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The Long-Term Care Workforce: Overview and Strategies to Adapt Supply to a Growing Demand

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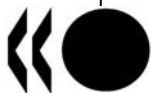
THE LONG-TERM CARE WORKFORCE: OVERVIEW AND STRATEGIES TO ADAPT SUPPLY TO A GROWING DEMAND

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EXECUTIVE SUMMARY

1. This working paper offers an overview of the LTC workforce and reviews country responses to a growing demand for LTC workers.

2. In the context of ageing societies, the importance of long-term care is growing in all OECD countries. In 2005, long-term care expenditure accounted for slightly over 1% of GDP across OECD countries (OECD *Health Data* 2008), but this is projected to reach between 2% and 4% of GDP by 2050 (Oliveira Martins *et al.*, 2006). Spending on long-term care as a share of GDP rises with the share of the population that is over 80 years old, which is expected to triple from 4 per cent to 11-12 per cent between 2005 and 2050.

3. In addition to ageing, there are other factors likely to affect future spending. Trends in severe disability among elderly populations across 12 OECD countries for which data are available do not show a consistent sign of decline (Lafortune and Balestat, 2007), while the number of elderly that need assistance in carrying out activities of daily living is also growing. Meanwhile, societal changes – notably possible reductions in the importance of informal care due to rising labour market participation by women and declining family size, as well as growing expectations for more responsive, quality health and social-care systems – are creating pressures to improve value for money in long-term care systems. These factors add pressures on the workforce of this highly labour-intensive sector. Adding to this are the difficulties in attracting and retaining caregivers to a physically and mentally gruelling profession.

4. These trends may well not result in future shortages of LTC workers if labour markets are able to adapt to increased demand via, for example, higher wages and better working conditions. Several solutions are indeed being considered to manage a growing demand for LTC workers. A first solution is to ***increase the LTC workforce***.

5. Although higher nursing skills may be necessary to attend to high-care jobs for recipients affected by dementia or with multiple chronic-care needs, many LTC jobs require a relatively low level of skills. This reduces the training requirements for caregivers. *Training programmes* play an important function of helping to guarantee quality standards. Developing training programmes and career structures for LTC workers has the additional benefit of ameliorating the poor image of many LTC jobs, thereby attracting more people to the sector.

6. A second strategy to increase the LTC workforce consists of *recruiting LTC workers from underrepresented or inactive populations*. These include, for example, retired elderly people, unemployed populations, volunteers, or groups traditionally underrepresented in the LTC workforce such as men. However, there are only a few examples of country initiatives that target the unemployed or the elderly. These measures often require additional spending, for instance to subsidise training and wages, but the evidence on their effectiveness and cost-effectiveness is sparse.

7. Growing demand for LTC workers is also affecting the *labour migration trends of low-skilled workers* in some countries. Demand for LTC workers has become a “pull” factor behind the immigration of low-skilled long-term care workers. For example, foreign LTC workers represent around a fifth of the total LTC workforce in Canada and the United States. Although OECD countries compete to attract high-skilled migrants, there is a growing, long-term demand for low-skilled labour in the elderly and disabled

care sectors – among others. Migration channels such as so-called “managed-migration schemes” have historically applied to high-skilled workers, and have only to a limited extent become available to low-skilled foreign-born LTC workers. In the face of growing demand, this has resulted in a significant flow of international low-skilled LTC workers through unmanaged migration routes, such as overstaying, fraudulent entry or illegal border crossing. This poses the question of whether current migration policies are suitable in the face of growing demand for low-skilled LTC labour. The employment of foreign LTC workers raises other issues too, related, for example, to the impact on the labour market for low-skilled natives, guaranteeing uniform standards of quality in care services, the societal integration of foreign-born LTC workers, and the protection of worker’s rights.

8. A second set of strategies to manage an increasing demand for LTC workers consists of investing in *policies to make better use of available labour capacity*.

9. Better retention of long-term care workers in their jobs, however desirable, is obviously difficult, given the nature of the tasks involved and low attractiveness of the job. Increasing wages is an option. Non-wage benefits such as reimbursement for transportation, bonuses and annual wage raises, or subsidised child care, are another alternative. Changes in the content of work can also contribute to improved morale, as do improvements in safety standards in long-term care – with the additional benefit of ameliorating care quality.

10. Informal caregivers provide the largest share of care to elderly and disabled people. Informal care yields several economic, health and social benefits for the care recipient. It can also help to increase the overall supply of care and reduce public LTC spending. However, it is a stressing and enduring responsibility, and it is not unusual for intensive informal carers to incur health or mental problems themselves. To help informal carers reconcile work with caring responsibilities while preserving their income, work prospects, and wellbeing, many OECD countries support family and other informal carers either financially, or through respite care and other non-financial benefits. The mechanism and modalities of such support differ across countries, reflecting the social values as well as the organisation of formal care. For example, care-leave arrangements, available in several OECD countries, differ in length and so do the availability and amount of compensation during leave (*e.g.* care allowances, tax exemptions or contributions to pension schemes). Conditions for receipt of allowances, such as an income and needs test, co-residency with or relationship to the care recipients, or minimum hours of caring, also vary. Despite the stated aim, experience so far shows that it is difficult for caregivers who have left the labour market to return to work and earn the same or a similar income as before. There is still a lot which is not known about how best to reconcile work and caring jobs – certainly a priority area for governments.

11. Improved *co-ordination between the LTC and health care sectors* has been identified as a key area for efficiency improvements and better value for money, although its potential to reduce the demand for LTC workers is not certain. Several factors explain the lack of care co-ordination in LTC services, including the lack of co-ordination between multiple services and providers catering to LTC recipients, perverse financial incentives faced by providers, and difficulties in co-ordination across public and private third-party payers with overlapping beneficiaries. Possible improvements may derive from assigning care managers or assessment teams to plan and co-ordinate long-term care services for care recipient with multiple care needs or emphasising the importance of communication among different care providers and recipients. Some OECD countries have recognised the importance of emphasising integrated approaches that make better use of community-level resources to improve care co-ordination between social and medical services, or have started to consider how to design appropriate payments for long-term care providers.

12. A third final set of policy solutions relates to *reducing the need for LTC workers and improving the productivity of LTC jobs*. There are some promising directions to explore in this respect.

13. The use of *Information and Communication Technologies (ICTs)* in long-term care, such as telemedicine and electronic health records, offers additional opportunities to address the demand on LTC labour. Indeed ICTs have much potential – to utilise better current resources and to empower the elderly to be more autonomous in daily living. ICTs can also be used to improve efficiency in organising and planning formal caregivers’ services. However, the uptake of ICTs has been slow to date in the long-term care sector in several countries.

14. Finally, there are other important strategies to reduce the need for LTC workers, notably the promotion of healthy ageing policies (Oxley, 2009), including promoting self-care, and redefining job tasks by assigning simpler tasks to less qualified workers, such as care-work assistants.

15. All these strategies raise their own costs and challenges, and may well need to be combined. The review of country experiences shows some of the difficulties to be addressed. For example, retention of LTC workers may require better career prospects and better paid jobs, raising public costs in a sector under significant financing strains. Compensating informal carers and providing them with respite care may support them to continue supplying labour – but financial compensation may well reduce the attractiveness of jobs in the formal labour market, particularly for women and people in poorly paid jobs. Scaling up training programmes for caregivers can attract new recruits through improved image of the profession and can improve quality standards, but, again, this has a fiscal cost. As for migration policies, there is probably a need to adapt strategies to the growing demand for low-skilled migrants, but, for several reasons, countries are cautious in accepting low-skilled migrants. Finally, the review of available data and published literature reveals a dearth of information on what works and what does not in providing LTC systems with a quality and sustainable care workforce. This is clearly an area that OECD, and policy makers in member countries, should address in future work.

RESUME

16. Ce document de travail présente une vue d'ensemble sur les travailleurs du secteur des soins de longue durée (SLD) et passe en revue les réponses des pays à l'accroissement de la demande de travailleurs des SLD.

17. Dans le contexte du vieillissement des sociétés, l'importance des soins de longue durée va se développer dans tous les pays de l'OCDE. En 2005, les dépenses de SLD ne représentaient guère plus de 1 % du PIB dans ces différents pays (*Éco-Santé OCDE* 2008), mais d'après les projections, cette proportion pourrait atteindre entre 2 et 4 % du PIB à l'horizon 2050 (Oliveira Martins *et al.*, 2006). La part des dépenses de SLD exprimées en pourcentage du PIB augmente en même temps que s'accroît la part de la population âgée de plus de 80 ans. Or, cette part devrait tripler entre 2005 et 2050 et passer de 4 % à 11 ou 12 % sur cette période.

18. Outre le vieillissement, d'autres facteurs pouvant affecter les dépenses futures sont impliqués. Dans 12 pays de l'OCDE pour lesquels on dispose de données, la tendance à l'incapacité sévère chez les personnes âgées ne diminue pas de manière régulière (Lafortune et Balestat, 2007), tandis que le nombre de personnes âgées ayant besoin d'aide pour accomplir les activités élémentaires de la vie quotidienne est en augmentation. En même temps, l'évolution de la société (notamment, la possible diminution d'importance qui devrait être accordée aux soins informels du fait de l'accroissement du taux d'activité des femmes et de la diminution de la taille des familles, mais aussi les attentes croissantes face à des systèmes de soins de santé et de protection sociale que l'on voudrait plus réactifs et de meilleure qualité) accroît la nécessité d'une utilisation plus efficiente des ressources des systèmes de SLD. Ces facteurs renforcent la pression qui s'exerce sur les travailleurs de ce secteur à très forte intensité de main-d'œuvre. S'y ajoutent les difficultés rencontrées pour attirer des soignants vers un métier pénible à la fois physiquement et psychologiquement et pour les retenir.

19. Ces tendances peuvent sans doute ne pas conduire à des pénuries de personnel de SLD si le marché du travail est capable de s'adapter pour accroître la demande avec par exemple, des salaires plus élevés et de meilleures conditions de travail. Pour remédier aux pénuries actuelles et prévisibles, plusieurs solutions sont à l'étude. La première consiste à **augmenter les effectifs de travailleurs des SLD**.

20. S'il est vrai que pour occuper les emplois où les soins prodigués sont complexes (patients atteints de démence ou de multiples affections chroniques) le personnel infirmier doit vraisemblablement être hautement qualifié, beaucoup d'emplois de SLD n'exigent qu'un niveau de compétence relativement faible. Le niveau d'instruction exigé des soignants s'en trouve réduit. Les *programmes de formation* jouent un rôle important en ce qu'ils aident à garantir le respect de normes de qualité. L'élaboration de programmes de formation et de plans de carrière structurés pour les travailleurs des SLD présente en outre l'avantage de corriger l'idée peu flatteuse que l'on se fait souvent des emplois dans ce secteur, permettant ainsi d'attirer plus de gens vers cette branche d'activité.

21. Il existe une deuxième stratégie pour étoffer les effectifs des SLD qui consiste à *recruter des travailleurs parmi les populations sous-représentées ou inactives*. Celles-ci englobent notamment les retraités, les personnes sans emploi, les bénévoles ou les groupes traditionnellement sous-représentés dans la main d'œuvre des SLD comme les hommes. Cependant, on ne recense que peu d'exemples d'initiatives nationales qui ont ciblé les chômeurs ou les personnes âgées. L'on sait que ces mesures exigent souvent

une augmentation des dépenses pour subventionner la formation et les salaires, mais rares sont les données attestant leur efficacité ou leur rentabilité.

22. L'accroissement de la demande de travailleurs de SLD influe aussi sur les *tendances des migrations de travail de personnes peu qualifiées* dans certains pays. La demande de travailleurs de SLD est devenue un facteur d'attraction sous-tendant l'immigration d'étrangers peu qualifiés appelés à travailler dans le secteur des soins de longue durée. A titre d'exemple, cette catégorie représente environ un cinquième du nombre total de professionnels des SLD au Canada et aux États-Unis. Certes, les pays de l'OCDE rivalisent actuellement pour attirer des migrants hautement qualifiés mais, dans une optique de long terme, on observe aussi une demande croissante de main-d'œuvre peu qualifiée dans le secteur des soins aux personnes âgées et aux handicapés, entre autres. Les filières migratoires telles que les « dispositifs d'immigration gérée » ont de tout temps été destinées aux travailleurs hautement qualifiés et n'ont été ouvertes que de manière limitée aux travailleurs des SLD peu qualifiés, nés à l'étranger. C'est ainsi que, face à une demande croissante, on a vu affluer un nombre significatif de travailleurs des SLD peu qualifiés venus d'un peu partout, et ayant emprunté des circuits d'immigration non gérée comme le maintien sur le territoire après expiration du visa, l'entrée dans le pays d'accueil avec de faux papiers ou le franchissement illégal des frontières. D'où l'enjeu de savoir si les politiques migratoires actuelles sont appropriées face à la demande croissante de travailleurs des SLD peu qualifiés. L'emploi d'étrangers dans ce secteur soulève aussi d'autres questions liées, par exemple, à l'impact sur le marché du travail des autochtones peu qualifiés, à la garantie d'homogénéité des normes de qualité des prestations de soins, à l'intégration dans la société des travailleurs de SLD nés à l'étranger et à la protection des droits des travailleurs.

23. Un deuxième ensemble de stratégies visant à gérer une demande croissante de travailleurs de SLD consiste à *investir dans des mesures visant à une meilleure utilisation des capacités de la main-d'œuvre disponible*.

24. Il est manifestement difficile, bien que souhaitable, de mieux s'y prendre pour retenir les travailleurs des SLD, étant donné la nature des tâches à accomplir et le peu d'attraits des emplois. Offrir un salaire plus élevé est une possibilité. Une autre consiste à offrir des avantages non salariaux comme le remboursement du coût du transport, les primes et les augmentations de salaires annuelles, voire une subvention « garde d'enfants ». La modification du contenu du travail peut aussi contribuer à améliorer le moral des travailleurs. Il en va de même de l'amélioration des normes de sécurité en matière de soins de longue durée (ce qui a comme avantage supplémentaire d'améliorer la qualité).

25. Les soignants informels fournissent des soins pour la plus grande part, aux personnes âgées et aux handicapés. Le recours aux soins informels présente plusieurs avantages d'ordre économique, sanitaire et social pour les bénéficiaires. Il peut aussi contribuer à augmenter l'offre globale de soins et réduit les dépenses publiques de SLD. Cependant, il incombe à ces soignants une responsabilité stressante et continue. Il n'est d'ailleurs pas rare que les soignants informels ayant une activité intensive souffrent eux-mêmes de problèmes de santé physique ou psychique. Pour les aider à concilier obligations professionnelles et de soins tout en préservant leur revenu, leurs perspectives de carrière et leur bien-être, de nombreux pays de l'OCDE aident les soignants familiaux et autres soignants informels soit financièrement, soit par des services de relève et autres prestations non financières. Le mécanisme et les modalités de ce soutien, qui diffèrent d'un pays à l'autre, témoignent de valeurs d'ordre social ainsi que de l'organisation des soins formels. A titre d'exemple, des dispositifs prévoyant la possibilité pour les soignants de prendre des congés existent dans plusieurs pays de l'OCDE. Elles diffèrent toutefois par la durée de ces congés mais aussi par la disponibilité et le montant de ces compensations (indemnité de soins à domicile, par exemple), ainsi que par les exemptions fiscales ou les cotisations à un régime de retraite. Les critères à remplir pour percevoir ces indemnités tels que l'évaluation des revenus, la progressivité des aides en fonction des besoins, la cohabitation avec les bénéficiaires des soins ou le nombre minimum

d'heures consacrées aux soins varient également. Malgré l'objectif affiché, l'expérience montre jusqu'ici qu'il est difficile pour les aidants ayant quitté le marché du travail de retrouver le chemin de l'emploi et une rémunération égale ou similaire à celle dont ils bénéficiaient avant ce congé. Il reste bien des points obscurs concernant la manière de concilier au mieux les emplois et les fonctions de soignant, question dont les gouvernements devraient certainement faire une priorité.

26. L'amélioration de la *coordination entre le secteur des SLD et celui des soins de santé* est incontestablement un aspect clé de l'amélioration de l'efficacité et de l'utilisation à bon escient des ressources, même si ses capacités à réduire la demande de travailleurs de SLD est incertaine. Plusieurs facteurs expliquent le manque de coordination des soins dans les services de SLD, dont l'absence de coordination entre les multiples services et prestataires s'occupant des bénéficiaires de SLD, les effets pervers des incitations financières sur les prestataires, et les difficultés de coordination entre les organismes payeurs publics et les organismes payeurs tiers privés quand les bénéficiaires relèvent à la fois des uns et des autres. On trouvera peut-être des moyens d'améliorer les choses en attribuant aux responsables de l'administration des soins ou aux équipes d'évaluation de planification et de coordination des prestations de soins à long terme, destinées à des bénéficiaires présentant des besoins multiples en matière de soins, ou en insistant sur l'importance de la communication entre les différents prestataires et bénéficiaires de soins. Certains pays de l'OCDE ont reconnu l'importance de privilégier les approches intégrées permettant de mieux utiliser les ressources au niveau local afin d'améliorer la coordination des soins entre les services sociaux et les services médicaux, ou ont commencé à réfléchir à la manière de concevoir des rémunérations appropriées pour les prestataires de soins de longue durée.

27. Le troisième et dernier ensemble de solutions concerne *la réduction du besoin en travailleurs des SLD et l'amélioration de la productivité des emplois de SLD*. A cet égard, plusieurs pistes de réflexion semblent prometteuses.

28. L'utilisation des *technologies de l'information et de la communication* (TIC) dans les soins de longue durée (télémédecine et dossiers médicaux électroniques, par exemple) offre d'autres possibilités pour gérer la demande de travailleurs des SLD. De fait, les TIC ont un énorme potentiel, qu'il s'agisse de mieux utiliser les ressources actuelles, ou de rendre les personnes âgées plus autonomes dans leur vie quotidienne. Les TIC peuvent aussi servir à améliorer l'efficacité dans l'organisation et la planification des prestations des soignants formels. Toutefois, l'adoption de ces technologies a été lente dans le secteur de soins de longue durée dans plusieurs pays.

29. Enfin, il existe d'autres stratégies à ne pas négliger si l'on veut limiter les besoins en travailleurs des SLD, en particulier la promotion de politiques du bien vieillir (Oxley, 2009), autrement dit en encourageant les patients à se prendre en charge en redéfinissant les missions et en confiant des tâches plus simples aux travailleurs peu qualifiés, comme les aides-soignants.

