Closing the gap - in search for ways to deal with expanding care needs and limited resources

Discussion Paper

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Background and Introduction

In their recent study, the OECD summarizes four main reasons why future long-term care (LTC) systems will come under pressure (OECD 2011, p. 61ff): First, demographic transformations are expected to increase demand for LTC services in all societies, although there are uncertainties about future trends in disability among the population, and speed of population ageing in different countries varies. Second, the availability of family carers presumably will decrease, leading to an increase in the need for paid care. This process is fuelled by changing societal models like declining family size, changes in residential patterns, also of people with disabilities, and rising female participation in the formal labour market. Third, as societies become wealthier, individuals demand better quality and more responsive social-care systems. People want care systems that are patient-oriented and that can supply well co-ordinated care services. Fourth, technological change will affect possibilities for long-term care services but may require a different organisation of care.

Although trends differ between countries, populations of many developed countries are ageing as a result of low fertility, low immigration, and increasing life expectancy. The share of the population aged 80 years and over is expected to increase from 4% in 2010 to nearly 10% across OECD countries by 2050, and even slightly more in EU countries (OECD 2011, p. 13). A key question is, if increases in life expectancy are accompanied by a shift of the onset of functional limitations and disabilities to later ages. The answer is still open, but research suggests that ageing processes can be modified and that people are living longer without severe disability (Christensen et al. 2009). Since LTC consumption by the older population, especially by the very old and frail, is well above average, also public and private expenditures on LTC are likely to increase significantly, even though uncertainties over the development of care needs complicate reliable forecasts.

Government and private market spending on LTC is as much as 1.5% of GDP on average across the OECD countries, and is estimated to double or even triple between now and 2050 (OECD 2011, p. 13). The European Commission estimates the share of public spending for LTC in GDP to increase from 1.2% (EU 27, 2007) to 2.4% (2060) in their 'reference scenario' (European Commission 2009, p. 145; an update of these forecasts will be published 2012). In line with the internationally very different approaches to the provision of (formal) care, also projected changes in public expenditure are very diverse. Countries with very low projected increases spend also currently only very modest amounts on LTC. This observation highlights the large upward uncertainty in these projections due to a possible convergence of national systems towards more developed care models, including more formal care and thus an even larger need for care workers.

Currently, between 1 and 2% of the total workforce is employed in providing LTC in developed countries. For many countries, this share is estimated to more than double by 2050. (OECD 2011, p.13). For Germany for instance, Hackmann (2010) estimates that the number of care workers for the elderly will go up 30% by 2050, while demand for their services will increase about 270%. Estimates for Sweden expect the need for staff to increase over the period 2010-2050 by about one quarter in health care and by about three quarters in care of the elderly, with an overall increase of about 50% (MHSA 2010). Without effective countersteering measures, these developments will open a big gap in care provision which calls for efficient strategies to delay care needs while increasing the relevant workforce and their productivity.

This paper is organised as follows: To set the stage, we first provide a very brief summary how long-term care is organised in European countries, using a recently developed typology of LTC systems for the elderly. Next, we focus on human resources in the care sector. After summarizing current characteristics, we discuss options to improve the availability of care workers. The next chapter discusses (dis)advantages of different funding systems for LTC. The final chapters try to draw some conclusions focussing on long-term sustainability in terms of public funding and care workforce as well as avoiding care-related poverty.

Current systems of LTC delivery in Europe

A recent analysis of LTC systems in Member States of the European Union applies formal clustering techniques to characteristics of organisation, provision and financing of LTC to derive 'system clusters' (Kraus et al. 2010). One of the typologies derived concentrates on use and financing of care and is limited to 14 EU Member States due to data availability. Four variables were found to be most relevant to characterise LTC systems: (1) public expenditure on LTC as share of GDP, corrected for the population share 65+, (2) private expenditure as share of LTC spending, (3) informal care recipients aged 65+ as share of the population 65+, and (4) support for informal care givers. The resulting typology (Table 1) can be interpreted in the context of 'spending' and 'informal care':

With regard to spending, cluster B comprises countries with highly developed and generous public LTC systems, including Scandinavian countries. Countries in cluster C and D spend low or medium amounts of public funds on LTC, making use of considerable private financing. There is no clear geographical pattern discernable. Cluster A is an intermediate case, with lower spending and low shares of private financing.

