Preface

Steadily increasing life expectancy is one of the great achievements of industrialised societies over the last century. Life expectancy has not only been growing among the young and those reaching retirement age, but also, especially in recent decades, among people ages 80 and above. These improvements in life expectancy have led to the emergence of the so-called third age, when people retire, but are still youthful, healthy and able to participate in society. Nevertheless, closer to the end of life, a fourth age of decrepitude and dependence on others has to be anticipated. Despite the postponement of functional limitations and severe disabilities into higher ages, the debate continues over whether the additional years gained are healthy years, or years with severe care need, particularly among the oldest old, the fastest growing segment of the population.

Future improvements in life expectancy and the health status of the elderly will determine the need for care in the future. While different assumptions about these trends based on expert opinion or the extrapolation of past experiences can be made, there will always be a degree of uncertainty about future trends. A third important factor driving the extent of future care need is, however, already determined by the history of the past century and is embedded in the age structures of our populations. From 2030 onwards, the large cohorts of the baby boomers, or those born between 1950 and the middle of the 1960s, will reach ages at which the need for care may be expected to rise. Care need projections extending up to 2030 do not include the ageing of the baby boomers, and therefore do not account for the likelihood that the growth in the need for care may be much steeper after 2030 than before.

But it is not just cohort sizes that have varied over the last century; individual biographies have also changed, and the elderly of the future will differ from today's older people in many respects. Patterns of family formation and dissolution have undergone an extensive transformation. Childlessness decreased among those cohorts born at the beginning of the 20th century to those born in the 1940s, only to increase again among later cohorts. Educational achievement, income and labour force participation, particularly among women, changed from cohort to cohort. If we want care need projections to go beyond the sheer numbers, these changing characteristics have to be taken into account.

This book is an attempt to combine the expertise available in the field of health, care need and care resources, with a strong focus on Germany, but also including other European countries, such as the UK, Belgium and Finland. It is divided into three parts. The first part presents various care need projections for Germany. The data bases used and methods applied, as well as the underlying assumptions and diverse main focuses, lead to a variety of innovative projections of future care need. The second part deals with trends in health, care need and care

need determinants. Changes are explored at the individual level, as well as for population averages. Finally, the third part is devoted to an equally important topic: the care providers, their living circumstances and their quality of life.

Part 1 opens with care need projections for Germany at the federal level up to 2030 and for the Länder up to 2020, carried out by Heiko Pfaff. Based on the 11th coordinated population projection of the Federal Statistical Office, Pfaff developed two different scenarios for predicting the future course of care need: one scenario of stable and one of declining care need prevalences. His findings project an increase in the number of people in need of care in both scenarios, but a dampening effect of the decreasing prevalences of poor health. Furthermore, the results anticipate a very high increase in care need in the eastern part of Germany, especially Mecklenburg-Western Pomerania and Brandenburg and the lowest increases in the city-states of Bremen and Hamburg. Eckart Bomsdorf, Bernhard Babel and Jens Kahlenberg develop four different scenarios for future population trends, while conducting probabilistic population projections up to the year 2050. They assume two scenarios of trends in health, one with constant and one with decreasing prevalences of care need. Additionally, they carry out a sensitivity analysis that examines the impact of different parameters on the future need of long-term care. The results show an increasing need for long-term care in absolute and relative terms. Life expectancy is shown to have the strongest effect on future care need trends, while fertility and migration are found to have only slight effects. To what extent is the increase in care need a consequence of the changing age distribution up to the year 2020 and to what degree can improvements in the health of the elderly compensate for the increase? Rainer Unger addresses these questions in a cohort analysis and finds – in contrast to all other studies in this book – that improvements in health, measured as decreasing prevalences (here for women) up to 2020, result in a decline in the number of women in need of care. His analysis is based on the population projections of the Federal Statistical Office of Germany and on data from the German Socioeconomic Panel (GSOEP) on cohort-specific health transitions. Whether and to what extent demand for and supply of care will change in the near future is the main focus of the dynamic household projection, "Future Elderly Living Conditions In Europe" (FELICIE). The core objective of this study, by Gabriele Doblhammer and Uta Ziegler, is to forecast the need for care among the population aged 75+ by family status and childlessness through 2030, while applying two assumptions regarding future trends in care need prevalences. Results of this study show that the demand for care will rise, but that the potential supply of informal care giving by children and partners will also grow numerically until 2030. Erika Schulz offers projections of the number of people likely to need care while living at home, as well as of the care giving potential within families in Germany through 2050. The projections are based on the DIW population forecasts. In order to measure the future ratio of informal care givers to dependent people living at home,