30. Ces stratégies sont toutes assorties de coûts et de défis qui leur sont propres, et il se peut bien qu'il faille en conjuguer plusieurs. L'examen des expériences des pays fait apparaître certaines des difficultés auxquelles il faudra remédier. A titre d'exemple, retenir les travailleurs des SLD passe peut-être par de meilleures perspectives de carrière et des emplois mieux rémunérés, mesures qui font augmenter les dépenses publiques dans un secteur connaissant déjà des tensions financières significatives. Rémunérer les soignants informels et les faire bénéficier de services de relève peut les soutenir à continuer à fournir leur travail, mais cette rémunération risque fort de diminuer l'attrait des emplois sur le marché du travail formel, en particulier pour les femmes et les individus ayant des rémunérations faibles. Des programmes de formation des soignants à plus grande échelle peuvent attirer de nouvelles recrues via une image améliorée de la profession et peuvent corriger les standards de qualité mais là encore, cette mesure a un coût pour le budget. Quant aux politiques migratoires, il est probablement nécessaire d'adapter les stratégies à la demande croissante de travailleurs peu qualifiés mais, pour diverses raisons, les pays font preuve de

circonspection dans l'admission d'immigrants peu qualifiés. Enfin, l'examen des données disponibles et des publications sur ce thème fait apparaître un manque criant d'informations sur les méthodes qui marchent et celles qui ne marchent pas pour fournir les systèmes de SLD d'une main d'œuvre de qualité et durable. C'est à l'évidence une question sur laquelle l'OCDE et les responsables de l'élaboration des politiques des pays membres devraient se pencher dans le cadre de leurs travaux à venir.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	3
EXECUTIVE SUMMARY	4
RESUME	7
INTRODUCTION	13
1. LONG-TERM CARE WORKFORCE: AN OVERVIEW	14
1.1 A growing need for long-term care workers	14
1.1.1 Demographic and disability trends fuel the demand for long-term care.....	14
1.1.2 Long-term care spending growth.....	15
1.1.3 Rising numbers of long-term care recipients especially at home	17
1.1.4 Societal changes suggest a decline in the supply of family caregivers.....	19
1.1.5 The working-age population is declining.....	20
1.1.6 Long-term care jobs are unattractive leading to difficulties in retention.....	21
1.2 Long-term care workers: who they are, how many there are	23
1.2.1 Significant cross-country variation in the supply of long-term care workers.....	24
1.2.2 A majority of LTC workers are in the informal sector; many operate on part-time basis.....	26
1.2.3 LTC workers are predominantly women with diverse educational levels and age.....	27
1.2.4 The number of foreign-born LTC workers is significant and increasing.....	29
1.2.5 Foreign-born LTC workers are generally middle-aged women from neighbouring countries.....	31
2. RESPONDING TO THE GROWING NEED FOR LONG-TERM CARE WORKERS.....	33
2.1 Increasing the supply of LTC workers	33
2.1.1 Improving the attractiveness of LTC jobs through training.....	33
2.1.2 Recruiting LTC workers from underrepresented or inactive populations.....	35
2.1.3 Recruiting international LTC workers	36
2.2 Making better use of the available long-term care workforce.....	41
2.2.1 Improving retention	41
2.2.2 Supporting family and other informal caregiving arrangements	42
2.2.3 Better co-ordination of care	45
2.3 Reducing the need for long-term care workers	46
2.3.1 Redefining the skill mix and job tasks.....	46
2.3.2 Is there a role for ICT in long-term care?	46
2.3.3 Promoting self-care and healthy ageing.....	48
3. POLICY CHALLENGES AND FUTURE WORK	49
REFERENCES	51

Tables

Table 1. Number of formal and informal LTC workers, selected OECD countries, 2006 or latest year available	26
Table 2. Number and share of Full Time Equivalent LTC workers among total LTC workers, selected OECD countries, 2006	27
Table 3. Number and share of women among formal LTC workers, selected OECD countries, 2006 or latest year available	28
Table 4. Number and share of women among informal LTC workers, selected OECD countries, 2006 or latest year available	28
Table 5. Share of foreign-born in total labour force, low-skilled labour force and LTC workers, around 2006	31

Figures

Figure 1. Share of population aged 65 and over and aged 80 and over, OECD and EU countries, 1960-2050	15
Figure 2. Long-term nursing care expenditure as a percentage of GDP in 2006	16
Figure 3. Public and private share of long-term nursing care expenditure as % of GDP in 2006	17
Figure 4. People aged 65 and over living in institutions and receiving care at home as a share of people aged 65 and over, 2006	18
Figure 5. Female and male recipients aged between 65 and 79 and 80 and over, share of respective age group and male/female, 2006	19
Figure 6. Average female employment rates, in EU and OECD countries, 1992-2005/6	20
Figure 7. Share of working-age population (aged between 15 and 64) in OECD and EU countries, 1960-2050	21
Figure 8. Ratio of total formal LTC workers per 1000 population aged over 65 years old	25
Figure 9. Ratio of care recipients aged over 65 to LTC workers in institutions	25
Figure 10. Percentage of foreign-born among low-educated labour force, 1995-2006	30

Boxes

Box 1. Definitions of long-term care and LTC workers	14
Box 2. Wage of long-term care workers across selected OECD countries	21
Box 3. Definition of long-term care workers	24
Box 4. Origin countries of foreign-born long-term caregivers in OECD countries	32
Box 5. Training programmes for long-term care workers in selected OECD countries	34
Box 6. Selected initiatives to recruit LTC workers from specific population groups	36
Box 7. Requirements for international recruitment of long-term care workers	37
Box 8. Benefits for carers in selected OECD countries	43

INTRODUCTION

31. The demand for LTC workers is set to rise in many OECD countries in light of an increasing share of older people in the population and the projected growth in the number of dependent elderly. This occurs in a context where the retention of formal caregivers is difficult and the supply of informal care is set to decline.

32. OECD countries have responded in different ways. Some have set up incentives and mechanisms to improve recruitment and retention of formal caregivers, as well as to support informal caregivers to complement formal care arrangements. Others have considered approaches to reduce the demand for LTC workers, by encouraging the use of ICT innovation, for example. Some OECD countries are increasingly relying on foreign-born care workers.

33. This study offers an overview of some OECD country responses to a growing demand for the long-term care workers. The paper comprises three sections. The first discusses demographic trends, societal and labour market changes that lead to a greater need for LTC workers in OECD countries. It also presents available data on the stock of LTC workers collected by OECD. The second section describes some of the measures to overcome the growing demand for long-term care workers, including the use of migrant workers. This section relies to a large extent on a review of the published literature. The last section summarises some emerging policy challenges, gaps in evidence, and areas for future work.

1. LONG-TERM CARE WORKFORCE: AN OVERVIEW

1.1 A growing need for long-term care workers

1.1.1 Demographic and disability trends fuel the demand for long-term care

34. The LTC sector is a high labour-intensive sector. It is therefore reasonable to assume that future growth in the number of people requiring LTC will lead to a rise in the demand for LTC workers (see Box 1 for definitions).

Box 1. Definitions of long-term care and LTC workers

Long-term care is a range of services required by persons with a reduced degree of functional capacity, physical or cognitive, and who are consequently dependent for an extended period of time on help with basic activities of daily living (ADL), such as bathing, dressing, eating, getting in and out of bed or chair, moving around and using the bathroom. This is frequently provided in combination with basic medical services such as help with wound dressing, pain management, medication, health monitoring, prevention, rehabilitation or services of palliative care. Long-term care services also include lower-level care related to help with instrumental activities of daily living (IADL), such as help with housework, meals, shopping and transportation.

Long-term care can be received in institutions or at home. A long-term care institution is a place of collective living where care and accommodation is provided as a package. It refers to a specially designed institution or a hospital-like setting where the predominant service component is long-term care. Long-term care at home is provided to people with functional restrictions who mainly reside at their own home. It also includes institutions used on a temporary basis to support continued living at home -- such as community care and day care centres and respite care facilities. Home care also includes specially designed or adapted living arrangements for persons who require help on a regular basis while guaranteeing a high degree of autonomy and self-control and adapted/supportive living arrangements.

Long-term care workers provide long-term care services to individuals dependent on help with basic activities of daily living (ADL) or with instrumental activities of daily living (IADL) for an extended period of time. Long-term care can be provided by both formal and informal caregivers.

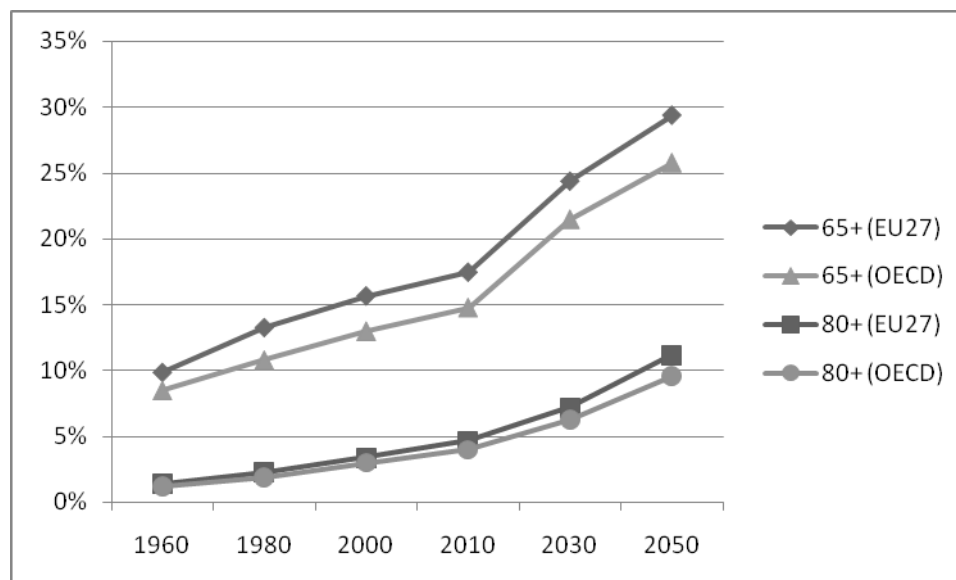
Source: *OECD Health Data 2008*

35. The share of the population aged over 65 and 80 year old has increased in OECD countries over the past few decades. In 1960, 9% of OECD population was above 65 years old, but the proportion increased to around 15% in 2006 (*OECD Health Data 2008*). This trend is expected to continue into the future as the “baby-boom” generation grow older and life expectancy keeps on rising (Figure 1). In 2050, the share of the population aged 65 and over is estimated to reach 26% of total OECD population, while the over 80 age group is projected to increase its share by 2.5 times between 2008 and 2050 (OECD Demographic and Labour Force Database).

36. The impact of these demographic trends on the demand for (and the cost of) long-term care will depend upon the functional capabilities of seniors. Some studies had reported a decline in the share of the population with disability across OECD countries (Waidmann and Manton, 1998; Jacobzone *et al.*, 1999), but a recent analysis reveals clear signs of a decrease in the share of the elderly populations with disability between the late 1990s and the early 2000s only in 5 of the 12 OECD countries reviewed. Disability has

been on the rise in Belgium, Japan and Sweden, and remained stable in Australia and Canada (Lafortune and Balestat, 2007).

Figure 1. Share of population aged 65 and over and aged 80 and over, OECD and EU countries, 1960-2050



Source: OECD Demographic and Labour Force Database, 2008

37. Some country-specific studies also show similar trends. In Austria, the number of elderly people in need of long-term care is projected to increase by over 40% within 20 years (Federal Ministry of Health and Women, 2005). The number of older people with a long-term care need in Japan is estimated to almost double, from 2.8 million in 2000 to 5.2 million in 2025 (Ministry of Health, Labour and Welfare, 2002). In the United States, the number of people aged 65 and over with Alzheimer's disease is expected to increase by more than 50% over a 30-year period, reaching 7.7 million in 2030 (Alzheimer Association, 2008).

1.1.2 Long-term care spending growth

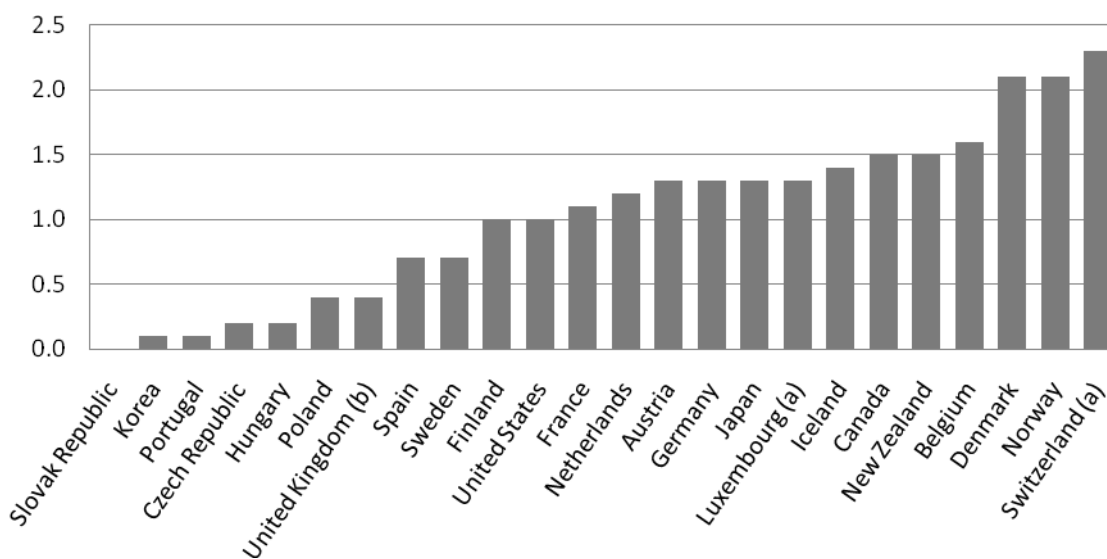
38. Many OECD countries spend a significant and growing amount on long-term care, although there is significant cross-country variation.¹ In 2005/6, expenditure on long-term (LT) nursing care² – the health component of long-term care spending and a part of total health spending -- represented 1 percentage point of GDP and 9% of total health spending, on average across 24 OECD countries. It was the highest in Switzerland (2.3% of GDP) (Figure 2). When *social services* related to long-term care are also included, total LTC spending accounts for 1.2% of GDP, on average across 11 countries for which data are available

¹ The System of Health Accounts framework adopts a comprehensive approach, covering both health care and social care components of LTC expenditure. Total expenditure on long-term care is divided into *long-term health/nursing care*, referring to health care components, and *long-term social care*, referring to social care components. In practice, it is difficult to draw a clear boundary between health and social care and as a result, international comparability is difficult. Many countries only provide data on long-term nursing care.

² Long-term nursing care includes activities performed either by institutions or individuals pursuing through the application of medical, paramedical and nursing knowledge and technology with the goals (inter alia) of caring for persons affected by chronic illness, with health-related impairments, disabilities and handicaps and assisting who require nursing care and end-of-life care (OECD *A System of Health Accounts*, 2000, p. 42).

in 2005/6 (*OECD Health Data 2008*). Per capita long-term nursing care spending in 2006 ranged from 5 USD purchasing power parity (PPP) in the Slovak Republic to a high of 1 107 USD PPP in Norway, while total per capita LTC spending varied between 29 USD PPP in Korea and 1 248 USD PPP in the Netherlands. Data indicate relatively high level of expenditure in Nordic countries and relatively low level in Eastern and Southern European countries such as Portugal and Spain.

Figure 2. Long-term nursing care expenditure as a percentage of GDP in 2006



Note: (a) Data refer to 2005; (b) Data refer to 1999.

Source: OECD Health Data 2008

39. Long-term nursing care appears to be predominantly funded through public sources (Figure 3). Switzerland is the only country where the private share (60%) is larger than the public share, followed by Portugal (47%), the United States (37%), Spain (32%) and Germany (29%). In all these countries but the United States, the private share of LT nursing care is higher than that of total current³ health expenditure.⁴ However, there is significant underreporting of private spending on LTC in several countries.⁵ For example, data on private cost sharing and other private out-of-pocket payments are not available for some countries.

40. The upward trend in LTC expenditure observed across OECD countries confirms the growing importance of this sector in the economy. In the past decade, per capita LT nursing care spending has increased by an annual average of 6.5% in real terms across 24 OECD countries. Total health and social

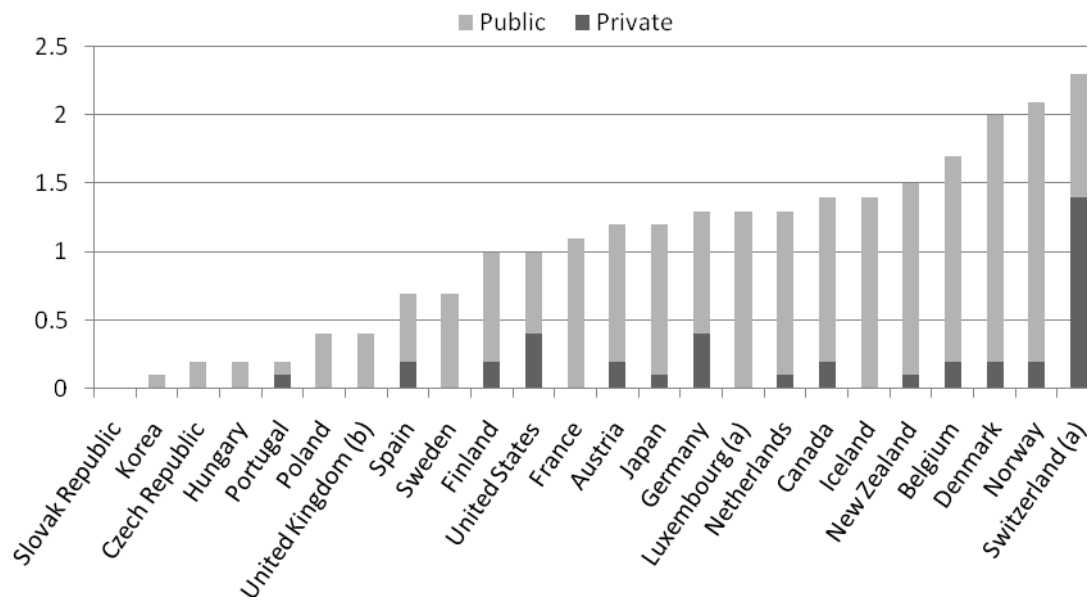
³ LTC expenditure does not include recurrent costs, so the share is compared with that of total current health expenditure, instead of total health expenditure.

⁴ In Switzerland and Portugal, the difference in the private share of LTC and health care spending is about 20%, but in Spain and Germany, the difference is smaller (at 2% and 6%, respectively).

⁵ Under the System of Health Account, LTC expenditure includes costs related to board and lodging in institutions mainly providing health care services, but excludes such costs in institutions predominantly providing services in social care.

LTC spending per capita increased by over 5% in real terms in Finland, France, Korea, Luxembourg and Spain between 2000 and 2006. Korea experienced the largest annual growth, although total LTC expenditure in 2006 is still low, relative to other countries. On the other hand, the annual real growth rate in Japan – at 1.5% – has been lower than in other countries and than the 2.2% increase of health spending.

Figure 3. Public and private share of long-term nursing care expenditure as % of GDP in 2006



Note: (a) Data refer to 2005; (b) Data refer to 1999.

Source: OECD Health Data 2008

41. In recent years, the share of private expenditure in total long-term nursing care spending has grown in about half of the countries for which data are available. On average across 16 countries, per capita private expenditure on LT nursing care has tripled in real terms between 2000/1 and 2005/6. The private share of LT nursing care has increased rapidly even in countries with social insurance systems, such as Luxembourg, Germany, Japan and the Netherlands. On the other hand, some of the countries with universal comprehensive LTC system – for example, Sweden, Norway and Finland – experienced a reduction in the private share of LTC spending. Korea also saw a decline in the private share.⁶

42. The OECD forecasts that spending on long-term care would reach between 2% and 4% of GDP by 2050 (Oliveira Martins *et al.*, 2006), up from the present share of 1%. This reflects the projected rise in the percentage of the elderly population – indeed, spending on long-term care as a share of GDP rises with the percentage of the population aged 80 and older (OECD, 2005; *OECD Health Data 2008*).

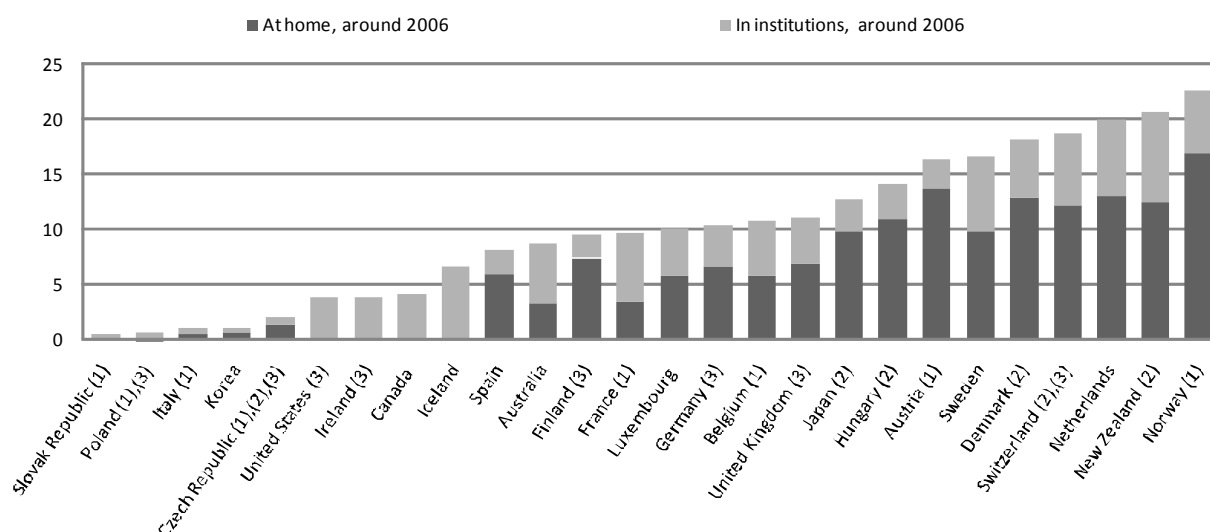
1.1.3 Rising numbers of long-term care recipients especially at home

43. Although LTC spending in institutions represents over 70% of long-term nursing care spending, home care arrangements predominate in OECD countries, as indicated by data on recipients of LTC services (Figure 4). This is confirmed by the trend towards a reduction in the number of LTC beds

⁶ Other countries experienced mixed trends, for instance a rapid increase in the private share in Poland and Spain and a slight decrease in the share in countries such as the United States and Portugal.

observed in most OECD countries. In recent years, a shift from institutional to home care – albeit small – can be observed in Australia, Belgium, Italy, Japan, Korea and Sweden (OECD, 2009).⁷ This reflects older people's preferences for home care and an attempt to reduce reliance on expensive institutional care, particularly for recipients with lower levels of disability (OECD, 2005).