The role of informal care groups the sample countries into two opposite and two intermediate clusters. Opposites are formed by low informal care use, but rather substantial support for informal carers (cluster B) and high informal care use despite lack of support (cluster D). Clusters A and C combine high informal care use with substantial support, which can be seen as the expected outcome for countries favouring informal care and supporting it accordingly.

The result concerning informal care could be interpreted with regard to the development of national LTC systems: Highly developed and generously funded Scandinavian systems (cluster B) support also informal care quite generously, which is not used as frequently as in other countries, and may be seen as an incentive to increase the informal share of care giving (see Sweden). This interpretation, however, leads immediately to the question of the financial sustainability of intensive support schemes if indeed informal care becomes considerably more frequent. Conversely, countries with low public funding for LTC and also low support for informal

carers still rely heavily on informal provision of care (cluster D). Here, informal care sometimes might be the care setting of 'choice' just because of the lack of formal alternatives.

Table 1: Use and Financing Typology of LTC systems in Europe

Nature of the system	Countries	Characteristics
Cluster A Informal care oriented, low private financing	Belgium,* Czech Republic, Germany, Slovakia	Low spending, low private, high IC use, high IC support, cash benefits modest
Cluster B Generous, accessible and formalised	Denmark, the Netherlands, Sweden	High spending, low private, low IC use, high IC support, cash benefits modest
Cluster C Informal care oriented, high private financing	Austria, England, Finland, France, Spain	Medium spending, high private, high IC use, high IC support, cash benefits high
Cluster D High private financing, informal care seems necessity	Hungary, Italy	Low spending, high private, high IC use, low IC support, cash benefits medium

Source: Kraus et al. (2010)
Note: IC denotes informal care, * denotes a medium spender

The crucial question, in how far different clusters are associated with different productivity levels is not yet resolved but still work in progress in course of the ANCIEN project[1].

Differences between clusters, however, might become less discernable in the years to come. Simonazzi (2009, p. 17) observes already a convergence in the organisation of the care market towards more home care, private provision and cash transfers and interprets this as a consequence of the search for cost effectiveness / cost reductions.

Long-term care in Sweden in a European context

Compared to other European states, the Swedish population is old. Until recently, Sweden had a higher share of persons of 80 or more years of age than any other member state of the European Union. For 2008, however, EUROSTAT reports that Italy took over this leading position, with 5.5% of all Italians in the age group 80+, compared to 5.3% of all Swedes (EUROSTAT 2010, p. 166). With a high share of older population and a high standard of care, lessons from Swedish long-term care are therefore a rewarding area for study for all European countries. But such lessons need to be interpreted in the national context. Countries like Sweden and Denmark traditionally put a large amount of responsibility for care into the hands of the government, which seems to be a necessary pre-requisite to organise, provide, and last not least fund systems of formal care. This is also reflected in the fact that in both countries, more than 80% of home care as well as residential care for the older population are still being provided by public organisations, while in most other European countries already a higher share of LTC services is provided by

[1] http://www.ancien-longtermcare.eu

private enterprises (Riedel, Kraus 2011). In both countries, recent legislation aimed at facilitating entry of private firms into the market for these services. Adjustment processes following these changes need not be finished yet and further shifts toward the private sector may be in process. First results, however, suggest that the private sector enters only slowly into this market. To draw lessons from the Swedish (or Danish) experience, it has to be taken into account that similarly high level of trust into the state need not be present in countries with very different historical experience. A more critical attitude of the population to government and broad government responsibilities may be a hindrance towards both, public financing as well as public governance of services covering very personal needs.

Options to provide sufficient (wo)manpower

Status quo of formal care providers

Family carers are the backbone of any LTC system. But over-reliance on family carers is not desirable, given increasing pressure from pension systems to stay fully active in the labour market, loosening family ties and other demographic and societal developments.

Simonazzi (2009, p.5) characterizes elderly care as a low-pay, low-status sector, features which are shared across countries even though large differences between countries prevail, e.g. with regard to care job quality or the degrees of wage compression and union coverage. Moreover, there is also wide dispersion of wage levels and working conditions within countries, with usually worse conditions for staff in private enterprises compared to those in public facilities of the care sector, and workers in residential care usually faring better than those providing home care. High turnover rates and recruitment problems are common in many countries.