she takes into account in her analysis household size, family status and the number of children, as well as the labour market participation of women and the changing living arrangements of the elderly. The findings suggest there will be a decline in the number of potential care givers aged 65 or younger and an increase in the number of potential care givers among the elderly. At the same time, the number of people who will require care at home is expected to increase significantly through 2050, especially if better overall levels of health are assumed. The final chapter of the first part focuses on the development of a disease that is attracting considerable attention: dementia. Uta Ziegler and Gabriele Doblhammer pose the question: How will the number and the age-specific prevalence of people with dementia develop in Germany in the coming years? By using three different assumptions for future life expectancy, the authors carry out three different scenarios of population projections through 2050. They apply constant prevalences of dementia and, based on the overall development of healthy life years, prevalences that follow a dynamic equilibrium. The projection results reveal that the number of people with dementia will definitely increase up to 2050, but that the increase is determined more by the development of overall life expectancy, than by the future trend in the prevalence of dementia.

The role of risk factors in the development of the need for care in general and of care determinants in particular, is discussed in the second part of the book. A statistical meta-analysis that summarises existing studies on the effects of sex, obesity and smoking on health transitions marks the beginning of this section. The analysis by Gabriele Doblhammer, Wilma Nusselder, Rasmus Hoffman and Elena Muth shows the connections between risk factors and health transitions. They confirm the common paradox that women, compared to men, have a higher risk of becoming dependent, but exhibit a lower mortality risk. In line with recent findings about obesity, they show that, compared to overweight and underweight people, obese people become disabled more often and have worse chances of recovery, but have lower mortality risks. This is particularly true among the elderly. Linked to the risk of becoming dependent on long-term care in old age is the risk of becoming dependent on acute hospital care. In their analysis, Mike Murphy and Pekka Martikainen discuss the different drivers for these two forms of care and the associated costs. They carry out projections of age distribution for different countries, and focus particularly on four different factors that have a significant influence on the demand for long-term care and hospital care, today and in the future: proximity to death, marital status, sex and age. Observing these influencing factors in a case study with Finnish data, they confirmed that age is a more important determinant for long-term care, while proximity to death is of greater relevance for acute care need. Additionally, they conclude that the marital status differentials and future changes in marital status distribution are substantial for both types of care. The subsequent study by Elke Hoffmann und Juliane Nachtmann focuses on the hypotheses of the compression or expansion of morbidity. By using a scientific use file

of the Research Data Centre of the Federal Statistical Office and the Statistical Offices of the Länder, they published for the first time the prevalences of care need for single age year intervals. The focus of their study is to measure the trend in numbers of life years without care need, as well as the ratio of these years to total life expectancy for men and women between 1999 and 2005. Their main result suggests that, in terms of care need, a "relative expansion of morbidity" occurred during the observed period. In addition to the level of health and disability, which is strongly determined by changes in health status over time, changes in individual pathways can also be seen as factors relevant to the question of whether a compression or expansion of morbidity has taken place. Hence, in the last chapter of the second part, Gabriele Doblhammer and Uta Ziegler study individual health trajectories of West Germans aged 50+ over two time periods (in the 1980s and the 1990s) using data on health limitations in the GSOEP. The results reveal that individual health trajectories have become more similar between the two time periods and that there is a general shift towards better health, with a particularly strong trend towards stable health trajectories that involve minor limitations.

Finally, Part 3 of the book is dedicated to the other side of the care need equation: the care givers, especially the informal care givers. Since informal care constitutes the majority of all care provided to the elderly in Germany - as well as in many other European countries - analysing this increasingly important sub-group in a population is of considerable interest. Benedicte De Koker looks at the well-being of care givers in Flanders/Belgium. The data used stem from a postal survey of informal carers that was performed in 2003. In her analyses, she investigates differences in the levels of perceived burdens experienced by care givers who are either spouses or children and examines to what extent the differences between these two groups could be explained by the different care giving situations they are confronted with. The differences between spouses and children are significant, and it seems as if the emotional relationship between care givers and care takers constitutes a significant factor in care givers' perceptions of the weight of the burden they carry. Tatjana Mika and Michael Stegmann analyse voluntary care giving in the life courses of younger and older female birth cohorts in East and West Germany after the establishment of the public long-term care insurance in 1996. They study how care giving episodes are positioned in the life courses of women and seek to answer the question of whether the implementation of care allowances for informal care at home, and the fact that informal carers get pension contributions from care insurance, influences the decision of women to exit the labour market and care for a family member. The study concludes that compulsory care insurance simply provides a premium to women who have a strong family orientation and who were already periodically engaged in caring for the elderly.

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Gabriele Doblhammer