Figure 4. People aged 65 and over living in institutions and receiving care at home as a share of people aged 65 and over, 2006



Note: Data on home care recipients are not available for Canada, Iceland, Ireland, the Slovak Republic and the United States. Institutional recipients refer to 2003 (Canada) and 2004 (the United States). Institutional and home care recipients refer to 2003 (Austria, France, Hungary, the Slovak Republic), 2004 (Belgium, Korea, the United Kingdom) and 2005 (Australia, Switzerland).

a) Data refer to different age-breakdown: recipients of all ages (Czech Republic, Italy and the Slovak Republic); recipients aged 60 years and over (Austria, Belgium and Poland); home care recipients aged 60 and institution recipients aged 65 and over (France); recipients aged 67 and over (Norway). For Norway, people aged 65 and over are used to calculate the share, resulting in underestimation. For other countries, corresponding population data are used to calculate the shares. b) Data do not refer to a specific day in the year, resulting in overestimation. Data refer to a week for Denmark, a month for Japan, the entire year for Hungary and New Zealand and for home care recipients in the Czech Republic and Switzerland. c) Data include care recipients who are fully paying their care from private sources. For the Czech Republic, only data on home care include privately-funded recipients.

Source: OECD Health Data 2008

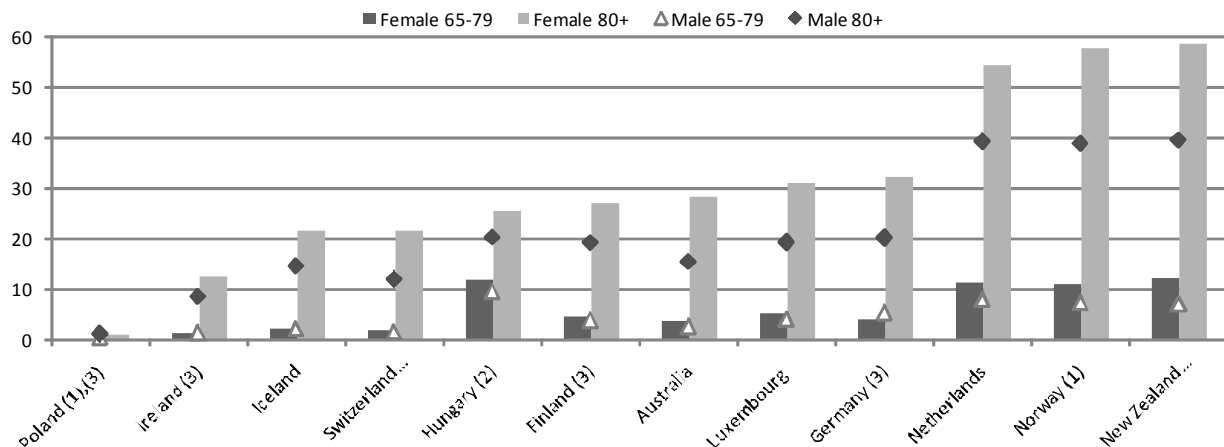
44. The share of the elderly receiving LTC shows significant cross-country variations, although in recent years it has been converging. In Nordic countries with relatively extensive LTC systems, the share was over 15% of the over 65 years old in 2006 (Figure 4). Similarly, countries with universal or comprehensive LTC coverage (e.g. Austria, Germany, Japan, Luxembourg and Netherlands) have a relatively high share of recipients. On the other hand, in Korea, Italy and Eastern European countries (except Hungary), where LTC arrangements are not as formalised, the share of the elderly receiving LTC ranged between 0.6% and 3.6%. Over time, the share of total LTC recipients in the elderly population has increased in countries with a relatively low share around the year 2000 (Australia, Belgium, Iceland, Italy, Japan and Korea), while it has declined in countries with a 2000 share above the OECD average (Finland, Germany, Norway, Sweden and Switzerland), as well as in Ireland and the United States.

45. The average share of LTC recipients among the oldest age cohort (80 and over) is over five times the proportion of recipients aged between 65 and 79. Across the 12 countries for which data are available,

⁷ Germany, however, experienced a recent shift in the opposite direction (Gibson and Redfoot, 2007).

the proportion of women LTC recipients in the 65 and 79 year old female population is over a third higher than that of men. This gap becomes greater among the over 80 years old recipients, where the average share of female recipient is one and a half times the male share, in their respective population groups (Figure 5). This female over-representation is consistent with analysis suggesting a generally higher prevalence of disability among elderly women (Lafortune and Balestat, 2007). Over the past few years, the average share of female recipients in total care recipients slightly declined.

Figure 5. Female and male recipients aged between 65 and 79 and 80 and over, share of respective age group and male/female, 2006



Note: Home care recipient data are not available for Iceland, Ireland and Switzerland. Data for Australia and Switzerland refer to 2005.

a) Data refer to different age-breakdown. The age threshold is 60 (instead of 65) and 75 (instead of 80) for Poland and it is 67 (instead of 65) for Norway. Corresponding population data are used to calculate the share for Poland. For Norway, people aged 65 and over are used to calculate the share, resulting in underestimation. b) Data do not refer to a specific day in the year, resulting in overestimation. Data refer to the entire year for Hungary and New Zealand. c) Data include care recipients who are fully paying their care from private sources.

Source: OECD Health Data 2008

1.1.4 Societal changes suggest a decline in the supply of family caregivers

46. Adult children, especially daughters, have traditionally cared for parents with reduced functional and mental capabilities. Declining fertility rates, a higher participation of women in the labour market and the increase in lone-elderly households suggest that family members might not be readily available to care for their parents in the future.

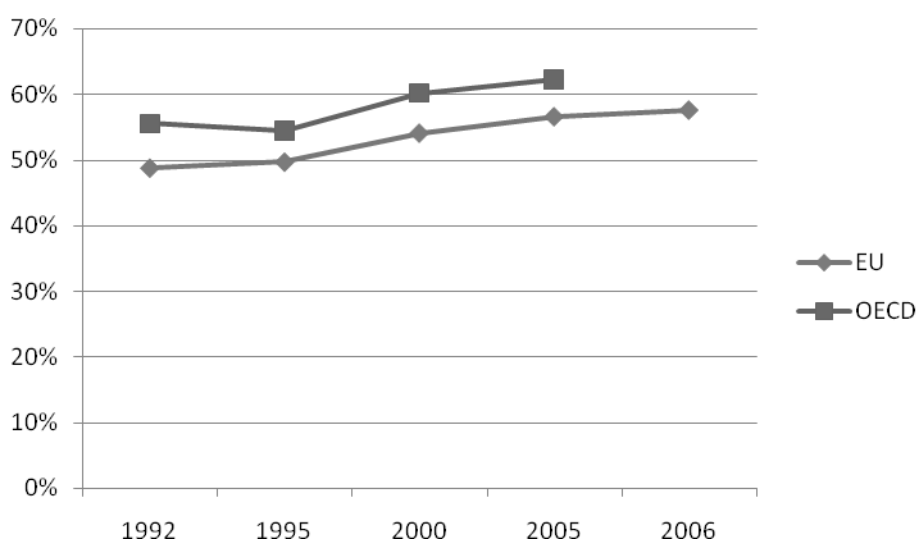
47. Due to the high fertility rate in the 1970s, a higher proportion of the elderly will have surviving adult children in the near future in many OECD countries (Gaymu *et al.*, 2007).⁸ But fertility rates continue to fall and this trend is unlikely to be fully reversed, according to a recent OECD study (d'Addio and Mira d'Ercole, 2005).

48. As for the female employment rate, this has increased from an average of 47% in 1960 to 62% in 2005, across OECD countries (OECD.Stat, 2008). A similar pattern can be found in EU countries; the female employment rate reached 58% in 2006 up from 49% in 1992 (Figure 6). As this trend is expected to

⁸ According to another study from the United States, the proportion of unmarried elderly aged 85 and over without any child will decrease by 2020 (Stone, 2000).

continue and with increased women's educational attainments, the opportunity cost of caring for the elderly rises. In the United States, many family caregivers – a majority of whom are women (as shown in section 1.2.3) – report lost income and benefits, including employer contributions to their retirement savings, as a result of turning down promotion, reducing work hours and quitting work (Alzheimer Association, 2008).

Figure 6. Average female employment rates, in EU and OECD countries, 1992-2005/6



Source: Eurostat and OECD calculations based on data from OECD.Stat, 2008

49. Partners and spouses are another source of informal care. The share of lone-elderly households has increased between 1990 and 2000 across OECD countries (except New Zealand, the United Kingdom and the United States) (OECD, 2005),⁹ including in countries with a strong family-ties tradition, such as Southern European and far-east Asian countries.¹⁰ In the United States, a study estimates that 1.2 million people aged 65 and over will be living alone and have no living children or siblings in 2020, compared to 682 000 in 1990 (Stone, 2000). In England, Germany, Israel, Norway and Spain, seniors prefer to receive care directly from professionals and maintain residential independence (Daatland and Herlofson, 2003).

1.1.5 *The working-age population is declining*

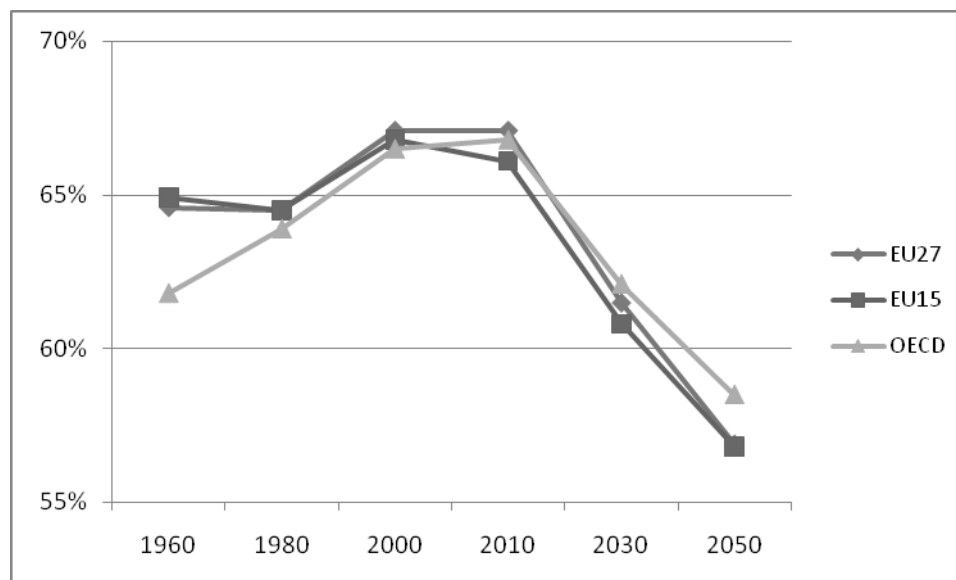
50. In many OECD and EU countries, the age cohorts entering the labour market are and will continue to shrink under the effects of population ageing (Figure 7). In the United States, for instance, the ratio of women aged between 20 and 54 is expected to drop from 16.1 per elderly person aged 85 and over in 2000 to 5.7 by 2040 (Scanlon, 2001). Meanwhile, the educational attainments of the population have risen across OECD countries, resulting in a better educated labour force. These factors together are likely

⁹ Northern European countries – the Netherlands, Norway and Sweden – had a high proportion of lone-elderly households (over 35%) while Mexico, Japan, and Spain had the lowest rates in 2000 (OECD, 2005)

¹⁰ However, there is no conclusive evidence on the impact of changes in the marital status of the elderly (such as a decline in the marriage rate, an increase in divorce and remarriage) on caregivers' availability (Stone, 2000; European Foundation for the Improvement of Living and Working Conditions, 2006; Pezzin *et al.*, 2006).

to reduce the supply of workers for less skilled jobs – such as providers of care for the elderly and disabled people – at a sharper rate than possible declines in demand.¹¹

Figure 7. Share of working-age population (aged between 15 and 64) in OECD and EU countries, 1960-2050



Source: OECD Demographic and Labour Force Database, 2008.

1.1.6 Long-term care jobs are unattractive leading to difficulties in retention

51. Adding to the above trends, unappealing labour market conditions make it difficult to attract or retain LTC workers. Notwithstanding variations in wage levels across OECD countries, LTC workers typically earn lower wages than the average wage in the economy, even though their wage levels are often higher than the average wage of many low-skilled professions (Box 2).

Box 2. Wage of long-term care workers across selected OECD countries

Data on the wage levels of long-term care workers are compared with the national average wage, minimum wage or average wage for low-skilled workers for a few OECD countries. Each country uses slightly different categories of professions working on long-term care, which limits the comparability of the data across countries.

National average wage. In Japan, the United Kingdom and the United States, caregivers typically earn between 50 and 70% of the average wage, while in Canada and Denmark, long-term care workers earn slightly below the average wage. In Denmark, full-time personal care workers earn about 93% of the average full-time worker's earnings and full-time domestic helpers earn 76% of the national average wage (Korczyk, 2004). In Japan and the United Kingdom, the relative wage is about the same. In the former, caregivers in institutions and at home earned 64% of the average wage in 2007 (Ministry of Health, Labour and Welfare, 2008b). In the latter, personal care workers earn 67% of the national average wage and domestic helpers earn 63% of the average workers (Korczyk, 2004). The relative wage is lower in the United States and the average hourly wage of nursing aides, orderlies and attendants was 59% of the national average, while home health aides earned 51% of the average wage in 2007 (Bureau of Labor Statistics,

¹¹ In many OECD countries (Australia, Belgium, the Czech Republic, Greece, Hungary, Italy, Japan, Korea, Portugal, the United Kingdom and the United States), the recent increases in the pension eligibility age (OECD, 2007b) might increase the size of working cohorts. However, it is unclear whether this would lead to an increase in the supply of workers in low-skilled jobs.

2007c).

The wage level of care workers such as nurses and assistant nurses in Luxembourg is considered relatively high compared to those in Belgium, France and Germany (Ferring and Weber, 2005). In Canada, the wage of long-term care workers ranges between CAD 12.7 per hour for home service workers to CAD 24.4 per hour for registered nurses in 2001. On average, home care workers (including nurses, registered nurse assistants, nursing aides, homemakers, and other workers) earned CAD 16.1 per hour in 2001 (Korczyk, 2004; Canadian Home Care Human Resources Study, 2003).¹

Minimum wage. Australian and French long-term care workers earn more than the minimum wage (Korczyk, 2004). In Australia, personal care and nursing assistant working full-time earned on average about 50% more than the minimum weekly wage in 2002. In France, long-term caregivers with a private contract received about the minimum wage while workers contracted through agencies received 50% more.

Low-skilled wages. Earning data for the low-skilled workers are limited. Based on the data collected for OECD Education at a Glance 2008, LTC workers generally seem to earn more than the average earnings of low-skilled workers. Home care workers in Canada, personal care workers in Denmark and nursing aides, orderlies, attendants and home health aides in the United Kingdom earn more than the average low-skilled worker in the country. Domestic helpers in Denmark and personal care workers and domestic helpers in the United Kingdom earn less, at about the average for the low-skilled in the economy.

1. In 2003, the average hourly wage was CAD 17.2.

52. Work-related benefits for LTC workers, such as pension or child-care benefits, similarly tend to be poor. In Australia, family care workers paid by care allowances do not earn retirement credits, and employers are not required to pay contributions to the national retirement scheme for non-family carers earning less than a certain threshold (Korczyk, 2004). Long-term care workers with multiple shifts are often not compensated for their travel time or for the time spent on planning and preparing for their direct care services (Canadian Home Care Human Resources Study, 2003). Compared to other workers, home support workers receive fewer work-related benefits such as paid sick leave, health insurance and pension in Canada (Canadian Home Care Human Resources Study, 2003) and the United States (Harmuth, 2002).

53. Other factors contribute to recruiting and retention difficulties. First, caregiving is mentally and physically hard. A report by the Alzheimer's association (2008) found that about one-third of family members providing care for people with dementias have symptoms of depression and other health problems¹² in the United States. Nursing aides, orderlies, and attendants have the highest nonfatal occupational injury and illness rates in the country (US Bureau of Labor Statistics, 2007b). Similarly, a Canadian study reports high work-related injury and stress, which results in high rates of absenteeism (Canadian Home Care Human Resources Study, 2003). Second, working hours are often long and irregular. In Canada, a significant share of LTC workers endure rotations with short shifts for each recipient, so that workers might need to stay on the job for 12 to 14 hours to accumulate 6 to 8 hours of paid time (Canadian Home Care Human Resources Study, 2003). In addition, caregivers' working conditions are often precarious as part-time and short-term employment contracts are common. Third, long-term care work is not a popular career option and is generally perceived as unattractive. Career progression is nearly absent in most countries (Browne and Braun, 2008). Caregivers' jobs are not adequately recognised by families, care recipients or employers (Harmuth, 2002) and other health professionals (Institute of Medicine, 2008).

54. Given the labour market conditions described above, OECD countries face high caregivers' turnover. For instance, in Australia, the annual turnover of home care worker is reported between 20 and

¹² High levels of stress, reduced immune function, slow wound healing, new hypertension and coronary heart disease.

30%, or sometimes even higher (Angley and Newman 2002). In Canada, the annual turnover rate in home care agencies is as high as 56% and, in 2001, 16% of home care employees quit their jobs within one year (Canadian Home Care Human Resources Study, 2003). In the Italian private sector, turnover was over 50% for institution-based personal care workers, and over 72% for home-based personal caregivers in 2007 (Chaloff, 2008). In the United States, the turnover of aides working in nursing homes ranges between 40 and 100% (Scanlon, 2001), with a resulting cost estimated at over 4 billion per year (Seavey, 2004). In France, recruiting and retaining LTC workers is hard even at times of low unemployment (Crumley 2003). Compared to other OECD countries, the turnover rate for LTC workers in Japan is relatively low, but it is still over 20% and higher than that for all industry sectors (Ministry of Health, Labour and Welfare, 2008b).

55. Vacancy rates for LTC positions are high in several OECD countries. In Austria, between 1 400 and 6 500 full-time employee positions need to be filled (Krajic *et al.*, 2003).¹³ In 2000, vacancy rates for social care workers ranged between 6 and 11% in England (Eborall and Grameson, 2001). In the United States, about 10% of full-time nursing positions in nursing homes were vacant in 2002 (Decker *et al.*, 2003). In the Netherlands, care-work vacancies increased by 17% per year on average between 1995 and 2000 (Ewijk, 2002). Recent policy discussions in Finland and Japan also point to the challenge in securing sufficient numbers of LTC workers (Leppo, 2006; Prime Minister of Japan and His Cabinet, 2008).

56. Demand is expected to grow in the future. According to an Australian study, the number of direct care workers in aged-care institutions would need to more than double the 2003 level by 2011 and more than quadruple by 2031 (Hugo, 2007). In the United States, the number of personal and home care aides need to increase by half between 2006 and 2016 (Bureau of Labor Statistics, 2007a). In Denmark, a significant demand for LTC workers will likely emerge by 2035 due to retirement of current staff and difficulties in retaining trained caregivers, while an additional half a million people with training in nursing care is expected to be needed by 2015 in Sweden and Norway faces a similar outlook (Edebalk, 2004).

1.2 Long-term care workers: who they are, how many there are

57. Identifying and counting LTC workers across OECD countries is complex. The job categories vary significantly across countries,¹⁴ reflecting variation in the organisation of care for people with physical and mental impairments. Using the definitions reported in Box 3, data on the number and characteristics of LTC workers were collected from 14 OECD countries in 2008.¹⁵

¹³ An estimated 7 810 full-time and many part-time nursing and care personnel work in Austria (Schütz, 2006).