Data bases covering human resources for long-term care are scarce. International data bases like the Labour Force Survey (LFS) do not apply very exact definitions for coverage of the LTC sector, while national data are hard to compare between countries. Even though the LTC labour force seems to be quite heterogeneous, Geerts (2011, p. 11ff) identifies a couple of common characteristics and trends and thus corroborates earlier findings on different sets of countries (see e.g. Fujisawa, Colombo 2009, Simonazzi 2009). Geerts (2011) analyses four EU Member States that were chosen as representative for the four clusters discussed in the previous section, namely Germany, Netherlands, Poland, and Spain:

- Employment in LTC is predominantly **female**, the share ranging from 95.6 % (Poland) to 88.5% (Netherlands). Thus in all four countries, the female share in LTC approximately doubles that of the overall workforce. Only in Germany the female share was roughly constant since the early 1990s, the other three countries in the study experienced even a slight increase in the share of female workers (in LTC as well as in the total workforce). All data are from LFS for 2008, for a definition of LTC sector see Geerts (2011).
- In all four countries, the share of **older workers** (50-64) increased since 1993, and converged to slightly over 25% in 2008. Thus the share of older workers in LTC is now higher than that in total workforce in three of these countries (Germany: about equal shares), in spite of the overall increasing share of older workers.
- In all four countries, the share of low-skilled workers decreased during the last decade, most remarkably in Spain, where nevertheless this share still is much higher than in the other countries (total economy as well as care). The share of high-skilled carers rose in all

countries, and especially in Poland, where hardly any care workers were high-skilled in 1998. Compared to the total workforce, **education levels** in the LTC workforce remain low in all four countries, e.g. shares of high-skilled workers are approximately half the respective share in the total workforce.

- The share of **foreign nationality** workers is higher in care occupations than in other occupations, but seems to evolve in line with a country's overall labour market trends. Shares of foreign workers vary widely between countries, with Spain attracting rather many (mostly Latin American) and Poland rather few foreign workers. The occupational category "domestic and related helpers" seems to be particularly prone to attracting foreign workers in three countries, but not Poland.
- **Part-time employment** is by far more wide-spread in LTC than in the total labour market, but again there are large between-country differences in part-time employment rates, with low rates in Spain and Poland and a maximum of about 80% in the Netherlands. In line with general labour market trends, the share of part-time work increased in the Netherlands, Germany and Poland during the last decade.

Possibilities to secure future LTC workers[2]

OECD (2011, chapter 6) considers achieving adequate supply of LTC workers a manageable goal, but asks for a multipronged approach as well as a better evaluation of success stories and encouraging examples. They recommend the following strategies:

- improving recruitment efforts, in some countries including through the migration of LTC workers, and the extension of recruitment pools of workers;
- increasing the retention of successfully recruited LTC workers, by improving the wage levels and working conditions of the LTC workforce; and
- seeking options to increase the productivity of LTC workers.

Improving recruitment

Ensuring adequate inflow into the care workforce requires continuous efforts to achieve both, a better use of available recruitment pools of human resources, as well as utilization of new recruitment pools.

Competition for young entrants into the labour force (as the most natural traditional pool) will get fiercer as the share of young people in the population is below replacement level in many countries. So far, however, OECD (2011, p. 193) observes only little evidence of successful efforts to improve entry of young people in education and training for care work, and subsequent successful retention in this line of work after education. As yet only some countries target women re-entering the labour market, a population segment which forms another major source especially for lower-level LTC workers. A problem with the current nursing workforce might be that current curricula do not yet give sufficient attention to the management of chronic and long-term conditions or geriatric issues, furthermore wage and career differences with the acute-care sector prevail. Without specific emphasis on LTC issues, nurses are less likely to choose LTC as their preferred setting of work.

[2] This section largely follows OECD (2011, chapter 6).

The largest potential recruitment pool (within the country) consists of men. Available data from a new German policy in 2005, however, which concentrated on young men, suggest that numbers may be low relative to expected need.

Several countries (e.g. England, Finland, Japan) apply policies which try to motivate unemployed persons to take up work in the care sector, typically lower-level care work. Other programmes aim to recruit people from underrepresented e.g. ethnic groups, which - if successful - might facilitate later on also provision of care for recipients belonging to these groups. Another option for 'new' recruitment might be perceived in family carers who were hired through cash-benefit programmes. There is, however, only very limited evidence for successes to transfer those formerly informal carers into the 'regular' LTC workforce.

OECD (2011, p. 195) concludes that the success of activation programmes and target group based recruitment into the LTC workforce is not always positive. Long-term evaluations often are missing and not necessarily ask for LTC job tenure, but for the impact on the employment status in general.

