizational and financial challenges in care transitions in LTC systems in Germany, the Netherlands and Poland based on country informants' opinions. Twenty-two in-depth semistructured interviews were carried out with providers representing primary care, hospital, LTC, and insurers/payers. Our findings suggest that at present, care transitions of older adults in Germany, the Netherlands and Poland are suboptimal, and improvement is needed if these countries aim to deliver safe and seamless care transitions. Some organizational challenges, such as problems with communication, transfer of information and coordination of resources, are similar across these three countries. Among financial challenges particularly, reimbursement plays a crucial role when it comes to care transitions in Germany, the Netherlands and Poland. Nonetheless, the chapter also observes key differences between the factors affecting care transitions in Germany, the Netherlands and Poland that could be partially explained by variations in the provision and financing of care. Further, the results of this chapter suggest that regulative aspects, previously not considered in other studies and frameworks, might also affect care transition and thus, should be taken into consideration e.g. restrictive data protection laws.

Chapter 6 describes an evaluation tool for assessing the performance of LTC systems in relation to care transitions. The chapter aims to present the development of this evaluation tool and its application. The tool is developed in three steps and in accordance with the guidelines on scale development by DeVellis. At first, the conceptual model informed by the systematic literature review in Chapters 2 and 3 was developed. Secondly, item pool generation using deductive and inductive methods took place. Subsequently, the preliminary validation of the tool was performed among the research team members at first, and five experts in research and practice. Following the preliminary validation, the tool was adjusted according to the feedback. As a result, the Transitional Care Assessment Tool in Long-Term Care (TCAT-LTC) was developed. The tool consists of 2 themes, namely, organizational and financial aspects. Organizational aspects are divided into eight categories, and there are three categories regarding financial aspects, as those in the model presented in Chapter 2. Each category entails dedicated items. In total, TCAT-LTC consists of 63 items. Each question/item can be graded and the total score can be calculated. The score indicates the performance of a country's LTC system in relation to care transition. The assessment tool is an important step in promoting accountability and improving the performance of the LTC system in relation to care transitions.

Chapter 7 presents and discusses the main dissertation findings and outlines the implications for policy and research. Understanding which organizational and financial aspects influence care transitions in LTC systems is crucial for the development of tailored strategies and for the optimization of care transitions. Moreover, this chapter outlines methodological reflections related to this dissertation.