¹⁴ For instance, in Spain, LTC workers include residential centre carers and directors, gerontology and geriatrics assistants, social pedagogues, gerontologists and specialised technicians for different disabilities (Escobedo and Fernandez, 2002). In the United Kingdom, LTC workers consist of care assistants, home help/home carers, health care assistants and nursing auxiliaries (Moss and Cameron, 2002).

¹⁵ The OECD pilot data collection on LTC workforce requested data along 5 specifications: i) gender (male, female); ii) formal LTC workers, by occupation (nurse, caregiver) and informal caregivers; iii) care settings (institution, home); iv) origin (natives, foreign born); and v) for the latest available year only, education level (according to the International Standard Classification of Education – ISCED - codes). Fourteen countries (Canada, the Czech Republic, Finland, France, Hungary, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Spain, Switzerland, the United Kingdom and the United States) reported data with some specifications, most of which for 2005 or 2006.

Box 3. Definition of long-term care workers

Long-term care can be provided by both formal and informal workers:

Typically, **formal LTC workers** have a formal contractual obligation with the person receiving care (or an agency or third party representing the person receiving care). Usually, the employment contract would specify the tasks of the caring job, annual leave, and the pay (salary and other monetary compensation) for the caregiver. LTC workers are usually declared to social security systems as caregiver by the care recipient (or person/agency representing the care recipient). They are typically entitled to some level of social security protection, for example an entitlement to health coverage and a pension, in line with country-specific legislation and conditions of employment.

Formal LTC workers include practising nurses (typically associate, practical and vocational nurses) and personal care workers. **Practising nurses** tend to have lower nursing qualifications than professional nurses and are more likely to be involved in caring jobs for dependant people. They have completed a programme of basic nursing education and are qualified and authorised to practise in the country where they work. They provide nursing services directly to patients in all care settings in institutions such as long-term care institutions (e.g., nursing homes), long-term care wards or departments of general hospitals and in specialty hospitals and at home. **Personal care workers** include nursing aids/assistants and care workers providing long-term care services, who do not have any recognised qualification/certification in nursing. Formal caregivers also include family members, neighbours or friends employed under a formal contractual obligation and/or declared to social security systems as caregiver.

Informal caregivers do not have a formal contractual agreement with a care recipient and a declaration of employment to social security offices, and they can be categorised into three groups. **Uncompensated informal caregivers** include 1) family members or friends that do not receive any compensation for their caring activities, although they may receive some type of respite care, *i.e.*, a short-term arrangement providing the caregiver with break from his/her caring commitments; 2) volunteers providing long-term care entirely free of charge; 3) caregivers receiving benefits solely as income support to the household. **Informal caregivers that receive cash benefits/allowances** are caregivers (usually family and friends) providing long-term care services on a regular basis and who receive benefits, cash payments or allowances as part of cash benefit programmes and/or consumer-choice programmes, providing some compensation for their caring activities.¹ **Undeclared/illegal informal caregivers** are for example: 1) undeclared caregivers, receiving a salary or pay by the care recipient and who do not have a contract with the care recipients nor are declared by him/her to the relevant social security offices; 2) undocumented migrants illegally-employed as caregivers by the care recipient (or a person representing the care recipient) but who do not have a contract with the care recipients nor are declared by him/her to the relevant social security offices. These three types of informal caregivers usually provide long-term care services at home.

1. Several OECD countries have introduced cash-benefit programmes (e.g., personal budgets, allowances, cash payments) which aimed either at supporting caring activities by unpaid caregivers or at providing care recipients with greater choice over which caregivers to employ. Furthermore, reforms in some OECD countries have improved social security for informal caregiver, for example by subsidising pension contributions for the informal caregiver.

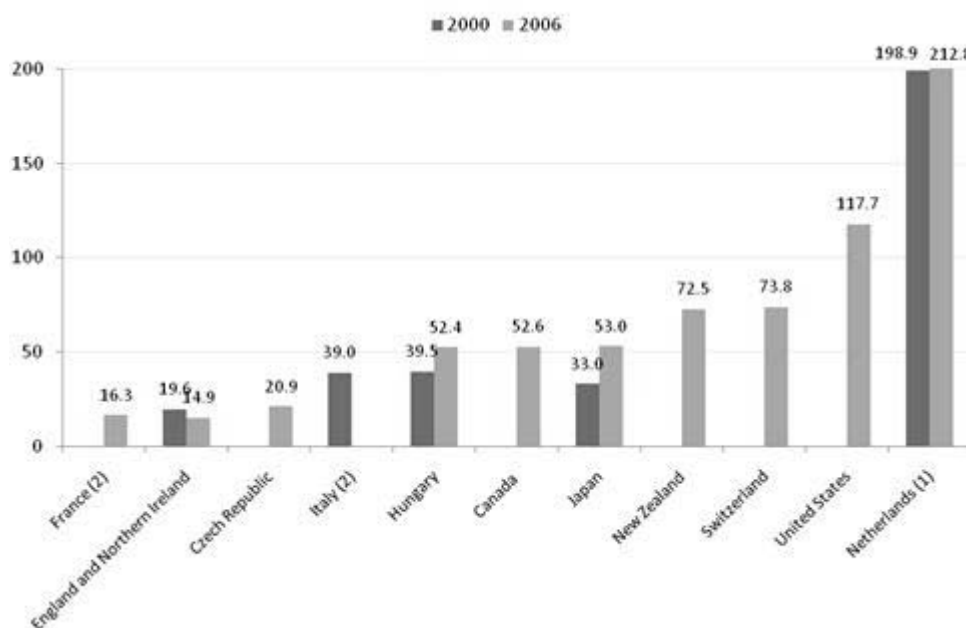
Source: OECD *Pilot questionnaire on long-term care workforce*, 2008.

1.2.1 Significant cross-country variation in the supply of long-term care workers

58. The number of formal LTC workers per 1 000 over 65 year old elderly ranges between 16 in France and 213 in the Netherland (Figure 8) – a high variation which is in part explained by limits to data comparability,¹⁶ differences in country arrangements and in the prevalence of part time arrangements. The ratio of care recipients aged over 65 to LTC workers in institutions also displays substantial cross-country differences (Figure 9), possibly an indication of difference in staffing ratios. For instance, more than one LTC staff is available for each care recipient in institutions in Finland and the United States, while one average LTC worker cares for 10 recipients in Spain and 5 recipients in France and England.

¹⁶ For France, data only include home care nurses (*soins infirmiers à domicile*) while the elderly in need can receive home care services provided by other LTC workers. The particularly high ratio in the Netherlands results, most likely, from the inclusion in the data of a large variety of occupations that could not be separated from the headcounts of LTC workers, including midwives and child care workers.

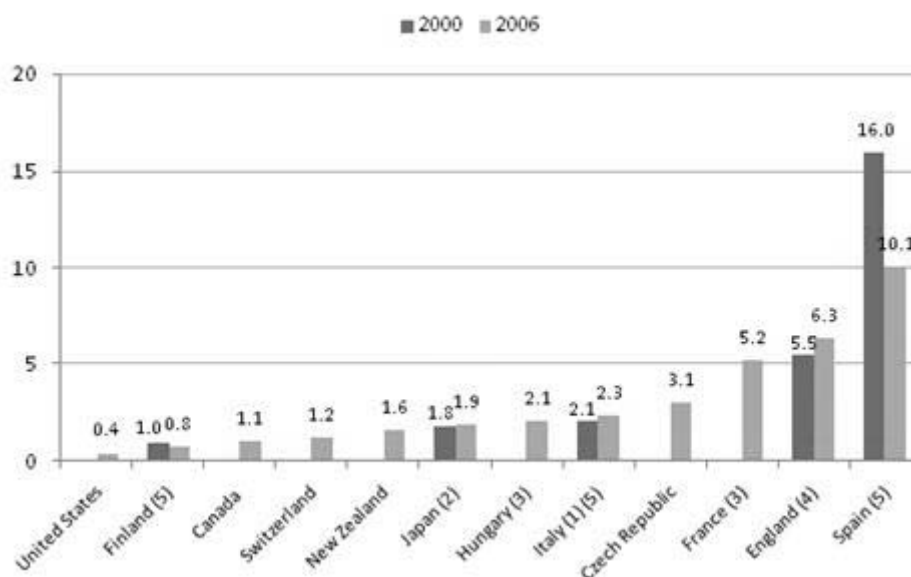
Figure 8. Ratio of total formal LTC workers per 1000 population aged over 65 years old



Note: (1) 2001 instead of 2000. (2) 2005 instead of 2006. Data for Netherlands refer to the ISCO-codes assigned to nurses (2230 and 3231) and personal care workers (5130, 5133 and 5139). Data for Italy do not include nurses working at home.

Source: OECD Pilot data collection on long-term care workforce, 2008.

Figure 9. Ratio of care recipients aged over 65 to LTC workers in institutions



Note: (1) 2001 instead of 2000. (2) 2002 instead of 2000. (3) 2003 instead of 2000. (4) 2004 instead of 2006. (5) 2005 instead of 2006. Data on Canada and Spain include only LTC nurses. Data on England include only caregivers. Data for Finland come from "Care and Services for Older People 2005, Official Statistics of Finland". Ratios for the Czech Republic and Italy are computed with number of recipients of all ages. 2006 data on the number of recipients aged over 65 for Canada and Switzerland have been estimated based on the yearly average growth rate of previous years.

Source: OECD Pilot data collection on long-term care workforce, 2008.

59. The number of formal and informal LTC workers has steadily grown over recent years in most OECD countries. With the exception of England,¹⁷ the growth of formal LTC workers was faster than that of the population aged 65 and over between 2000 and 2006, according to data collected by OECD. The ratio of informal caregivers to the elderly aged 65 and over has increased in Italy and in Luxembourg during the same period. LTC workers in institutions grew 4.4% faster than institutional care recipients annually in Finland between 2000 and 2005 and LTC home care workers grew more than home care recipients in Japan (2.2% per year between 2002 and 2006), Luxembourg (18.8% per year between 2004 and 2006) and the Netherlands (6.5% per year between 2004 and 2006).

60. The demographic and disability projections discussed earlier in this paper suggest a likely sustained growth in the number of people with disabilities. As long-term care is a highly labour-intensive sector, it is likely that the growth in the number of future LTC recipients will lead to a significant demand for LTC jobs, in a sector facing significant recruitment and retention difficulties. Some recent studies from a few OECD countries point to a possible LTC workforce crisis (Edebalk, 2004; Bureau of Labor Statistics, 2007a; Hugo, 2007). The question will be how quickly labour market conditions and salaries for these low skilled-workers will be able to adapt to growing demand.

1.2.2 *A majority of LTC workers are in the informal sector; many operate on part-time basis*

61. Informal caring arrangements are predominant in many OECD countries. Reliable numbers are difficult to obtain, but in the five countries for which data are available through the OECD pilot project (Italy, the Netherlands, Spain, the United Kingdom and the United States), the number of informal caregivers exceeds by far that of formal LTC workers (Table 1).

Table 1. Number of formal and informal LTC workers, selected OECD countries, 2006 or latest year available

Countries	Formal LTC workers	Informal LTC workers
Italy (1)	125 717	4 034 696
Netherlands (2)	100 000	1 193 000
Spain (3)	10 856	2 709 305
England. & Northern Ireland (4)	92 133	5 062 126
United States (5)	4 385 600	44 443 800

Note: (1) 2003. Data on formal LTC workers refer to nurses and caregivers in institutions. (2) 2005. Data on formal LTC workers refer to nurses and caregivers providing home care. (3) Data on formal LTC workers refer to nurses in institutions. (4) 2001. Data on formal LTC workers refer to caregivers providing services in institutions and at home. (5) 2004. Data on formal LTC workers refer to caregivers providing services in institutions and at home.

Source: OECD Pilot data collection on long-term care workforce, 2008.

62. Findings from other studies confirm this high proportion. For example, between 10 000 and 40 000 caregivers are estimated to work in the informal sector in Austria, (Streissler, 2004), while 29 100 staff (full-time equivalent) provide services to people living at home and in nursing homes (Hofmarcher, unpublished). In Germany, three million domestic helpers, including those providing services to children, are expected to work in the informal sector (European Foundation for the Improvement of Living and Working Conditions, 2006). Another study (Lamura, 2003) also confirms a high prevalence (between 80 and 90%) of family care recipients in total recipients in France, Italy and Poland. In Sweden, on the other hand, only half of home care is estimated to be provided by informal caregivers.

¹⁷

The number of LTC workers in England refers to staff employed by social-service authorities. The decline can be explained by increased outsourcing from councils to the private and voluntary sectors, which are not captured in the data.

63. Part-time arrangements are common. Based on the pilot OECD project, the number of Full Time Equivalent (FTE) LTC workers is less than half (40%) the total headcount in Switzerland, and about 57% in the United States (Table 2). Japan, a country with universal LTC insurance, has a smaller gap between the numbers of LTC workers measured as headcounts and FTE (67%), and the gap is even smaller in New Zealand (76%) and the Czech Republic (97%).

Table 2. Number and share of Full Time Equivalent LTC workers among total LTC workers, selected OECD countries, 2006

Countries	Number	%
Czech Republic	32 147	96.9
Japan	950 089	67.4
New Zealand	37 203	76.1
Switzerland	9 889	40.6
United States	2 518 318	57.4

Note: Data for US refer to individuals who work more than or equal to 40 hours per week.

Source: OECD Pilot data collection on long-term care workforce, 2008.

64. Other studies generally indicate the high prevalence of part-time employment in other OECD countries. In Australia, only 11% of residential care staff are permanent full-time employees, while over 60% are permanent part-time employees and the share of part-time workers is higher than in other sectors (Fine and Mitchell, 2007). In Canada, about half the home care workers are in part-time employment and between 11 and 18% are in casual employment (Canadian Home Care Human Resources Study, 2003). In Sweden and the United Kingdom, LTC workers are generally part-time employees (Johansson and Moss, 2004), and in Germany only 42% of nursing home workers are employed full-time (Rothgang and Igl, 2007). The share of part-time personal care and related workers is high in the Netherlands (90%) and somewhat lower in France (46%) (Korczyk, 2004). Denmark is an exception: the share of full-time LTC workers increased over the past decades and reached as high as 82% in 1999 (Jensen and Hansen, 2002), although a higher proportion of personal care workers (46%) work part-time according to Korczyk (2004).

1.2.3 LTC workers are predominantly women with diverse educational levels and age

65. Women represent between 89 and 93% of formal LTC workers in countries participating in the OECD pilot project (Table 3). Between 60 and 77% of informal caregivers are women in Italy, Luxembourg, the Netherlands, Spain, and the United States (Table 4). Other studies report that LTC workers are overwhelmingly women in Australia (Australian Bureau of Statistics, 2003), Denmark (Korczyk, 2004), France (Korczyk, 2004), Germany (Rothgang and Igl, 2007) and Sweden (Ewijk *et al.*, 2002).

Table 3. Number and share of women among formal LTC workers, selected OECD countries, 2006 or latest year available

Countries	Number	%
Canada	208 540	92.0
Italy (1)	125 717	87.4
Japan (2)	937 795	86.9
Netherlands	464 000	92.8
New Zealand	34 155	91.8
Spain (1)	9 280	85.5
Switzerland	58 881	91.2
England	104 292	91.0
United States	3 934 439	89.7

Note: (1) 2005 instead of 2006. (2) 2003 instead of 2006. Data on Canada refer to the following occupations of the NOC-S classification: D111 head nurses, D 1112 registered nurses, D 233 licensed practical nurses, D 312 nurses aides, G 811 visiting homemakers and related occupations. Data for the Netherlands refer to the ISCO-codes assigned to nurses (2230 and 3231) and personal care workers (5130, 5132, 5133 and 5139). Data on LTC workers for Spain refer only to nurses working in institutions.

Source: OECD Pilot data collection on long-term care workforce, 2008.

Table 4. Number and share of women among informal LTC workers, selected OECD countries, 2006 or latest year available

Countries	Number	%
Italy (1)	2 095 607	63.9
Luxembourg	2 641	70.1
Netherlands (2)	778 000	60.2
Spain	2 085 890	77.0
United States (3)	27 110 718	61.0

Note: (1) 2003. (2) 2005. (3) 2004. Data on Italy, Spain and United States refer to informal LTC workers at home.

Source: OECD Pilot data collection on long-term care workforce, 2008.

66. The educational level of *formal LTC workers* is typically lower than that of health care workers. Luxembourg reported that personal carers, accounting for 58% of formal LTC workers, are all low-skilled¹⁸ (OECD Pilot data collection on LTC workers, 2008). In Hungary, two-thirds of people working at homes for the elderly and for people with disabilities have only basic level of education (Johansson and Moss, 2004). The educational attainment of most LTC workers is low in Spain, Sweden and the United Kingdom (Johansson and Moss, 2004).¹⁹

67. Conversely, more than two-thirds of personal carers (accounting for 40% of formal LTC workers), 93% of nurses in the Netherlands and all nurses in institutions in Spain have at least higher secondary education (OECD Pilot data collection on LTC workers, 2008). In Canada, most formal long-term care workers have college degrees (Canadian Home Care human Resources Study, 2003), while in

¹⁸ The definition of “low-skilled” can be based either on the skills required for the job performed, or according to the educational level of the worker. In this paper, low-skilled are defined as those with level 0 (pre-primary education), level 1 (primary education) and level 2 (lower secondary education) under the International Standard Classification of Education (ISCED). The terms, low-skilled and low-educated are used interchangeably in the paper.

¹⁹ According to Johansson and Moss (2004), 55% of newly recruited LTC workers did not have any qualification on care or nursing in the late 1990s in Sweden and, in the United Kingdom, 80% of social care workers did not have recognised qualifications or training in the same period.

Denmark, LTC workers typically have at least upper secondary education (Korczyk, 2004). In Australia, most LTC workers have higher than secondary education (many of them with Certificates III in Aged Care or Home and Community Care) (Martin and King, 2008). Data on the United States are not consistent. According to the OECD Pilot, only 4.5% of personal carers (which account for roughly half the formal LTC workers) and nearly none of the nurses are low-skilled (OECD Pilot data collection on LTC workers, 2008). However, a study (Leutz, 2007) found a lower proportion of high-skilled -- about 60% of nursing and home health aides had a high-school diploma in 2005.²⁰

68. There are few data on educational attainments of *informal caregivers*. According to the 2005 American Community Survey about two-thirds of the (informal) personal and home care aides in the United States had secondary school diploma or lower educational attainment (Leutz, 2007).

69. Many LTC workers belong to middle-age cohorts or above in some OECD countries. In Australia, the largest number of primary carers²¹ are between 45 and 54 years old (Australian Bureau of Statistics, 2003) and the residential staff caring for the elderly are usually older than the overall workforce (57% of staff are aged 45 and over) (Fine and Mitchell, 2007). The majority of formal caregivers are between 40 and 60 in Canada (Canadian Home Care Human Resources Study, 2003), while the LTC workforce comprises mostly of middle-aged women from minority racial/ethnic backgrounds in the United States (Montgomery *et al.*, 2005). The age profile of social and health service helpers and assistants is also high in Denmark (Jensen and Hansen, 2002). According to the *Comprehensive Survey of the People on Health and Welfare*, one-third of family caregivers living with care recipients are aged 70 and over in Japan, and 10% are aged 80 and over (Japan Ministry of Health, Labour and Welfare, 2008c).

70. In other OECD countries, the average age of LTC workers is comparatively lower. In Denmark, France, the Netherlands, Spain, Sweden and the United Kingdom, about a third of care workers are over 45 years old, while between a third and half of care workers are aged between 25 and 45 (Korczyk, 2004; Ewijk *et al.*, 2002).²² In Japan, the average age of formal care workers in institutions was 36 and that of home helpers was 44 in 2007, not much different from the average age across all industries of 41 (Ministry of Health, Labour and Welfare, 2007).