Care workers from abroad are a frequently used recruitment pool in many OECD countries. Demand for foreign born LTC workers keeps growing, and may be expected to continue doing so. Simonazzi (2009, p. 12) highlights that countries pursue quite different strategies as to which kind of work immigrant care workers can expect to do: The UK as one of the largest importers of professional health care workers – a large share of whom work in LTC – has not relied on immigrants for unskilled, personal care. Germany, by contrast, has not experienced a shortage of professional workers, while a parallel market for health care workers seems to have emerged in recent years, often illegal female live-in carers from Eastern Europe.

Increasing retention

Often a mix of general as well as sector specific measures will be needed to better value LTC work and the LTC workforce. One of the obvious levers to improve retention is the (relative) wage level in LTC, and indeed a number of countries did raise LTC workers' wages recently or have planned to do so (see Table 6.1 in OECD 2011). If not accompanied by other measures, their impact on recruitment and retention may be short-lived; recognizing job experience in wage levels, however, has proven successful in some North European countries.

Other benefits such as pay for travel time or inconvenient hours or rosters, bonuses and annual wage raises, or subsidised child care, are also possible levers. Changes in the content of work can also contribute to improved morale, as do improvements in safety standards in LTC – with the additional benefit of ameliorating care quality. (Fujisawa, Colombo 2009).

OECD (2011) finds management in LTC facilities to be lacking in quality and efficiency, with detrimental effects for both, care recipients and workers. Several OECD countries are therefore implementing policies to improve this situation. Also, LTC workers often do not have much say in planning and responsibility in care provision, even though they are in closest contact with care recipients. There are examples of more worker-centred workforce policies which have proven to reduce workers' stress levels or reduce turnover, like mentoring opportunities, merit-based remuneration mechanisms, career ladders, promoting work-life balance (which increasingly will

have to take the rising age of care workers into account), and other measures which make LTC workers feel that their work is valued.

One obstacle – apart from the often unknown 'true' turnover costs – to implement a retention programme may be that costs of increasing retention might be borne by different institutions than those to whom resulting benefits accrue (Seavey 2004).

Increasing productivity and better use of existing workforce

There is not much evidence on clear-cut, widely accepted measures to increase productivity in LTC. In some countries (Netherlands, USA) pilots have been carried out which seek to contribute to tackle nursing shortages by delegating nursing tasks to lower-level workers. OECD (2011, p. 193f) summarizes such endeavours which are based on guidelines defining appropriate tasks for delegation. Several of the few reported examples include use of e-health applications or ICT (e.g. avoidance of home visits via tele-monitoring of health indicators). The impact on productivity, if evaluated at all, is mixed. Additionally the question arises whether productivity improvements via technology and work reorganisation are compatible with quality enhancement goals for both, quality of care and of jobs. There are positive as well as negative examples. However, possibilities for the application of technology and its potential to improve the efficiency of care will depend upon the kind of care needed (e.g., does tele-monitoring work for dementia patients?) and can raise ethical issues, e.g. related to privacy. Evidence for the impact of technology on patient outcomes is still limited, and even more so evidence on cost-effectiveness, which explains not only provider reluctance to use those applications but also its limited insurance coverage in several countries (RAND Health 2010).

Currently, educational levels of the LTC workforce vary considerably across and within countries. Education and training of the LTC workforce will gain importance for several reasons, including the likely changes in care processes caused by technological progress and the use of ICT in the sector. The training of care workers, particularly of those providing home care, gains also importance as medical advances and the shift to home care permit more persons with complex needs to live in the community rather than in specialized institutions (Simonazzi 2009, p. 16). At the other end of the care chain, with the average period spent in residential care decreasing, also the average nursing and health needs of residents in nursing homes will increase, requiring a 're-medicalisation' of nursing homes (OECD 2005, p.86).

Options to finance future care needs

Basic design issues of LTC systems

WHO (2003) formulates two basic decisions needed to design a long-term care (financing) system: 1) Does the system target only the poor or the poor and the non-poor population alike? 2) Does the system define entitlements to certain benefits or not, with the possibility of combinations like entitlement to some benefits (for all population) and no entitlement for benefits targeted at the poor population? These basic questions give already rise to the possible 'types' of LTC financing systems as discussed in Fernandez et al. (2008) or Wittenberg et al. (2002). The literature distinguishes five types of financing systems: Private, private with government subsidies, provision of a safety net, universal-progressive system, universal funding system. Table 2 summarizes some likely outcomes of such LTC financing systems. We do not discuss aspects and likely outcomes of the first two options, as drawbacks of these options are explained sufficiently in the literature (e.g. OECD 2011, Wittenberg et al. 2002, WHO 2003) and we do not assume that these options would be acceptable to European populations. For the sake of comparison, however, we include also these options into the table.

Provision of a minimum safety net

This policy option minimizes state intervention and concentrates support on persons lacking the financial ability to pay for the cost of services. Public resources available for LTC are typically cash-constrained and do not necessarily adjust to needs, thus offering an effective control for public expenditure. Usually they use mixed funding, combining general tax revenue and means-tested user charges.

Usually tough needs-criteria for eligibility apply, and support is restricted to a limited core set of personal care tasks. Financial support and user charges are income related and usually take availability of assets into account. As a result, means-tested systems can generate significant unmet need due to restricted 'baskets' of support as well as due to persons being 'poor but not poor enough'.

Prudent savers may perceive such systems as unfair. Problematic incentives apply for persons close to financial eligibility criteria: depleting assets and minimizing (reported) income may help to increase the amount of subsidy. On the other hand, persons being eligible for services may perceive eligibility as social stigma, preventing them to apply for services and therefore not covering their needs. In the USA, segregation into three population groups can be observed: Those sufficiently wealthy to pay privately for all services needed, those just too rich to qualify for services, but not rich enough to be able to finance all support needed, and finally those poor enough to qualify for services. (see discussions in Brown, Finkelstein 2007, Cutler 1996 for the US context)

Universal funding system

Covering the entire population, such systems should foster equality and social cohesion, ensuring that everybody who meets need criteria can access services regardless of their income or wealth. Funding is typically progressive, relying on a combination of earmarked contributions and payroll taxes, with user charges often being levied on some services.

Social insurance systems often assess eligibility based on clear, algorithmic rules, offering transparency as to which conditions entitle individuals to which services. Total expenditure, therefore, is typically rather needs driven than budget constrained in social insurance systems, while tax-funded systems can also employ expenditure constraints and eligibility criteria. Total expenditure are usually higher than in safety net systems, last but not least due to defined entitlements.

Progressive universal funding system

This system tries to combine advantages of both systems: Entitlements cover the entire population, but apply some means-testing in order to ensure that individuals in highest financial need receive the highest amount of state support and that public expenditures remain controllable.

Providing public support for larger population groups, also these systems promote social cohesion, and can reduce stigma effects from safety net systems.

Table 2: Likely Outcomes of LTC Financing Systems

	Private	**Private with government subsidies**	**Provision of a safety net**	**Progressive universal system**	**Universal funding system**
Cost for care recipient	Very high	High	Very high for large population share	Related to income and/or assets	None or low
Cost for public authorities	None	Very low	Low but significant administration	Moderate	High
Level of care provision	Tendency for unmet need	Tendency for unmet need	Tendency for unmet need		Tendency for over-supply
Redistribution	None	Low	From rich to poor and to a smaller degree from healthy to those with care needs	From rich to poor and from healthy to those with care needs	From healthy to those with care needs and possibly also from rich to poor

Source: IHS compilation based on Fernandez et al. (2008), Wittenberg et al. (2002), Kraus et al. (2011).

Other design features of financing LTC

Forms of cost-sharing

A study covering 21 EU Member States found user charges for residential LTC in all countries, and user charges for home care in all but three of the states covered by the study; large differences in level are hard to document but have to be assumed (Riedel, Kraus 2010). OECD (2011) summarizes effects of some forms of cost-sharing. *Flat cost-sharing formulae* (e.g. a flat percentage of LTC services cost; see e.g. in Belgium, Japan) serve as price signal for care recipients and are hoped to foster the link between need and provision, but raise distributional concerns because low-income and high-need individuals alike will need a larger share of their

income to cover those charges. Flat rates are therefore typically accompanied by upper ceilings for user charges and / or by additional social assistance.

If cost-sharing is calculated as a *given share of disposable income* or assets (e.g. some Scandinavian countries), financial predictability for individuals is higher. This form may be less regressive than flat rates of costs, but are more complex to administer as they require certain knowledge on current and changing income situations.