1.2.4 The number of foreign-born LTC workers is significant and increasing

71. Domestic shortages of LTC workers have resulted in more jobs being filled by migrant low-skilled workers in a number of OECD countries. For services provided at home – including care for children, disabled and elderly people – the share of foreign-born workers is larger than that of native-born in the 12 OECD countries²³ (other than Germany) for which data are available (OECD International Migration Outlook, 2008). With the exception of the Netherlands, in 14 OECD countries for which data are available the share of foreign-born in the low-skilled labour force has grown by an average of 50%

²⁰ Nursing aides provide basic patient care (help with ADL) in nursing facilities and other settings under the direction of nursing staff. Home health aides provide routine personal healthcare and assistance with ADL to elderly, convalescent, or disabled persons at the patient's home or in a residential facilities (Leutz, 2007).

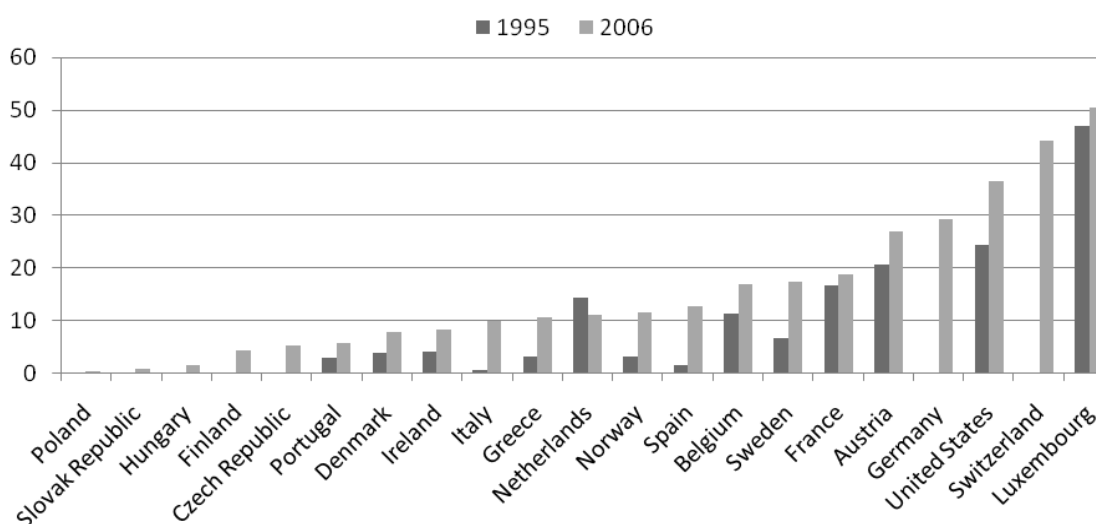
²¹ Primary carers provide most of the informal help to a person with a disability.

²² Care workers refer to personal care and related workers, and domestic, related helpers, cleaners and launderers and they include those caring for people other than the elderly.

²³ Austria, Belgium, France, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Switzerland and the United Kingdom and Germany.

between 1995 and 2006 (Figure 10).²⁴ Facing difficulty in finding jobs, migrant workers may take lower-skill jobs, leading to a common phenomenon of over-qualification of immigrants in many OECD countries.

Figure 10. Percentage of foreign-born among low-educated labour force, 1995-2006



Source: European countries: European Union Labour Force Survey (data provided by Eurostat); United States: Current Population Survey, March supplement.

72. According to the pilot OECD data collection, the proportion of (formal) foreign-born LTC workers in the United States (18%) and that of foreign-trained LTC workers in Canada (26%) are slightly above that of foreign-born workers in general (16% and 21% respectively) (Table 5). In the Netherlands and Australia, on the other hand, the share of foreign-born LTC workers (8 and 25%, respectively) is below that in the total labour force. When considering the low-skilled workers as the reference group, the proportion of foreign-born LTC workers is slightly lower than that of the low-skilled labour force in the Netherlands, and significantly lower in the United States. Foreign-born nurses are more likely to work in LTC settings than their native counterparts. For example, in the United Kingdom, 14% of foreign-trained nurses work in private nursing home, compared to 5% of domestically-trained white nurses (AARP, 2005).

73. Looking at trends over time, some countries have seen an increase in the absolute number of foreign-born LTC workers in recent years. The pilot OECD project found that in Canada and the Netherlands, the number of foreign-trained or foreign-born LTC workers increased between 2001/2 and 2006 by an average of 6%.²⁵ Similarly, in the United States, the average growth of total foreign-born LTC workers was over 12% between 2005 and 2006, with a particularly large growth of 33% for foreign-born home care workers. The inflow of domestic care workers from Eastern European countries (Poland, the Czech Republic, and Slovenia) has increased in Germany in the past few years (Gibson and Redfoot, 2007; Rothgang and Igl, 2007), and similarly growing inflows are found in Greece and Italy (Lamura, 2003).

²⁴ These numbers might not include all the low-skilled immigrants that participate in the informal market, and the share of foreign-born workers might be in fact larger in many countries.

²⁵ Data are available for years between 2002 and 2006 for Canada and years between 2001 and 2006 for the Netherlands.

Table 5. Share of foreign-born in total labour force, low-skilled labour force and LTC workers, around 2006

	Share in the total labour force (15-64 years old)	Share in low-skilled labour force	Share in formal LTC workers
Australia	25.7	..	25
Austria	16.2	26.8	..
Canada	21.2	..	26.1
Finland	3.3	4.2	..
France	12.5	18.7	..
Germany	..	29.1	..
Greece	8.3	10.5	..
Italy	8.6	9.8	..
Netherlands	11.0	10.9	8.2
Norway	7.8	11.5	..
Portugal	7.4	5.6	..
Spain	13.6	12.7	..
Sweden	13.5	17.2	..
United Kingdom	11.2
United States	15.7	36.5	18.0

Note: For Australia, data on LTC workers only include those in aged residential care. For Canada, the share of total labour force excludes non-permanent residents. Data on the share in LTC workers for Greece include workers providing child care at private households. For Italy, total labour force refers to persons aged 15 years and over. “..” signifies that data are not available. Foreign-born caregivers are also known to work in countries including Finland (OECD *International Migration Outlook*, 2008), France (Da Roit *et al*, 2007), Germany (Gibson and Redfoot, 2007), Norway (Redfoot and Houser, 2005), Portugal (Bettio *et al*, 2006), Sweden and the United Kingdom (Lamura, 2003) but the numbers of formal and informal LTC workers are not known.

Source: European countries: European Union Labour Force Survey (data provided by Eurostat); Australia: Labour Force Survey; Canada: 2006 population censuses; United States: Current Population Survey, March supplement.

74. The growth in absolute numbers of non-native LTC workers was faster than the growth in total LTC workers and in foreign-born low-skilled workers in the United States, resulting in a higher proportion of non-native caretakers. In Canada, both the share of foreign-born LTC workers and the share of foreign-born low-skilled workers declined between 2001/2 and 2006, but the former was slower than the latter.

75. Finally, a significant number of foreign-born caregivers work in the *informal sector*,²⁶ but data limitations are even more important here. In Austria, about half of total (formal and informal) caregivers are undocumented illegally-employed migrants, usually providing home care (Hofmarcher, unpublished). Foreign workers are estimated to account for about 70% of care workers²⁷ at private households in Greece (Kanellopoulos and Gregou, 2006) and around 90% of home caregivers in Italy (Chaloff, 2008).

1.2.5 Foreign-born LTC workers are generally middle-aged women from neighbouring countries

76. Available (limited) evidence suggests that the migration flows of LTC workers reflect general migration patterns for low-skilled workers, and as in the case of migration of health professionals, this largely follows language, proximity, and historical links (OECD *International Migration Outlook*, 2007) (Box 4). Many foreign LTC workers in European countries originate from within the EU. The EU

²⁶ Informal caregivers include: i) undeclared or illegal LTC workers, who might receive a salary but are not declared to social security offices not have a legal contract; ii) uncompensated caregivers (*e.g.*, volunteers or family members and friends); iii) caregivers receiving some compensation cash payments or allowances as part of cash programmes and/or consumer-choice programmes (OECD Pilot Data Collection on LTC Workforce, 2008).

²⁷ Data refer to caregivers for the elderly, disabled people, and also child carers.

enlargement process has also led to an increased flow of migrant care professionals from new member Eastern European countries in Austria and Germany (Hofmarcher, unpublished; Schütz, 2006; Gibson and Redfoot, 2007, Rothgang and Igl, 2007). In Greece, Italy and Spain, caregivers from neighbouring African countries, Spanish-speaking South or Central American countries (in the case of Spain) and from the Philippines account for a large share of foreign-born care workers (Lazaridis, 2000; Quinn, 2006). Filipina care workers are also present in significant number in Ireland (Quinn, 2006).

Box 4. Origin countries of foreign-born long-term caregivers in OECD countries

Unfortunately, there is a dearth of data on the country of origin of foreign-born LTC workers and, when multiple data sources are available, the evidence is not always consistent. This reflects, at least partly, the difficulty in collecting data on migrant caregivers, especially, but not only, those working in the informal sector.

In the European Union, many foreign LTC workers originate from within the EU. In Austria, migrant LTC workers come mainly from the Czech Republic, Hungary and the Slovak Republic (Hofmarcher, unpublished; Schütz, 2006). In the past, foreign-born LTC workers would also originate from the Philippines and India but country of origin have been shifting to the EU 10 since 2004 (Schütz, 2006). In Germany, LTC workers often originate from Poland, the Czech Republic and Slovenia (Gibson and Redfoot, 2007, Rothgang and Igl, 2007). Germany also signed bilateral agreements with several central and eastern European countries to recruit nursing aids (OECD International Migration Outlook, 2007). Non-European LTC workers are also present in large numbers in EU countries. In Greece, foreign-born domestic workers come from Bulgaria and Poland but also from Albania, Ethiopia, Somalia, and the Philippines (Lazaridis, 2000). In Italy, most domestic workers come from Central Europe such as Ukraine, Romania, Poland, Moldova and Albania, and also from other continents such as South America (*i.e.* Ecuador and Peru) and Asia (*i.e.* the Philippines and Sri Lanka) (Lamura *et al.*, 2008). In the late 1990s, many came from Morocco, Eritrea, Ethiopia and the Philippines (Lazaridis, 2000) and those from countries in African continent are now negligible. In Ireland, nurses from the Philippines are recruited into elderly care jobs (Quinn, 2006). Most foreign-born domestic workers in Spain come from the Dominican Republic, Morocco and Peru (Lazaridis, 2000). Spain has also signed a bilateral agreement with the Philippines to recruit LTC workers for nursing homes (OECD International Migration Outlook, 2007).

Outside the EU, foreign-born care workers typically come from countries speaking the same language, or with geographical and historical links. In Australia, most foreign-born residential aged-care workers come from English-speaking countries such as New Zealand, the United Kingdom, the United States, Ireland and South Africa, but also from Vietnam, Singapore, China, Malaysia, the Philippines, Fiji, Samoa and Tonga (Fine and Mitchell, 2007). Most foreign-born long-term care workers in the United States come from Central America and the Caribbean (Mexico, Jamaica, Haiti, and Puerto Rico), as well as the Philippines (Redfoot and Houser, 2005). In Japan, a group of about 200 nurses and long-term care workers from Indonesia who came under a bilateral agreement, started language training in 2008 and will start engaging in long-term care positions from 2009. Based on the bilateral agreement, Japan is also planning to accept a limited number of caregivers from the Philippines and Vietnam in the near future (Ministry of Health, Labour and Welfare, 2008a; Ministry of Economy, Trade and Industry, 2008).

77. Foreign-born LTC workers are predominantly middle-aged women and their qualification can be higher than is strictly necessary to the job. In the United States, foreign-born direct-care workers are generally older and have higher educational attainments than their native-born counterparts (Leutz, 2007).²⁸ Nearly nine in ten foreign-born LTC workers in the United States are women, mostly working in institutions (OECD Pilot data collection on LTC workers, 2008). About 90% of migrant workers – including elderly and child carers – employed by Italian families are women, and many Eastern European migrants are middle-aged, well-educated women (Bettio *et al.*, 2006). Migrant nurses with unrecognised qualifications may end up taking LTC jobs, as observed in Canada (International Labour Office, 2005), Spain (Johansson and Moss, 2004), the United Kingdom and the United States (Redfoot and Houser, 2005).

²⁸ 44% of foreign-born workers in direct care are between age 45 and 65 compared to 34% in the native-born LTC workers, and about 15% of foreign-born direct care workers had a college degree, about twice the share of the natives (Leutz, 2007).

2. RESPONDING TO THE GROWING NEED FOR LONG-TERM CARE WORKERS

78. Meeting the growing demand for LTC services may require increasing the supply of workers, making a more effective use of the existing skills, or seeking ways to reduce the ratio of LTC providers per recipient without reducing access and quality. These approaches are analysed in the following section.

2.1 Increasing the supply of LTC workers

79. Strategies to expand the supply of LTC workers can be multipronged. Employers and/or public authorities may provide additional training, seek to improve the attractiveness of LTC jobs, and recruit underrepresented population groups – such as inactive and unemployed populations – into caregiver jobs. In some countries, recent recruitment efforts have targeted foreign-born LTC workers.

2.1.1 Improving the attractiveness of LTC jobs through training

80. LTC jobs require a relatively low level of skills, although higher nursing skills may be necessary to attend to high-care jobs for recipients affected by dementia or with multiple chronic care needs. In some countries, educational levels of LTC workers are low, particularly those working in home care settings.

81. Nevertheless, LTC training serves important functions. Training programmes help to attract people to LTC jobs and provide some control over quality standards. Developing training programmes and career structures allowing upward mobility has the additional benefit of improving the poor image of many LTC jobs, thereby attracting and retaining more people to the sector. Leon *et al.* (2001), for example, found a positive association between high levels of training of home health workers and retention in Pennsylvania (United States). Geriatric care-management programmes aiming at improving the skills of personal care aides is also found to have strong influence on retention and job satisfaction (Coogler *et al.*, 2007).

82. Several OECD countries have developed training programmes for LTC workers (Johansson and Moss, 2004; Korczyk, 2004; Ministry of Health, Labour and Welfare of Japan, 2006), with significant cross-country differences in the duration, content and emphasis on theoretical learning versus on-the-job training (Box 5). Training duration ranges from 75 hours (*e.g.* the United States) to a few years (*e.g.* Denmark, Japan). Training tends to prioritise theoretical knowledge in Spain (Johansson and Moss, 2004), while the focus in Denmark and the Netherlands is on practical experiences (Korczyk, 2004), which can help minimise turnover by matching trainees' expectations with actual job experience. Subject areas covered in training vary from disease-specific care to human-resource management, including stress management, team work, communication and conflict management. There is no minimum international standard for LTC training. Differences in the content of training, job categories and the organisation of LTC services make it difficult to compare country experiences, curricula and requirements.

83. Training requirements are typically developed at national level, but there are some exceptions. In Australia, Italy and the United States, curricula and training requirements are not standardised at national level, reducing mobility across jobs and locations. This is also the case for home-care aid training in Germany, although training requirements for skilled LTC workers are uniform (Gibson and Redfoot, 2007).

Box 5. Training programmes for long-term care workers in selected OECD countries

This box summaries some characteristics of training programmes for LTC workers in Denmark, Japan, the Netherlands, Spain, the United Kingdom and the United States.

The duration of training ranges between 75 hours and five years. In the United States, the federal-level training requirement for nurse aides working in Medicare- or Medicaid-certified long-term care institutions is 75 hours of training prior to work and 12 hours of in-service training each year while working. At the federal level, home health aides working with Medicare- or Medicaid-financed employers need to pass a test and undergo 75 hours of theoretical and practical training under the supervision of a registered nurse. A majority of states, however, require more than 75 hours of training and a quarter require 120 hours (Institute of Medicine, 2008), but the duration of training is still short compared to other countries, such as Denmark (16 months for social and health service helpers and 22 months for social and health service assistants) or the Netherlands (two to three years for care-worker helpers, three to four years for care workers and four years and more for social care workers). In Japan, the training of home helpers is 130 hours (for grade 2) and 230 hours (for grade 1) and that of care workers varies between 1 and 4 years, while for social workers it ranges between 1 and 5 years, depending on the previous training and qualifications (Helper Network, 2008; Center for Social Welfare Promotion and National Examination, 2008).

In most countries, training covers theory and also provides practical experiences. For instance, in Denmark, theoretical courses cover practical, cultural, psychological, sociological and nursing subjects over about a third of the training period, with the other two-thirds spent on gaining practical experience. According to Johansson and Moss (2004), the Spanish programme needs more emphasis on practical training.

In the United Kingdom, a unified educational framework (National Vocational Qualifications, NVQ) was introduced in the sector in the mid-1980s to replace the diverse qualifications and training opportunities for LTC workers. NVQ has several levels and each NVQ level offers competency-based modules focusing on specific skills and knowledge required for a particular occupation. The structure of NVQ levels is equivalent to that of the formal education system. For example, NVQ level 3 is equivalent to upper secondary qualifications and NVQ level 5 is higher education at first degree (Johansson and Moss, 2004).

In addition to the required training, supplementary training is available in some countries. In Spain, courses on working with mentally ill and terminal-care people are available. In the United Kingdom, poorly-educated workers can take supplementary training and there are also employer-based and workplace-based training courses on specific topics such as dementia, depression or diagnosis and treatment skills (Johansson and Moss, 2004).

84. Although training is important to ensure standards and quality, compliance with LTC training requirements – where they exist – is low in some countries. According to Ewijk *et al.* (2002), only 35% of workers have the required social-care worker qualification in home help services in Hungary, partly because employers hire unqualified workers to meet the demand. In Sweden, about half of home care workers lack the requisite training qualifications to provide LTC care at home.

85. To encourage enrolment – and compliance – with LTC training, and to improve job retention following training, some OECD countries have improved *training flexibility* or provided *clearer career prospects*. Denmark and the United Kingdom, for example, provide training in modules, allowing LTC workers to move easily between work and training. Upward and lateral career mobility can be encouraged. In Denmark, for example, training is counted towards seniority in career-advancement decisions (Jensen and Hansen, 2002).²⁹ Some LTC jobs allow lateral and vertical career-advancement paths in the United States³⁰ (Seavey, 2006) and the United Kingdom. These can reduce the cost of moving between LTC jobs and related careers, or enable workers to pursue specialised medical and nursing care jobs.

²⁹ In addition, social and health-service helpers and assistants can pursue further education and obtain qualifications to become higher-skilled professionals such as qualified nurses, pedagogues, social workers, occupational therapists, or physiotherapists.

³⁰ For example, in the CAEL/DOL Healthcare Lattice Program run in several states by the Council for Adult and Experiential Learning (CAEL) and the United States Department of Labor (DOL), certified nursing

86. *Financial incentives* can offer a tool to encourage initial and continuous LTC training. In Denmark, new trainees are employed as salaried LTC workers, which provides them with hands-on experience (Jensen and Hansen 2002). Similar initiatives are implemented at the state or employer level in the United States (Stone and Wiener, 2001), while in Japan, publicly funded training for home helpers is generally offered free-of-charge. To help LTC workers enrol in additional training while on the job, employers pay training fees or provide paid leaves in Australia and the Netherlands (Anglely and Newman, 2002; Korczyk, 2004).³¹ Some other OECD countries provide opportunities for distant training for LTC workers (Canadian Home Care, 2003; Ministry of Health, Labour and Social Affairs of Japan, 2008).³²

87. *Improved information* can help to cast aside the negative perception associated to LTC jobs. Information sessions explaining the nature of LTC work are given to potential applicants in Australia (Korczyk, 2004). Media campaigns to improve the image of LTC work are undertaken in the Netherlands and the United Kingdom (Korczyk, 2004). Websites and a telephone helpline assist people considering a career in social care in the United Kingdom (Moriarty *et al.*, 2008). In Wales (U.K.), recruitment packages outlining the number and range of career paths across social care sectors have been created (European Foundation for the Improvement of Living and Working Conditions, 2006). Strategies developed in Wisconsin (United States) included distributing fliers, sending postcards, posting ads in the newspaper and on the radio and billboards and giving outreach presentations (Stone and Wiener, 2001).

88. The impact of these strategies on recruitment and retention is not known. Enhanced training for LTC workers in Denmark has been effective in attracting caregivers. However demand is expected to grow more rapidly than supply in the next 20 years. One study found that campaign strategies in Wisconsin (United States) contributed to higher retention and improved employee attitudes, but were not as effective in attracting new applicants and improving retention of new recruits (Stone and Wiener, 2001).

2.1.2 Recruiting LTC workers from underrepresented or inactive populations

89. Initiatives to recruit inactive (*e.g.* retired elderly), underrepresented (*e.g.* men, minority groups, migrants) or unemployed populations have been implemented in some OECD countries (see Box 6). Students can also provide temporary help to seniors or other people in need of care. Making active caregivers work longer or prolong the work period required to qualify for a full pension is another possible strategy to increase supply. Many OECD countries (Australia, Belgium, the Czech Republic, Greece, Hungary, Italy, Japan, Korea, Portugal, the United Kingdom and the United States) recently increased the pension eligibility age (OECD, 2007b), which might lead older LTC workers to postpone retirement.

90. These measures often require additional spending, for instance to subsidise training and wages, but there is limited evidence on their long-term effectiveness – and cost-effectiveness – in improving the supply of LTC workers. Initiatives such as care allowances in France seem to have contributed to an increase in the number of LTC family caregivers and otherwise unemployed people, but there is evidence of difficulties in retaining targeted LTC recruits – such as long-term welfare beneficiaries – in the United States (Stone and Wiener, 2001). Nursing assistant training offered by the New England Gerontology

assistants can become mentors, nurse extenders, medicine aides or skilled long-term care nursing assistants. They can also move upwards by taking courses either at educational institutions or through distance learning and become licensed practical nurses, respiratory therapy technicians or pharmacy technicians.

³¹ In the Netherlands, employers often finance and provide training for full-time workers. However, they usually do not cover part-time workers who account for most long-term caregivers, partly because of difficulty in scheduling on-the-job training (Korczyk, 2004).

³² Based on a survey, 12% of programmes at colleges and 17% of programmes at universities offered distant training in Canada (Canadian Home Care, 2003).

Academy was successful in targeting divorced homemakers, recent unemployed and recent immigrants with a good track-record of employment, but not for those who had been out of the labour market for an extended period of time (Stone and Wiener, 2001). In order to enable an effective use and retention of the inactive and unemployed populations, appropriate training, mentoring and adequate support systems are sometimes necessary (Stone and Wiener, 2001), adding to (often public) cost.

Box 6. Selected initiatives to recruit LTC workers from specific population groups

Elderly people are a potential source of long-term care workers. In the United States, some efforts have been made to attract older people to care jobs through greater access to training, additional tax relief for continued work and phased retirement and flexible work schedules (Institute of Medicine, 2008). The postponement of the pension entitlement age might also increase the supply of long-term care workers and can prevent the loss of expertise or reduce the costs of replacing LTC workers, hiring temporary replacements and training new recruits (Institute of Medicine, 2008). However, employers might be deterred from hiring older people due to their unfamiliarity with technology and possibly higher health care costs (Hwalek *et al.*, 2008). In Australia, a study also found that most unemployed middle-aged and older people do not wish to work in residential aged care (Price *et al.*, 2002). This is not surprising, considering that caring jobs are physically and mentally tiring activities.

In some countries, recruitment strategies have targeted the unemployed, men, ethnic minority and informal care workers. In France, care recipients can use care allowances (*Allocation personnalisée d'autonomie*, APA) to pay family caregivers other than spouses and partners and non-family caregivers that are unemployed (Korczyk, 2004). This increased the number of LTC workers at home and other home care workers employed by non-profit service providers. Some Finish and Swedish LTC recruitment projects target male recruits (European Foundation for the improvement of Living and Working Conditions, 2006; Johansson and Moss, 2004), while, in the Netherlands, some recruitment strategies target ethnic minorities, secondary school students, or care workers that have left the profession (Ewijik, 2002). Recruitment efforts in Germany and Sweden have been directed at unemployed migrants and accompanied by language courses (European Foundation for the Improvement of Living and Working Conditions, 2006; Knocke, 2005). This strategy is important not only to tap the underutilised labour force but also to provide care for migrants in need of care in countries with multicultural diversity. In the United States, wage subsidies are used to promote the employment of welfare recipients in the LTC sector, and some programmes at the state level also attempt to target high-school students, displaced/divorced or recently widowed homemakers (Stone and Wiener, 2001).

2.1.3 *Recruiting international LTC workers*

91. As seen in section 1, a significant proportion of LTC workers in some OECD countries are foreign-born. In some countries, a limited number of foreign-born LTC workers are allowed to work in the host country through managed migration schemes. In others, undocumented migration has become more prominent over recent years, rising significant policy challenges.

2.1.3.1 *Managed-migration schemes*

92. Some OECD countries allow foreign-born long-term care workers to be employed through so-called “managed-migration schemes”, including temporary work programmes and some limited permanent programmes (OECD International Migration Outlook, 2008). Managed-migration schemes have historically applied to high-skilled workers and provide simplified procedures to facilitate the recruitment of foreign-born workers, but in some countries they have become available also to low-skilled foreign LTC workers (Box 7). International recruitment can be cumbersome and costly for both foreign workers and employers, particularly for low-paid LTC jobs.

Box 7. Requirements for international recruitment of long-term care workers

In countries which allow migration of LTC workers, their entry is contingent on a job offer. Employers generally need to advertise jobs for a certain period or the vacancy may need to be listed with public employment services. If the vacancy is not filled locally or nationally, the job can be offered to foreign nationals. The duration of advertisement differs across countries. In order to get authorisation to hire foreign-born workers, employers also need to prepare a job contract that meets certain wage levels and contractual requirements under national labour laws.

On the employee side, in order to work in the host country, foreign-born workers typically need to obtain an employment contract and a work permit and visa. Requirements for a work permit differ across countries. For example, in Austria, migrant workers are allowed to stay only if the monthly income is above certain threshold (EUR 1 500 in 2006), which is lowered for EU's 10 new member states (Schütz, 2006). In addition, foreign-born workers sometimes need an academic recognition, and registration to a professional association. They may need to go through an adaptation period or undergo additional training to prove sufficient skills and ability to practise in the host country. They may also need to prove the competency in the language of host country.

Some additional criteria might need to be met in some countries, for example based on the country of origin. In the United Kingdom, to avoid exacerbating the brain drain on countries with low densities of health professionals, recruitment restrictions based on country of origin are recommended for nurses employed by the NHS (OECD International Migration Outlook, 2007). Nevertheless, other employers are not required to adhere to these requirements, and one in four foreign nurses was from countries on the proscribed list in 2002-03 in the United Kingdom (Buchan and Dovlo, 2004).

93. While specific migration rules differ across host countries, low-skilled workers, where admitted, are generally allowed to work in host countries on a *temporary basis* for the period of the initial offer of employment. In Canada and France, workers are required to obtain a new work permit for each employer, but other countries allow migrant workers to change employers without work-permit renewal. Workers who originally entered Spain based on a labour-market test or shortage list can change employers provided they initially remain in the same province and sector for a year. Migrant workers in Italy can change employers once they have obtained the first work permit (OECD International Migration Outlook, 2008).

94. In the United States, many LTC workers came through family-reunification programmes. Registered and licensed nurses with sufficient qualifications, typically 4-year bachelor degree, can apply for skilled-workers and professional visa (EB-3), offered for an indefinite period, but there is a quota of about 40 000 for all professions. They can also apply for temporary student visa (F-1) – but they can engage in LTC work only for twenty hours per week while pursuing their studies (Priester and Reinardy, 2003). Immigration restrictions have been eased for trained nurses to alleviate regional-specific shortages (Hoppe, 2005), but such measures are not available for LTC workers (Browne and Braun, 2008).

95. Partly due to the demand pressure, some countries have simplified recruitment and migration procedures for long-term care workers in recent years. In Spain, Canada³³ and Finland, labour market tests have been simplified for LTC workers in case of local or national shortages (OECD International Migration Outlook, 2008). In Austria, the federal quota on the maximum share of employed and unemployed people from non-EU countries in the total labour force is lifted in the LTC sector due caregivers' shortage (Schütz, 2006). The Italian government has a quota for each professional group – a large part of which is for domestic work, including LTC. Nurses have been exempted from such quota since 2002. In addition, foreign-born workers in the LTC sector are not required to submit a proof of skill or experience. Italy also issued a few job-search visas in the late 1990s and Spain granted 450 job-search visas in 2007 (OECD International Migration Outlook, 2008).

³³ The free-trade agreement with Mexico and Canada, which allows certain occupations to work in the country, do not apply for most long-term care workers (Priester and Reinardy, 2003).

96. *Permanent migration channels* for low-skilled – including LTC – workers have become available in some countries. Within the EU, non-EU nationals can acquire residence rights after five years of renewable permits sponsored by employers. Japan signed bilateral agreements with the Philippines, Indonesia and Vietnam, which allow a limited number of nurses and care workers to work in the country indefinitely once they acquire appropriate language proficiency and pass the national exams as qualified LTC workers.³⁴ Under the *Live-in-Caregiver Program* of Canada, caregivers may apply for permanent residency after two years of living with and providing care to the elderly, disabled (and children), in a government-approved home (Browne and Braun, 2008). In the United Kingdom, care assistants and home carers that satisfy certain requirements³⁵ have been recently identified as shortage workers (Home Office, 2005). Conversely, in the United States such permanent routes are still limited and only 10 000 Green Cards are available for low-skilled workers every year (OECD International Migration Outlook, 2008).

97. Temporary and permanent migration routes have not proved sufficient to meet demand for LTC workers. The reasons are many. It is difficult to retain into LTC jobs migrant caregivers who entered the country under temporary managed-migration schemes, as these workers seek ways to move into different occupations once they gain permanent residence or as other opportunities arise. This is especially the case for workers with higher skill (*e.g.* nurses), who may end up in LTC jobs temporarily. Intermediary agencies to facilitate the recruitment and to manage the migration procedures (*e.g.* Japan, Canada, Italy) are often not used for low-skilled workers who do not have resources to pay for such services, and returns from mediation for low-skilled workers appear to be low. Job search visas may well be suitable for LTC workers because care recipients or providers can have contacts before making a hiring decision, while visa holders have a certain time period to find a job. Yet, job search visas for LTC workers have remained underutilised (*e.g.* in Spain), an indication that this channel – and LTC jobs more broadly – is not attractive enough. In light of mixed outcomes, one question is whether a specific migration channel for LTC (or domestic) workers should be created at all. Other channels may be sufficient or more effective.

2.1.3.2 *Unmanaged migration*

98. Some OECD countries (*e.g.* Austria, Greece and Italy) rely extensively on foreign-born undocumented LTC workers who came through “unmanaged migration” routes, such as overstaying, fraudulent entry with false documents or illegal border crossing (Hofmarcher, unpublished; Bettio *et al.*, 2006; Chaloff, 2008).

99. The length of stay of these LTC workers varies. In Austria, for example, workers from neighbouring Eastern European countries usually work on a short-term basis, resulting in high rotation and turnover (Da Roit *et al.*, 2007). According to one study (Bettio *et al.*, 2006), many Eastern European women move to Italy for a few months in order to earn a higher salary and fund a specific project back home (such as building a house or paying for their children’s education). They often return to work for the same Italian family after a period spent in their home country, and may rotate job with other workers. Migrants from outside Eastern Europe (*e.g.* Cape Verde, the Philippines) tend to stay longer (Bettio *et al.*, 2006).

100. The volume of the services rendered by these “unmanaged” migrants is significant, moreover they often offer needed services at low costs compared to other domestic alternatives. To make an example, publicly provided domestic care, guaranteeing 24 hours/day medical, nursing and social home

³⁴ Nurses need to pass the examination in three years while care workers need to acquire a qualification in Japan within four years (Ministry of Health, Labour and Welfare, 2008a).

³⁵ As of September 2008, care assistants and home carers need to earn at least GBP 8.8 per hour after deducting costs for accommodation, meals and others or need to be qualified at least at National Qualifications Framework level 3 (Home Office, 2008).

services, cost EUR 200/day per recipient and the least expensive home care visit still costs EUR 16/hour in Italy, compared to EUR 6 per hour and EUR 475 per month for an illegally-employed live-in foreign caregiver in 2002 (Chaloff, 2008).³⁶

101. Demand pressures, significant inflows, and comparatively low migrant's costs have recently led to *regularisation programmes* or issuing of work permits to undocumented migrant workers in a number of OECD countries (e.g. Austria, Germany, Greece, Italy, Portugal and Spain). Formalisation guarantees minimum wages and working conditions for these foreign-born LTC workers. Additionally, this helps ensuring standards of care quality through better access to formal training and strengthened care coordination with the health and LTC systems of the host country. There have been five such regularisation programmes since the late 1980s in Italy and Spain, three in Portugal and two in Greece. Under the recent migration and labour law of Germany, foreign domestic caregivers with irregular status can obtain a work permit of up to 3 years for a full-time employment at private households, on condition that the long-term care insurance law is respected (Gibson and Redfoot, 2007).

102. Tax incentives and care allowances have been used in some countries to reduce the number of undocumented migrant workers and improve their work conditions. Care allowances to pay declared workers limited the development of grey markets in the LTC sector of France, partly because they were accompanied by other incentives to declare care workers introduced in 1990s, such as tax rebates, and the introduction of a voucher (*chèque emploi service*³⁷) simplifying administrative procedures to pay workers (Da Roit *et al.*, 2007). In Italy, the amount paid for housework and LTC services at home has become tax deductible from 2000. Municipal care allowances are given only if an accredited caregiver is employed under a regular employment contract (Bettio *et al.*, 2006). Here, however, a large number of undocumented migrant workers are still reported.

103. Through these initiatives, countries might well reduce, temporarily, the number of undocumented migrant workers. Yet, they might risk being perceived as offering illegal migrants higher prospects of regularisation, thus attracting a larger influx of undocumented migrants in the long run.³⁸ In addition, once regularised, caregivers might leave the LTC sector.

2.1.3.3 International LTC workers – addressing some of the policy challenges

104. Beside the difficulties of adapting labour migration policies to the demand for low-skilled LTC workers, the employment of foreign-born caregivers raises challenges related to the impact on the labour market, guaranteeing standards of quality of care services, the integration of foreign-born LTC workers, the protection of worker's rights, and the retention of migrant workers to the sector.

105. There have been some concerns that migrant workers in the housework and personal care sectors might conflict with the job search for native workers (e.g. in Greece, Italy, Portugal and Spain), especially where unemployment rates are relatively high. This does not seem to be the case -- except for young school drop-outs, women with low education and gypsies in Portugal and Greece (Bettio *et al.*, 2006). According

³⁶ In Italy, dependent persons with severe disabilities receive an *attendance allowance* of up to EUR 436 per month and the elderly also receive relatively high pension payments. These payments allow low-income elderly to afford LTC services by foreign-born workers at home for 24 hours per day (Bettio *et al.*, 2006).

³⁷ Under the *cheque emploi service* scheme, care recipients or families need to abide by a certain rules with regards to working conditions and need to pay at least the minimum wage and allowance for paid holiday.

³⁸ In some cases, regularised workers fall back to irregular status. They need to renew their status based on their employment, but it can be difficult to be employed in a sector with a high prevalence of precarious and illegal employment. There are also cases where undocumented workers do not seek to be regularised. Employers consider regularised workers less competitive (OECD International Migration Outlook, 2008).

to Redfoot and Houser (2005), the median income for foreign-born aides and nurses working 40 hours per week in the United States was higher than that for native-born counterparts, in 2000. Yet some studies (Arends-Kuenning and McNamara, 2004; George, 2005) explain the wage difference with the higher education levels, longer work experiences and career commitments, and willingness to work in central cities among foreign-born LTC workers.

106. A second concern is that the quality of care services provided by foreign LTC workers might not be up to acceptable standards. In many host countries, foreign-trained workers need to prove their competency either by passing a national qualification examination (*e.g.* Japan) or by following a period of supervised practice and adaptation (*e.g.* the United Kingdom³⁹). Some Italian regions provided professional training to candidate LTC workers while in their home countries (European Foundation for the Improvement of Living and Working Conditions, 2006; Chaloff, 2008) – although this pilot proved costly and unsuccessful in filling vacancies. Opportunities to gain skills are often limited for undocumented migrant workers who usually lack prior LTC training or experience. Some non-profit organisations organise training programmes to help migrant LTC workers satisfy required standards. ROSE, a partnership of organisations working with refugee and qualified overseas health professionals in the United Kingdom, helps foreign workers prepare to work in the National Health Service (AARP, 2005). In the United States, some non-profit organisations provide language (in some cases medical language) and certified nursing-assistant training programmes, and may also assist trainees financially (Leutz, 2007).

107. Linguistic and cultural training programmes facilitate the integration of low-skilled migrants, including foreign-born LTC workers and their children, into society. Some countries have developed infrastructure for second-language and work-place language training. In the United States, some non-profit organisations provide career advices for filling job applications and interviewing, as well as help with housing, child care, health insurance and taxes (Leutz, 2007). Integration can be a challenge also for children. According to data on scientific literacy from the OECD Programme for International Student Assessment (PISA), children of low-skilled migrants are left behind in educational attainment, while the second generation of high-skilled migrants do well (OECD International Migration Outlook, 2008).

108. Then, it can be difficult to offer adequate social protection to foreign-born LTC workers since they are often isolated geographically and linguistically, and not unionised. In recent years, there has been a trend towards more rigorous verification requirements of employers and sanctions. Most OECD countries have developed inspection mechanisms for workers migrating through managed schemes (OECD International Migration Outlook, 2008). For example, Japan's "International Cooperation of Welfare Services" pays visits to employers at least once a year and offers counselling to caregivers who migrated under the bilateral agreement. Care institutions have an obligation to report whether facility, training conditions and wage levels meet the agreed standards. Additionally, some source countries seek to protect the interests of migrant caregivers. For example, the Philippine Overseas Employment Administration negotiates contract agreements, regulates recruitment agencies, inspects contracts and helps to protect worker's rights (George, 2007). Yet, despite a few exceptions, it is difficult to monitor work conditions, and many foreign-born LTC workers work out of the reach of labour legislations inspections.

109. Finally, as already highlighted, the retention of migrant LTC workers in the sector is problematic. LTC jobs are typically considered transitional career options and foreign caregivers progress out of these jobs as soon as the opportunity arises. This leads to a constant need to recruit international LTC workers and difficulties in sustaining recruitment strategies.

³⁹ Foreign nurses need to undergo a period of adaptation and work as supervised aides in nursing homes before they become fully certified – however places for adaptation are often limited (OECD International Migration Outlook, 2008; Allan and Larsen, 2003)

2.2 Making better use of the available long-term care workforce

110. A second strategy to manage a growing demand for LTC workers is to invest in policies to make better use of available capacity – for example by improving job retention, supporting family and other informal caregivers, and improving care co-ordination.

2.2.1 Improving retention

111. Increasing wage and non-wage benefits helps keep LTC workers in their jobs. In Germany, the LTC insurance scheme introduced in the 1990s improved the wage of LTC workers, especially family caregivers (Keefe *et al.*, 2005), leading to fewer foreign-born informal caregivers (Derst *et al.*, 2006). A similar impact of higher wages on direct-care workers' retention is found in the United States (Howes, 2005, 2006; Sherard, 2002), although other studies report mixed long-term effects (Institute of Medicine, 2008; Stone and Wiener, 2001).⁴⁰ Other non-wage benefits have included better health-insurance coverage, reimbursement for transportation, bonuses and annual raises, subsidised child care and financial assistance on tuition. Home care staff in Leicester Council in the United Kingdom was given entitlements to a car-leasing scheme and parking permits – which had been only available to senior and NHS staff – leading to higher retention (Moriarty *et al.*, 2008).

112. Changes in the content of work can contribute to improved morale, with positive impact on retention, but these are not easy to design and have been introduced only in a small scale at a provider level. Participation in decision-making, mentoring and teamwork are known to increase job satisfaction and reduce turnover among LTC workers (Institute of Medicine, 2008). In Szombathely in Hungary, a rotation scheme was introduced, allowing each worker to participate in different projects and learn management skills (European Foundation for the Improvement of Living and Working Conditions, 2006). Some providers in the United States developed mentoring and peer-support schemes to encourage employee's development. Others attempted to improve nursing aids' decision-making in clinical domains – *e.g.* skin care and pain management (Stone and Wiener, 2001). But these efforts have concerned specific individual or local providers and might not have influenced human-resource management strategies at a larger scale.