In the context of some cash benefit schemes, private payments turn into a – sometimes rather large – *residual* between the prevailing cost of LTC and the set amount of public coverage, which may grow over time if benefit levels only partly adjust to increasing LTC costs (see e.g. the evolution of *Pflegegeld* in Austria and Germany). Obviously, this individual disadvantage helps to constrain public expenditure. (OECD 2011, p. 270f)

Costs for Board and Lodging in residential care

OECD (2011, p. 273) stress that a large share of costs associated with receiving care in a nursing home relates to board and lodging ('hotel costs'). In most countries major parts of a care recipient's disposable income can be used to pay for these costs, last but not least because these costs are generally not viewed as components of LTC. Failing to do so would provide an incentive to move to residential care even with moderate care needs, an effect that policy usually wants to avoid. Private payment for short-term and hospital stays may be treated different as the principal place of the care receiver's residence remains elsewhere. Designing fair and efficient cost sharing regimes needs to reflect several questions concerning the relevant basis like standard and quality of hotel costs, or inclusion of capital costs or additional services like leisure activities.

Assets and means-testing

Where means-testing includes also assets, again the question for the correct basis comes up. The principal residence in some European countries makes up about 2/3 (USA: about 1/2) of private households 'net worth', the difference between total assets owned and total debt incurred. The usual attachment to one's own home, the possibility that spouse or other family members still reside in the home, the close correlation of disposable income and net worth, questions of fairness between prudent savers and 'big spenders' over their lifetime and administrative complexities, all complicate the design of cost-sharing schemes including assets. OECD (2011, p.276) lists several international examples of methods how home-ownership can be used to cover high user charges for residential care. The cultural background will play a major role regarding which policy measures a society accepts as justified: All examples to raise money from home ownership cited in OECD (2011) originate in the Anglo-Saxon world.

Options to close the gap: demand versus supply options

The literature discusses several options how to improve sustainable funding for LTC. Using simulation results for Sweden, a recent report (Ministry of Health and Social Affairs, Sweden [MHSA] 2010) illustrates several hypothetical ways to achieve sufficient funding for future health and elderly costs, thus focussing on considerably more than LTC alone. They show that reducing

future demand for services by improving the health status is at least as important as optimized funding mechanisms, because the gap hardly can be closed by improved financing alone.

The authors calculate two groups of examples: (1) how can revenues be raised in order to finance public provision of a similar set of services amounting to the same share of GDP in 2010 and 2050, and (2) possibilities for reduced demand through improved health or more efficient service production.

Increase revenue to finance future care needs

MHSA (2010, p. 28) calculates that **raised tax rates** as sole measure to finance future needs for care would result in an increase of today's 31.6% to 40-42% in 2050. Even taking into account that there seems to be a large willingness to pay for health and care related issues as compared to other goods or increased income, such a rise seems hardly realistic. Additionally one needs to ask by how much taxes or similar contributions will have to be raised during the same period in order to provide pension incomes for a rising population share in retirement age, because such developments will narrow the available space for care-related rises in the tax rate.

Another possibility to increase revenues is a **broader tax base**, which in the case of income taxes can be achieved by an increase of the hours worked. MHSA (2010, p. 26) calculate two examples: If each individual worker increases his/her annual working hours by 9-10 hours per year, these extra hours would suffice to maintain both, current tax rates and current GDP share spent on care. This increase, however, would effectively eliminate more or less all current holidays by 2050. The second possibility would be an annual increase in employment rate (population aged 15-74) of 0.4-0.5 percentage point, from 70% (2010) to about 87% (2050). Considering that leisure time is getting valued ever higher, the authors consider both possibilities as not plausible.

MHSA (2010) use a simulation model to analyse the ability of households to pay for their own health and elderly care in 2050 (MHSA 2010, p. 26). If all disposable income apart from basic consumption was spent on health and elderly care, 80% of households manage to fund their own health care, in both 2010 and 2050. Among elderly people needing care, however, only around 10% of households are able to pay for the health and elderly care they receive. This simulation highlights very clearly the limits of **user charges** as a means to finance future need for LTC. The fact that the bulk of care needs is concentrated in a small population segment (MHSA 2010, p. 27) underlines this argument.

Reduced demand to facilitate financing future care needs

The concept of 'health' is complex and multidimensional. Improvements in overall population health therefore could be measured along different lines, and many of them confirm that European people have been enjoying increasing levels of health over the last decades. There is, however, considerable uncertainty regarding the future development. There seems to be consensus that increases in life expectancy will continue, but the key question remains whether increases in life expectancy are accompanied by a shift of the onset of functional limitations and disabilities to later ages. Typically, different models assume either the onset of morbidity at the same age as present (expansion of morbidity), or shifted to later ages (compression of morbidity).

Intermediate models assume that morbidity and death are deferred equally much (dynamic equilibrium).

MHSA (2010, p. 42) present a list of examples which may contribute to reduce future care costs for the older population. Most examples focus on reducing demand via health improvement or prevention of care needs, like reducing dementia or preventing falls and strokes. For the time being, these examples are useful to exemplify possible future focus areas, but lack estimates by which exact measures these goals could be achieved, and to which degree these examples are realistic.

Wrapping up

The contribution of the MHSA (2010) report to the discussion about sustainable future provision of care is very valuable since it highlights the relative quantitative importance of different areas of potential policy interventions, and lessons can be learned for far more countries than just Sweden, the country for which all calculations in this report are done:

In order to successfully narrow the estimated gap between future needs for care and available resources it seems to be advisable to approach both sides simultaneously, demand for and provision of services.

In order to provide sufficient funding, mere optimizing of existing mechanisms of financing will presumably not suffice but will have to be accompanied by measures to increase revenues, e.g. by broadening the tax base via a continuous increase of national working hours. This endeavour may be supported by (successful) efforts to tackle the demand side: improved population health could/should lead to longer years of economic activity and larger population shares participating in economic activity.

The report rightfully stresses the importance of reducing demand for services via prevention, healthy ageing and so forth. Reduced demand for LTC services can be achieved not only via improved health, but – perhaps as important – via improved possibilities to tackle problems arising from disability or bad health. However, the brief discussion of ways to achieve this goal (p. 29 ff, summary box on p. 42) often misses to state two important things:

- Which exact measures are necessary to achieve the calculated saving potentials, and is there evidence on their cost and their effectiveness?

- Are estimated potential savings as calculated in the report net of 'investment costs' to achieve those goals?

The difference between gross and net savings presumably will depend on the exact measures chosen to improve health, prevent falls etc. Being a summary report of a large project, the report cannot provide every detail of the long list of calculated examples. Knowing the scarcity of long-term cost-effectiveness calculations for interventions (OECD 2010, RAND Health 2010, Shekelle, Goldzweig 2009), we doubt that cost-effectiveness information is available for all examples cited in the report. This kind of knowledge, however, seems crucial to us for identifying priorities for action.

Narrowing the gap from the demand side rather than the funding side offers a series of advantages, first of all the benefit of improved health, prevented disabilities, postponed dependence on support etc. per se. Second, most ways of increasing revenues bear risks of detrimental effects on distribution or equity, thus likely counteracting the European goal of reducing poverty risks. Raises in revenue via growth of (taxable) employment seem to be the most prominent exception. Improving health and reducing depency from support can be expected to be accompanied by more favourable effects in this respect. Third, future care needs are likely to open a gap with respect to funding as well as available manpower. Tackling the gap from the demand side will simultaneously help to narrow both gaps. It goes without saying that again *net* effects are to be considered, because implementing measures to improve health will need trained care workers and funding alike.

Discussion and Conclusions

Combating poverty is one of five EU targets for 2020. More concretely, the population at risk of poverty or social exclusion is proposed to be reduced by 20,000,000 persons by 2020. Across developed countries, average LTC expenditure can amount to 60% of a senior's disposable income for those in the bottom 40% of the income distribution, and this already at care needs of 10 hours per week. With care needs of 25 hours per week, resulting expenses can exceed 60% of the disposable income for those up to the 8th income deciles (OECD 2011, p. 264). Thus cost of LTC services and support can rapidly become unaffordable, not only for poorer people. Moving towards universal LTC benefits is desirable to secure access on a broad basis.

Residential care homes in EU Member States typically require private co-funding from their inhabitants (Riedel, Kraus 2011), and costs for board and lodging often make up a higher share of total care costs than personal and nursing care services. In so far as a return to private habitation is unlikely, it therefore seems prudent to ask persons in residential care to cover for board and lodging, even if this means to use revenues from assets including their private home. In several countries corresponding schemes are in use or are being developed which can be analysed for use or adaptation for (other) European countries.