113. Improvements in safety standards can also improve retention, attract new recruits through reduction in work-related injuries and ameliorate LTC quality. In Maine in the United States, for example, nursing homes developed injury-prevention programmes to reduce musculoskeletal stress, requiring that workers do not lift or move a care recipient alone (Stone and Wiener, 2001). In the US Department of Labor, the Occupational Safety and Health Administration (OSHA) has developed guidelines to prevent musculoskeletal disorders among LTC workers in nursing homes, by offering techniques to lift and reposition patients (OSHA, 2008). National Emphasis Program also addresses ergonomics of LTC provision and health risk and injuries related to care delivery (OSHA, 2002).

⁴⁰

A majority of US States used Medicaid funds to increase the remuneration of direct-care workers by so-called “wage pass-through” initiatives. However, employers would need to pay additional contributions for fringe benefits of employed LTC workers (Stone and Wiener, 2001). Other mechanisms have included allocating a percentage of minimum service rates to workers, paying cost-of-living adjustment (Institute of Medicine, 2008) and introducing performance-based payment linked to the level of client and employee satisfaction, and the level of client disability (Stone and Wiener, 2001).

2.2.2 *Supporting family and other informal caregiving arrangements*

114. Family members and other informal (often uncompensated⁴¹) care providers take upon themselves large caregiving responsibilities. Data presented in section 1 – albeit limited – show that formal care represents only the emerged part of the “care iceberg”. Informal care has several economic, health and social benefits for the care recipient, and it can also reduce the overall public LTC spending (Yoo *et al.*, 2004). However, informal carers are under considerable psychological and physical pressures, which may cause stress and deteriorating health. Moreover, caring responsibilities can reduce participation in the formal labour market, while an increase in the labour-market participation, particularly of women, can reduce the supply of informal care. These considerations have led policy makers to devote considerable attention to ways to support informal caregivers and reconcile care with employment.

115. Support for family and other informal caregivers varies across countries, reflecting the social value placed on informal caregiving, the degree to which informal carers are encouraged to participate in the labour market, and the organisation of formal LTC coverage and provision systems.⁴² There is also significant discussion on the extent to which an increase in formal care reduces the incidence of informal caregiving. Viitanen (2007) found that higher formal care expenditure reduced the incidence of informal caregiving but also confirmed that formal home care did not entirely substitute for care provided by the family or other informal carers.

116. Support to informal caregivers can take the form of financial and non-financial benefits. The former attach a monetary value to informal care services and empower caregivers by reducing their financial burden. They can comprise of carer allowances, payments of income during care leave, or also tax and pension credits, available to people in paid jobs and/or to inactive caregivers. The latter – such as respite care, care leave and counselling – reduce the psychological and physical burden of informal caregivers and have positive impact on the quality of care provided (OECD, 2005). These benefits are governed by different eligibility criteria and their amount varies across countries.

117. Most OECD countries assist informal caregivers through *care allowances* (e.g. Australia, Austria, Canada, Denmark, Finland, France, Germany, Italy, Luxembourg, the Netherlands, Norway, Sweden and the United Kingdom) (Box 8). For employed individuals, care allowances may take the form of *guaranteed income during leave* which allows employees to combine work and care delivery by reducing their work time. The compensation is high in many Nordic countries (80% in Sweden, 70% in the Netherlands), where the duration of care leave is relatively short. On the other hand, employees in Norway (Fevang *et al.*, 2008) and Greece are not granted compensation during care leave and employees in Japan, who benefit from a relatively long care-leave period (93 days), receive 40% of their income either from the employers or from their insurance fund. Carer allowances in Australia and Canada support the loss of income up to a ceiling, during the care period. Due to the ceiling applied, the opportunity cost of caring is high, especially among the high-income earners who might prefer to seek professional care.

118. *Care leaves* for employed individuals – implemented in several OECD countries – help to direct additional manpower to the LTC sector, while guaranteeing job-maintenance. Differences in the duration of the leave, entitlement rules, and the compensation during leave reflect policy priorities, such as providing a fair compensation, encouraging family and other informal carers, controlling cost and, importantly, maintaining incentives to return to work. Yet, despite different cross-country arrangements, caregivers who left their job temporarily to attend to an ailing family member or friend generally encounter difficulties in returning to work and earning at the same level as before. This is the case for example for

⁴¹ Some informal carers, e.g. undeclared workers and illegal migrants, can receive compensation.

⁴² For example according to a study (Lamura, 2003), such efforts are pursued more vigorously in Sweden and the United Kingdom than in France, Italy, Greece and Poland.

women in the United States (Pavalko and Artis, 1997) and in Europe (Spiess and Schneider, 2001; Heitmueller and Inglis, 2007) – with the exception of some, but not all,⁴³ Northern European countries which show only a slight decrease in working hours after completing care responsibilities.

119. On the whole, it is difficult to compare financial entitlements (care allowances, tax and pension credits) across countries. Rules and benefits vary both within countries with decentralised administrative or care systems, and across countries. Eligibility criteria can be based on the dependency level and care need (e.g. France and Germany), on kinship to the care recipients (defined differently across countries), or based on co-residency (e.g. Australia and Canada). There can also be an income test (e.g. Canada, France, Ireland, and the United Kingdom), or requirements based on a minimum time spent on care provision (e.g. Australia, Sweden, and the United Kingdom). Care allowances are usually provided during the caring period but they can be still available after termination of care responsibilities (e.g. Norway and the United Kingdom). In some countries, informal caregivers can benefit from *preferential tax treatment*, and they might be fully or partly reimbursed for LTC expenses (e.g. Australia, Canada, France, Germany, the Netherlands and the United States) or earn *pension credits* during the care period (e.g. Finland, France, Germany, the Netherlands, Norway, Sweden and the United Kingdom). But care allowances are sometimes taxable (e.g. Australia, Canada, Norway and the United Kingdom).

Box 8. Benefits for carers in selected OECD countries

Compensation for informal caregivers

OECD (2005) provides cross-country comparison on care allowance across 12 OECD countries and Keefe *et al* (2005) examines financial compensation programmes for informal caregivers across 10 countries, including 9 OECD countries (Australia, Canada, France, Germany, the Netherlands, Norway, Sweden, the United Kingdom and the United States).

Eligibility criteria and entitlements for care allowance may be set at national or local level. In Japan, Switzerland and the United States, for example, the availability of care allowances varies across prefectures, cantons and states. In Norway and Sweden, the benefit-eligibility criteria and amounts differ across municipalities. Caregivers are often compensated for caring for parents, partners, grandparents, and siblings, but there are varied rules on kinship. In Canada, for instance, *caregiver credits* and *infirm dependent age 18 or older credits* (both income-tested and up to a threshold) are also available for people caring for an aunt, uncle, nephew and niece. The care allowance in France (*Allocation personnalisée d'autonomie*, APA) and the *carer's allowance* in the United Kingdom are available for those caring for a disabled elderly relative, neighbor or friend. In the former the amount varies between EUR 482 and EUR 1125 based on the care needs and in the latter, it is approximately GBP 44 per week. Allowance is usually given to family members during the caring period, but in Norway and the United Kingdom caregivers can receive benefits for some period after the death of care recipients. Payments are made to **caregivers directly** (e.g. Australia, Canada, Denmark, Ireland, Norway, Sweden, and the United Kingdom) or **through care recipients** (e.g. France, Germany, the Netherlands, Norway, Sweden, and the United States). In the case of indirect care payment, care recipients can choose providers, helping to relieve strong family obligation (Da Roit *et al.*, 2007) and enhance consumer choice.

Preferential tax treatments are available for family and sometimes other informal caregivers in Australia, Canada, Greece, France, Germany, Italy, the Netherlands, Poland and the United States, although eligibility criteria differ across countries. They are sometimes income-tested (e.g. Canada, Italy, the Netherlands and the United States) and based on co-residency (e.g. the Netherlands). In Canada, family caregivers can get *medical expenses tax credits* equivalent to 16% of qualifying medical expenses beyond 3% of net income, or CAD 1 755, whichever is less. In France, expenses related to assisting elderly parents can be deducted from taxable income. Expenses are also tax deductible in the Netherlands, but only if caregivers spend more than 11.2% of income on caring for a dependent parent, sibling or severely disabled person living together. In Italy, the expenditure related to assisting a disabled person can be deducted from income taxes up to 5 % of income. In the United States, caregivers can claim a tax deduction for qualified long-term care services, beyond 7.5% of their adjusted gross income.

Pension credits are accumulated during the period when people provide care for family members and sometimes for other informal caregivers in Finland, France, Germany, the Netherlands, Norway, Sweden and the

⁴³ According to one study, in Norway, employment rates of former caregivers appear to decline (Fevang *et al.*, 2008).

United Kingdom. Credits are given fully (e.g. France) or partially (e.g. Norway) and under certain conditions such as co-residency (e.g. France), the level of income (e.g. France and the United Kingdom), and the number of hours spent on care (e.g. Norway). In France, the government pays contributions to the pension scheme for those caring for a relative with disability at home, if the caregiver's income is below a ceiling. In Norway, three pension credits per year are given to people caring for severely disabled persons or spending at least 22 hours per week on care (including travel time). In Sweden, people receiving a carers' allowance, administered by the municipality can accrue pension credits together with other kinds of income. In the United Kingdom, caregivers with no income are treated in a similar manner to caregivers with formal employment earning a low income. They are covered fully for the basic state pension and they accumulate pension credits based on the low-earning threshold under the *State Second Pensions for Carer* system. Care allowances are taxable in Australia, Canada, Norway, and the United Kingdom.

B) Benefits for carers temporarily leaving their jobs

Entitlement to care leave and eligibility criteria. Leave is available for employees *caring for an elderly* family member in France, Italy, Japan, the Netherlands and Spain, while in Austria, Denmark, Norway and Sweden, leave is granted for caring for *terminally ill* family members. In Japan, employees are eligible for the guaranteed payment if they have engaged in paid activities and paid *insurance contributions* for more than 12 months in the past two years prior to the claim. Employees in Canada can obtain compassionate care benefit for caring for a spouse or parent with a risk of death, if their weekly earnings decline by more than 40% and sufficient insured hours are accumulated (600 hours in the last 52 weeks or since the last claim). In Australia, the carer payment is paid to employees who engage in paid or volunteer work for less than 20 hours per week and who also care for a person with severe disability at his/her home.

The **duration of paid care leave** can be short where the leave is provided for caring for terminally ill elderly family (e.g. 20 days in Norway, Fevang *et al*, 2008; up to 60 days in Sweden, according to the Care leave act of 1989), while it can be relatively longer where the leave is provided for caring for family members with ongoing needs (e.g. 93 days in Japan). The care allowance in Australia is paid up to 63 days in a calendar year. In some countries, employers provide their employees with additional care-leave entitlements or flexible working conditions. **Non-statutory care leave** is available in Denmark, and 80% of employees are actually entitled to reduced work hours through collective agreements (Jensen and Hansen, 2002). In the Netherlands, the statutory care leave is up to 10 days, but employees can also take leave for more than one-third of their normal working hours up to 6 months, or up to 18 months in some cases, with agreement from employers or if the employee finds a replacement.

The **compensation during leave** is relatively high in Denmark, where employees are entitled to either EUR 608 per week or previous earnings, whichever is lower (Jensen and Hansen, 2002). In the Netherlands the employees are guaranteed at least 70% of earnings. If employees have been employed for more than one year and employers find a replacement among those unemployed or inactive, employees can receive a *career interruption benefit*; up to EUR 490 in 2004 for two to six months, or 18 months in some cases. From 1998, the level of payment is 80% of the income qualifying for sickness insurance benefit in Sweden. In Canada, employees can receive up to CAD 435 per week (2008) for six weeks and, if they combine care with work, they can also earn CAD 50 per week or 25% of weekly care benefit, whichever is higher. In Australia, the carer payment is income and asset-tested and the amount was up to a ceiling of AUD 464 per week for a single person in 2004.

Unpaid leave with a job guarantee can have a longer duration. In Italy, paid leave is available for 25 days per year and 24 months in the entire working life if family members cohabit with care recipients, while unpaid leave is available up to 2 years (Lamura, 2003). On the other hand, in Greece, unpaid leave is available for 6 days per year and up to 10 days per year for caring for multiple persons. Employees in Canada and the United States are also guaranteed jobs upon their return to the labour market after caring for family members in need (Lilly *et al*, 2007).

Tax or pension credits. In Australia, the allowance is not taxable if caregiver or care recipients are below the Age Pension age. In the United States, employees can claim a proportion of expenses on caring for dependent adults who live with them, up to ceiling against federal income tax liability. In Germany, for people providing at least 14 hours of care a week and working less than 30 hours per week on the other paid job, long-term care insurance fund makes contributions up to ceiling (EUR 376 per month in 2004) to the statutory pension scheme. The amount of the contribution depends on the level of dependency of the care recipients and the time spent on care delivery. In the United Kingdom, caregivers with low income can be covered fully for the basic state pension and they can accumulate pension credits based on the low earning threshold. In Sweden, people taking care leave can accrue pension credits based in earnings and other incomes.

Sources: Keefe *et al.* (2005), OECD (2005) and other studies cited in the box.

120. In addition to financial benefits, some countries have taken initiatives to ameliorate informal carers' working conditions, reduce stress and the risk of deteriorating health (Houtven and Norton, 2006).⁴⁴ Attempts have included providing respite care⁴⁵ and counselling. In Australia, for instance, the Home and Community Care Programme provides counselling, information-sharing and advocacy (Keefe *et al.*, 2005). In Luxembourg, care recipients receive an extra nursing allowance to pay for stand-in workers for three weeks per year, and a funded temporary stay in a nursing home. Family carers can additionally avail of training on care skill-building and palliative care (Ferry and Weber, 2005). In Sweden, relatives of severely disabled people can take up group therapy (Huber *et al.*, 2006). Day-care centres and short-stay care services in a residential home are available in the United Kingdom. In the United States, states provide caregivers assistance, counselling and training, and respite and supplemental services (Keefe *et al.*, 2005).

121. Non-financial support for informal caregivers does not appear to be adequate, suggesting that the contribution of informal caregivers might not be fully recognised. For example, respite care for basic domestic tasks is not readily available in the Netherlands, while in Poland, respite care units are available in large cities through public residential institutions only and need to be paid privately (Huber *et al.*, 2006).

2.2.3 *Better co-ordination of care*

122. Long-term care is provided in various settings (*e.g.* nursing homes, individual home care, and community residential facilities) and utilises different personnel (*e.g.* social care workers, nurses, formal and informal unskilled labour, physiotherapists, and, to a smaller extent, medical doctors). There is often weak co-ordination within and between the health and LTC sectors, moreover the financing, organisation, and delivery of LTC services is generally fragmented across jurisdictions (OECD, 2005; Hofmarcher and Oxley, 2006). Several factors explain the lack of care co-ordination in LTC services.

123. Many people who receive LTC services suffer from more than one chronic disease and/or physical ailment that hinders a completely autonomous life. Depending on their need level, dependant people not only need assistance with activities of daily living, but also receive medical services, sometimes from more than one health care worker, and in different settings (Stille *et al.*, 2005). In the United States, the Institute of Medicine (IOM) Committee found that there was a significant gap in the capacity of most LTC providers to apply scientific knowledge in their actual practices (IOM, 2001) in different environments – nursing homes and home care settings. The involvement of various professionals makes it difficult to share information on each care recipient. For instance, direct care workers, including family and other informal caregivers, are often isolated and their hands-on information on care recipients is often not shared with and utilised by other professionals attending to the care recipient.

124. To counter these difficulties, some OECD countries (*e.g.* Japan, Sweden, the United Kingdom, some provinces and territories in Canada) assign care managers or assessment teams to plan and coordinate LTC services catered for care recipient with multiple needs, and emphasise communication among different care providers and recipients (OECD, 2005). A movement towards interdisciplinary training has been developed in geriatric medicine (Hall and Weaver, 2001). Medical school programmes have started to emphasise palliative and end-of-life care to make health professionals more responsive to interdisciplinary teamwork and effective communication in the United States (Institute of Medicine, 2008).

125. Long-term care and medical systems often do not offer all the services required by those with long-term care needs or inflicted with chronic diseases, such as exercise programmes and support groups.

⁴⁴ For example, in Australia, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Poland, Sweden, the United Kingdom and the United States.

⁴⁵ Respite care gives LTC workers temporary relief by providing a substitute caregiver or alternate accommodation to care recipients.

Building and reaching out to the community can help to meet the needs of LTC-dependent users and reduce costs by not duplicating services that are already provided by the community (Jordan *et al.*, 2004). Some OECD countries have started to recognise integrated approaches that make better uses of community-level resources to improve care coordination between social and medical services. New models of disease management have been used in the United States, Germany and the United Kingdom. These programmes place stress on utilising community resources to fill the gaps in the level of care and coverage of the health and LTC sector. France utilises regional/local community resources and service integration models combining home support and specialised medical care (Stuart and Weinrich 2004). Stuart and Weinrich (2001) found that after 12 years of Denmark advocating and implementing integrated home and community-based models, long-term care expenditures had plateaued. Under Spain's 2002 Gerontological Plan, social and health care services for the elderly were integrated at the local level (OECD, 2005).

126. More coordination between healthcare workers, patients and providers, healthcare personnel and community resources, and the health and the social care sectors, can help to reduce fragmentation and to increase communication between providers of LTC. This co-ordination has been proposed through various strategies, such as a strong gatekeeper system as seen in the United Kingdom, improved Information and Communications Technology (ICT), and the use of multidisciplinary teams.

2.3 Reducing the need for long-term care workers

127. Can the demand for LTC workers – which is projected to rise under the pressures of an ageing society – be alleviated in some ways? This section considers some possibilities: redefining care mix, the role of information and communication technology (ICT), and enhanced self-care management.

2.3.1 Redefining the skill mix and job tasks

128. A way to reduce the number of LTC workers needed to provide a given volume of services is by reorganising job tasks, leaving simpler tasks to less qualified workers or expanding care-provision roles.

129. *Care-work assistant*, a new professional category, was introduced in the Netherlands in 2000, aiming to fill in the demand for caregivers. This category of workers provides services in less complex cases and mainly takes care of domestic tasks and help with IADL, while more skilled workers can focus on specialised tasks (Korczyk, 2004). In several US States, the division of work between nurses and nurse aids has been modified, allowing the latter to deliver tasks previously performed by the former, such as administering medication, caring for wounds and changing catheter (Stone and Wiener, 2001; Kane, 1997).

130. A reorganisation of job tasks and structure of the LTC workforce is likely to allow flexible and effective use of workers, particularly in institutional settings and in cases of recipients with chronic care and LTC needs. There are, however, very few studies evaluating the effectiveness of strategies to expand and change tasks. Changes in division of responsibilities may also require regulatory modifications and additional training.

2.3.2 Is there a role for ICT in long-term care?

131. When looking for future remedies to meet a growing demand for LTC workers, some proponents cite adopting a more ICT-based approach. ICTs have the potential to utilise better current resources, to empower the elderly in being more autonomous in daily living, and to make services more patient-centred. ICTs can be used to improve efficiency in organising and planning formal caregivers' services. Electronic health records or medical informatics can facilitate communication and care co-ordination among different providers through improved data sharing, and they can also help to identify ways to improve treatment and medical practice for each care recipient. Telemedicine, which encompasses text messaging, internet communication (*i.e.* e-mail, instant messaging and video cam), phone calls, and fax, can monitor recipients

and provide care to them from a distance. They can also support caregivers by providing information on care practices and a forum for sharing care experiences with other caregivers.

132. ICTs can also improve quality of LTC services through streamlined tracking of patients and their needs, encouraging coordination between health care and social care. Chambers and Connor (2002) found that software technology has the potential to provide information and psychological support to caregivers assisting the disabled and the elderly, contributing to improved care practices and staff retention (Cherry *et al.*, 2008). Assistive devices can also reduce the time required for providing care to persons in need (Agree, 1999; Freedman *et al.*, 2006; Mann *et al.*, 1999).

133. Despite these potential benefits, the uptake of ICTs has been slow in several countries and care settings.⁴⁶ This low uptake can be attributed to several factors.

134. The evidence on the cost-effectiveness of ICT use in long-term care remains somewhat fragmented. Some successful disease-management programmes, using ICT, have been developed to support patients with chronic heart failure, asthma, diabetes and hypertension. One study, for example, found that home telecare for managing chronic heart failure resulted in reducing hospital admission rates and total costs through lower emergency care visits (Celler *et al.*, 2003). Another study found that video visits were effective in reducing total costs through lower hospitalisation (however the number of visits by care workers remained the same for patients with and without video visits, Johnston *et al.*, 2000).