In many EU Member States, family members are still the most important resource for the care of elderly persons or other people in need of care or support. Some countries like Sweden, which traditionally relied mostly on formal rather than informal and family-related care provision, increasingly try to shift more care to family members. This tendency will not only increase challenges for mental and physical strength of caring family members, but will sometimes require also financial means to (co-)fund necessary formal care, while simultaneously making it harder for younger carers to build up resources for their own retirement age: Without support, high-intensity care-giving is associated with a reduction in employment hours, a higher risk of poverty and a 20% higher prevalence of mental health problems among family carers than for non-carers (OECD 2011). Support services, properly designed cash-benefits and more flexible and worker-friendly employment opportunities can facilitate combining employment with family care. Such policies simultaneously support a setting of care which is preferred by many (but definitely not all) Europeans in need of care, help avoid future poverty risks of informal carers, and help governments to contain LTC expenditure.

Productivity improvements offer another source to achieve better long-term financial sustainability, even though productivity is hard to grasp in this sector. As usual, technical efficiency and allocative efficiency can be defined. Allocative efficiency asks e.g. if care is

provided in the most efficient setting: For 2008, the OECD estimates that institutional care accounted for 62% of total LTC costs across OECD countries, while on average only about a third of LTC users received care in institutions. (OECD 2011). Consequently, virtually all countries try to shift care from residential to home care settings, and try to foster family participation in care. It is, however, still unclear under which conditions and by how much home care is indeed less expensive than institutional care. Users of both settings need not share the same characteristics: Is home care cost-effective e.g. for users requiring constant supervision or care, or for users living in remote areas? Some critics warn that inappropriate or inadequate home care may lead to higher and/or more costly institutionalization later on.

In order to improve technical efficiency, some countries shift care from public to private institutions. Those, however, may be governed by less strict labour regulation, thus affecting the organisation of the care sector including quantity and quality of care workers needed. Increased privatisation may result in worsening labour conditions, which calls for effective regulation and supervision, in order to avoid putting even more pressure on workers who already show high turnover rates. (Simonazzi 2009)

LTC is a growing economic sector with highly labour intensive production and very robust forecasts for further developments. These characteristics provide a fertile background for productivity enhancing innovations. Many products have been developed already and are increasingly being used; the variety of successful examples is large and includes highly technical products like electronic locks as well as simpler mechanical means like rollators or drug dispensers. The overall impact of innovations in and for care on cost and quality seems promising, but needs to be analysed further.

In the health and care context, increased productivity most likely will impact quality of care, with potential for positive as well as negative implications. Like OECD (2011, e.g. p. 17) also MSHA (2010, p. 34f) stresses the interdependency of efficient and high-quality health care for LTC: e.g. optimal hip and cataract surgery may reduce the need for LTC services, while sub-optimal medication of elderly patients may lead to additional demand. The wide spread in patterns of treatment found across regions and accompanying differences in treatment costs suggest that there is room for quality enhancing efficiency gains. But, as OECD (2011, p. 16) concludes: “Efficiency discussions in long-term care have thus far received relatively little attention and better evidence on what works and under what conditions is needed.”

In this light, we formulate a list of key questions:

1. Improve health/reduce demand:

- Which measures are effective in reducing or delaying major diseases (like dementia, hypertension, osteoporosis)?
- What could be the prerequisites to implement systematic prevention plans on these diseases ?

2. Work force:

- How can we improve efficiency of care workers without impeding their job retention or recruitment? (e.g. experience with adjusted curricula, better cooperation between different job categories, better work organisation)
  - Specific focus on retention: what are the best strategies with financial / non financial (training opportunities, job profile changes..) dimension ?
- How can we effectively approach current and additional recruitment pools?
- How can we best support family / informal carers, also in their job situation (e.g. more flexible working hours, tele-working, but also respite dimension and legal support to carers)?

3. Allocative and technical efficiency:

- How can we foster the choice of the most efficient setting of care: home care/ intermediate forms/residential facilities?
- How can we further improve cooperation between “health care” and “long-term care”?
- How can we utilize efficiency potentials from care providers e.g. in the private sector while maintaining or improving quality in both, quality of care and quality of work?
- Which is the most efficient structure of care provider with regard to size, specialisation and location (e.g. urban/ rural, hospital affiliated/stand alone/ affiliation between residential facilities and home care)?

4. Long-term financial sustainability without increasing poverty risks:

- How can we foster intergenerational equity in financing LTC
- How should financing sources be broadened or increased?
- How can we target benefits to persons with high needs in a non-discriminating way?

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