135. The European Union launched a 3-year project in England, Northern Ireland, Portugal, Republic of Ireland, and Sweden – the so-called *Assisting Carers using Telematics Interventions to meet Older persons Needs* (ACTION) – to use ICTs to support the elderly and their family care-takers within their home environment. Magnusson *et al.* (2002) report that, under ACTION, the utilisation of assistive technology (*i.e.* multimedia programmes, videophone) was greatly beneficial to both the caretakers and the elderly themselves, due to the increased quality of life and sense of empowerment. However, many of the participants believed that the costs of training, assembly, and the technology products themselves “would remain too prohibitive for individual older people and family carers” (Magnusson *et al.*, 2002, p.377). According to Christensen and Remler (2007), there is a general lack of demonstrated cost-effectiveness in ICT technologies. This is mostly attributed to both the limited number of cost-effectiveness/outcome reports and many researchers utilising pilot studies that undergo a short duration (Celler *et al.*, 2003).

136. Other hindrances to electronic health records – an important feature of ICTs – include the need for staff training, high start-up costs for hardware and infrastructure, and resistance to sharing information or to structural changes (Cherry *et al.*, 2008; Loader *et al.*, 2008). Selwyn (2004) found that older adults are less likely to be involved in high use of ICT both in the home and at work, less likely to be involved in the culture of ICT and less likely to be involved in the pleasures of using ICT even though they see the significance of such technology. Lack of eagerness can likewise result from an undervaluation of the benefits, inadequate knowledge of technology, or, simply, fear of new technology (Hudak and Sharkey, 2007). Finally, to the extent that health and social-care professionals are not prepared to share information with each other (Loader *et al.*, 2008), the applicability and benefits of ICTs use are reduced.

137. More research utilising long-duration studies could help to substantiate claims of cost-effectiveness, and may overcome some of the existing hesitation in the adoption of ICTs. For ICTs to have relevance for long-term care, technology may have to become more user-friendly and tailored for users. Financial incentives could also be given by government or private agencies directly to caretakers to induce

⁴⁶ To mention just one example, in California (United States) LTC providers lag behind physicians and hospitals in adopting ICTs, which are used only for payment and certification requirements (Hudak and Sharkey, 2007).

uptake of such technology. For example, the use of ICT in health care has been supported through public and private remuneration schemes in the United States (Christiansen and Rimler, 2008). Canada, Japan and Korea undertook some initiatives to enhance the use of technology to address the need of the ageing populations (Government of Canada, 2006; AcademyHealth, 2006).

2.3.3 *Promoting self-care and healthy ageing*

138. There might also be room to reduce the demand for LTC care services and hence the need for assistance from a LTC provider by empowering care recipients through health-promotion initiatives, or delegating some basic tasks to the care recipients themselves, and encouraging autonomous living at home.

139. A recent review of healthy ageing policies in OECD countries (Oxley, 2008) highlights the significance of policies aimed at better self-care through increased “health literacy” - an ability to access and use health information for appropriate health decisions - and better lifestyles through physical activity, healthy diets, smoking cessation and reduced alcohol consumption. A few studies showed that health promotion and disease prevention can help to reduce care needs among elderly populations (Li *et al.*, 2002, 2005; Wolf *et al.*, 1996). Government agencies and professional associations in the United States have developed guidelines for health promotion and disease prevention for elderly populations, and encourage physical activity, smoking cessation, and weight management (Fields and Nicastrì, 2004).

140. However, it can be difficult to encourage behavioural changes from elderly people. Promotion of physical activities, for example, may require professional support – such as regular contact with an exercise specialist – to help old people without the habit of regular exercise to change their habits. Health literacy is also known to decline with age (Baker *et al.*, 2000; Scott *et al.*, 2002) partly because of increasing eyesight, communication problems and cognitive loss. Encouraging healthy behaviours at an early stage in life may have more lasting results (Oxley, 2008).

141. Some OECD countries have begun to delegate responsibilities in handling their own ailments to the recipients themselves, through better information on their conditions and on their medicine dosages, for example. These initiatives have the additional benefit of facilitating co-ordination between the provider and the care recipient. Bodenheimer *et al.* (2002) classify the essential tools for self-management support as consisting of educating the user on dosages and side-effects of treatments, psychological support, methods of assessing progress and adherence, and “activation” through collaborative decision-making with the person in need of care. In a Canadian study, researchers found that in patient-centred care-communication settings, health status and patient perception of care improved while referrals and diagnostic tests were reduced (Stewart *et al.*, 2000).

142. Finally, some governments assist autonomous living of the elderly in their own home. Devices such as motion detectors and remote controls can assist the elderly to become more autonomous in daily livings, while reducing the needs for supports from formal and informal caregivers. In Australia, for instance, a subsidy is provided for housing modifications – such as installing safety ramps and support rails, and widening doorways, especially for elderly people recovering from illness or accident (Department of Health and Ageing, 2006).

3. POLICY CHALLENGES AND FUTURE WORK

143. Managing a growing demand for LTC workers will be a priority for policy makers in the coming decades. This may not result in “shortages” of LTC workers – other than temporary ones – if labour markets are able to adapt to increased demand.

144. OECD countries are indeed responding to the challenge through different strategies. Some countries have developed training programmes and established career structures in the long-term care sector. Efforts to expand the pool of LTC workers from underrepresented or inactive population groups, and from low-skilled international workers, are another possibility. In order to improve retention of LTC workers, some employers have increased or are considered increasing wages and non-wage benefits, while changing work content and improving safety standards could also pay off. Support to family and informal carers has been enhanced in a number of OECD countries through, among others, care/carer allowances, care leaves and respite care. Improved co-ordination between the long-term care and the health care sectors can be an important source of efficiency gains and better value for money

145. Additionally, there can be strategies aimed at reducing the need for LTC workers and enhance their productivity. The use of ICTs in long-term care – for example telemedicine and electronic health records – offers opportunities for curbing the labour intensity of caring jobs. There can also be policies to encourage a reduction or a delay in the onset of disability – so-called healthy ageing policies – including promoting self-care and a reorganisation of tasks among caregivers of different skill levels.

146. These policy approaches raise nevertheless challenges and highlight areas for future research.

147. First, while much of the published literature on the long-term care workforce focuses on the idea of a possible “future crisis”, more analysis is needed to understand what market failures, if any, might prevent labour markets from responding adequately to the trends identified in this paper via, for example, higher wages and better working conditions. A related question concerns the need for policy intervention to facilitating the matching of demand with supply: Do governments need to support or facilitate the implementation of the options described in this paper? Do alternative strategies need to be identified?

148. Second, evidence on the effectiveness, cost-effectiveness and fiscal sustainability of the strategies listed in this paper is limited and somewhat mixed. It seems that a combination of approaches might work best. Nordic countries with relatively developed formal long-term care systems – Sweden, for example – also provide significant support to informal caregivers. Southern European countries, which meet the demand for LTC workers through a growing inflow of informal foreign-born caregivers, might, among other measures, profit from strengthening capacity in formal LTC settings.

149. Third, there is a need for greater policy emphasis on quality-related issues. Quality of long-term care relies on the skills and knowledge of formal and informal caregivers. Shortcomings can lead to a worsening of care recipients’ outcomes or work-related injuries of caregivers. Training opportunities might improve care quality and, in turn, better quality of care will encourage workers’ retention and job satisfaction. However, cross-country evidence on the adequacy of training and regulatory standards for LTC workers, and on job assessment and monitoring procedures is still limited.

150. Fourth, all the policy options discussed above have a cost – for the public sector, for individuals and their families, and/or other private providers. Attracting formal LTC workers through additional training, or improving care standards and wages to enhance quality and job attractiveness, put pressures on budgets. Employing non-native LTC workers requires processing migration applications, as well as supporting their cultural and professional adaptation and skill-building. There can be significant trade-offs between different and equally valuable policy goals – for example investment in quality can raise fiscal and financial sustainability concerns. Financial and non-financial support to informal caregivers can compensate for reduced incomes during and after the care period. But it can also discourage carers from returning to work or entering the formal labour market in the first place. Addressing trade-offs and cost-sustainability remains a major future challenge.

151. Fifth, the co-ordination and implementation of policies might be another challenge. Long-term care systems sit at the cross-road of the health and social care sectors. There is a national but also, importantly, a local dimension, of policies and practices. Responsibilities, especially for implementation, often rest with local-level governments or offices, making it difficult to make an inventory, evaluate and scale-up initiatives. Furthermore, LTC workforce policies have an important global dimension, too. For example, migration policies may need to adapt to the rising demand for low-skilled workers, which is met, in some OECD countries, through a growing inflow of migrant low-education workers. Policy co-ordination across migration, health, and social care authorities becomes critically important for the management of long-term care human resources.

152. Sixth, there are significant data-related challenges. The pilot data collection on LTC workers revealed difficulties in collecting comprehensive and consistent data at the international level. This is the consequence of several underlying factors. Data are not always available at the national level but fragmented across different jurisdictions and programmes. In national statistics, LTC workers cannot be readily distinguished from other health and social-care professionals. The coverage and classification of LTC workers differ across countries. Also, the review of the published literature revealed that, often, efforts to manage a growing demand for LTC workforce have not been monitored and evaluated. There is a clear call for further efforts to improve the quality, comprehensiveness and comparability of the data, both at the national and the international level.

153. Last, further research on the impact of various policies to mitigate LTC workforce needs – what works best and what works less – would improve the knowledge base and help designing better coping strategies. Innovative approaches could help. Integrated care, co-ordination among across multidisciplinary teams, and the diffusion of technologies offer promising directions, for example. Strategies are still pretty much at the experimental stage in OECD countries, though. The consequences of different approaches are also not well understood – an area that would benefit from further investigation.

154. This study has offered a broad overview of the key characteristics of the LTC workforce in OECD countries, drawing from OECD data collections and a review of the academic and policy literature. It has highlighted the need for further work on improving LTC workforce statistics. It has also shown significant gaps in our understanding of how different policy alternatives work in countries, and the outcomes of such approaches.

REFERENCES

- AARP (2005), “Global Focus on Long-term Care Workforce”, AARP International, Washington, DC
http://www.aarpinternational.org/gra_sub/gra_sub_show.htm?doc_id=556116 accessed on 1 October 2008.
- AcademyHealth (2006), <http://www.academyhealth.org/ltc/2006/index.htm>, accessed on 4 November 2008.
- Arends-Kuenning, M., and P. E. McNamara (2004), “The Balance of Care: Trends in the Wages and Employment of Immigrant Nurses in the U.S. between 1990 and 2000.” Presented at a conference on Gender and Transnational Care Work, October 21.
- Australian Bureau of Statistics (2003), Disability, Ageing and Carers: Summary of Findings Australia, Australian Bureau of Statistics, Canberra.
- Agree, E. M. (1999), “The Influence of Personal Care and Assistive Devices on the Measurement of Disability”, *Social Science and Medicine*, Vol. 48, No. 4, Elsevier Ltd, St. Louis, pp.427-443.
- Allan, H. and J. Larsen (2003), “We Need Respect”: Experiences of Internationally Recruited Nurses in the UK”, Presented to the Royal College of Nursing.
- Alzheimer Association (2008), 2008 Alzheimer’s Disease Facts and Figures, Alzheimer Association, Chicago.
- Angley, P., and B. Newman. (2002), “Who Will Care? The Recruitment and Retention of Community Care (Aged and Disability) Workers”, Brotherhood of St. Laurence, Fitzroy.
- Baker, D., *et al.* (2000), “The Association between Age and Health Literacy among Elderly Persons”, *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, Vol. 55, p. 6.
- Bettio, F. *et al.* (2006), “Changes in Care Regimes and Female Migration: the 'Care Drain' in the Mediterranean”, *Journal of European Social Policy*, Vol. 16, No. 3, SAGE Publications, London, pp. 271-285.
- Bodenheimer, T. *et al.* (2002), “Improving Primary Care for Patients with Chronic Illnesses: The Chronic Care Model Part 2”, *Journal of American Medical Association*, Vol. 288, No. 15, Chicago.
- Browne, C. V., and K. L. Braun (2008), “Globalization, Women’s Migration, and the Long-Term-Care Workforce”, *The Gerontologist*, Vol. 48, No. 1, The Gerontological Society of America, Washington, D.C., pp. 16-24.
- Buchan, J. and D. Dovlo (2004), “International Recruitment of Health Workers to the UK: A Report for DFID: Final Report”, DFID Health Systems Resource Centre, London.

Bureau of Labor Statistics (2007a), "Employment Projections: 2006-16", News, United States Department of Labor, Washington, D.C.

_____ (2007b), "Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, 2006", News, United States Department of Labor, Washington, D.C.

_____ (2007c), "Occupational Employment Statistics", United States Department of Labor, Washington, D.C.

Canadian Home Care Human Resources Study (2003), "*Synthesis Report.*"
www.homecarestudy.ca/en/news/docs/EngSynth.pdf .

Celler, B. G. *et al.* (2003), "Using Information Technology to Improve the Management of Chronic Disease", *Medical Journal of Australia*, Vol. 179, Australasian Medical Publishing Company Proprietary Limited, Sydney, p. 242–246.

Center for Social Welfare Promotion and National Examination (2008), Tokyo,
<http://www.sssc.or.jp/shiken/index.html>, accessed on 1 October 2008.

Chaloff, J. (2008), "Mismatches in the Formal Sector, Expansions of the Informal Sector: Immigration of Health Professionals to Italy", *OECD Health Working Paper No. 34*, OECD, Paris.

Chambers, M. and S. L. Connor (2002), "Issues and Innovations in Nursing Practice: User-Friendly Technology to Help Family Carers Cope", *Journal of Advanced Nursing*, 40(5), Blackwell Science Ltd, Oxford, pp. 568–577.

Cherry, B. *et al.* (2008), "Factors Affecting Electronic Health Record Adoption in Long-Term Care Facilities", *Journal for Healthcare Quality*, Vol. 30, No. 2, Glenview, pp. 37-47.

Christensen, M. C. and D. Remler (2007), "Information and Communications Technology in Chronic Disease Care: What Are the Implications for Payment?", *Medical Care Research and Review*, Vol. 64, No. 2, April, Sage Publications, London, pp. 123-147.

Coogle, C. L. *et al.* (2007), "Enhanced Care Assistant Training to Address the Workforce Crisis in Home Care: Changes Related to Job Satisfaction and Career Commitment", *Care Management Journals* 8(2), pp 71-81.

Crumley, B. (2003), "Elder Careless", *Time* (Europe edition), 24 August 2003,
www.time.com/time/nation/article/0,8599,477899,00.html

Daatland, S. O. and K. Herlofson (2003), "'Lost Solidarity' or 'Changed Solidarity': A Comparative European View of Normative Family Solidarity", *Ageing & Society* 23, Cambridge University Press, pp. 537-560.

D'Addio, A. C. and M. Mira d'Ercole (2005), "Trends and Determinants of Fertility Rates in OECD Countries: the Role of Policies", *OECD Social, Employment and Migration Working Papers No. 27*, OECD, Paris.

Da Roit, B. *et al.* (2007), "Long-term Care Policies in Italy, Austria and France: Variations in Cash-for-Care Schemes", *Social Policy & Administration*, Vol. 41, No. 6, December 2007, pp. 653-671.

- Decker, F. *et al.* (2003), *Results of the 2002 AHCA Survey of Nursing Staff Vacancy and Turnover in Nursing Homes*, American Health Care Association, Washington, D.C.
- Department of Health and Aging (2006), "Aged Care Australia: What Services Are Available?", <http://www.agedcareaustralia.gov.au/internet/agedcare/publishing.nsf/Content/What%20services%20are%20available-1#5>, Canberra, Australia, accessed November 4, 2008.
- Derst, P. *et al.* (2006), "Labour Market Participation of Non-Germans in the Health Sector in Germany", <http://emn.sarenet.es/Downloads/prepareShowFiles.do;jsessionid=78451F3AE3F7B121BAAE563749835445?directoryID=71>, European Migration Network, accessed 27 May 2008.
- Eborall, C. and K. Garmeson (2001), *Desk Research on Recruitment and Retention in Social Care and Social Work*, Prepared for Communication for the Department of Health, London.
- Edebalk, P. G. (2004), "Staff and Staff Statistics in Services for the Elderly in the Nordic Countries", *Staff and Staff Statistics in Services for the Elderly*, Chapter 11, Nordisk Socialstatistisk Komité (NOSOSKO), Köpenhamn.
- Eurostat (2008), "The Life of Women and Men in Europe - A Statistical Portrait", Eurostat, Luxembourg.
- Ewijk, H. van (2002), "Care Work in Europe, Current Understandings and Future Directions, Surveying Demand, Supply and Use of Care: National Report, The Netherlands", Netherlands Institute for Care and Welfare, Utrecht.
- Ewijk, H. van *et al.* (2002), "Care Work in Europe: Current Understandings and Future Directions, WP3 Mapping of Care Services and the Care Workforce: Consolidated Report", Ed. Peter Moss, Thomas Coram Research Unit, Institute of Education, University of London.
- Escobedo, A. and E. Fernandez (2002), "Care Work in Europe, Current Understandings and Future Directions, Mapping of Care Services and the Care Workforce: National Report, Spain", CIREM Foundation, Barcelona.
- European Foundation for the Improvement of Living and Working Conditions (2006), *Employment in Social Care in Europe*, European Foundation for the Improvement of Living and Working Conditions, Dublin.
- Federal Ministry of Health and Women (2005), *Public Health in Austria*, Federal Ministry of Health and Women, Vienna.
- Ferring, D. and G. Weber (2005), "Services for Supporting Family Carers of Elderly People in Europe: Characteristics, Coverage and Usage: National Background Report for Luxembourg", EUROFAMCARE, Hamburg.
- Fevang, E., S. Kverndokk and K. Røed (2008), "Informal Care and Labor Supply", *IZA Discussion Paper No. 3717*, Institute for the Study of Labor, Bonn.
- Fields, S., and C. Nicastrì (2004), "Health Promotion/Disease Prevention in Older Adults: An Evidence-Based Update: Part II: Counseling, Chemoprophylaxis and Immunizations", *Clinical Geriatrics*, Vol. 12, No. 12, New York, pp. 18-26.
- Fine, M. D. and A. Mitchell (2007), "Immigration and the Aged Care Workforce in Australia: Meeting the Deficit", *Australasian Journal on Ageing*, Vol. 26, No. 4, December 2007, ACOTA, pp. 157-161.

- Freedman, V. A. *et al.* (2006), "Trends in the Use of Assistive Technology and Personal Care for Late-Life Disability, 1992-2001", *The Gerontologist*, Vol. 46, No. 1, Washington, D.C., pp. 124-127.
- Gaymu, J., P. Ekamper and G. Beets (2007), "Who Will Be Caring for Europe's Dependent Elders in 2030?", *Population*, Vol. 62, No. 4, 2007, Institute national d'études démographiques, Paris, pp. 675-706.
- George, S. (2005), "When Women Come First: Gender and Class in Transnational Migration", University of California Press, Berkeley.
- Gibson, M. J. and D. L. Redfoot (2007), "Comparing Long-Term Care in Germany and the United States: What Can We Learn from Each Other?", AARP Public Policy Institutes, Washington D.C.
- Government of Canada (2006), "E-Health Technologies and Canada: The Future Is Here", Ottawa.
- Grabowski, D. C. (2007), "Medicare and Medicaid: Conflicting Incentives for Long-Term Care", *Milbank Quarterly*, Blackwell Synergy.
- Hall, P. and L. Weaver (2001), "Interdisciplinary Education and Teamwork: A Long and Winding Road", *Medical Education* 35(9), pp. 867-875.
- Harmuth, S. (2002), "The Direct Care Workforce Crisis in Long-Term Care", *North Carolina Medical Journal (NCMJ)*, March/April 2002, Vol. 63, No. 2.
- Heitmueller, A. and K. Inglis (2007), "The Earnings of Informal Carers: Wage Differentials and Opportunity Costs", *Journal of Health Economics* 26, Elsevier B. V., pp. 821-841.
- Helper Network (2008), Tokyo, <http://www3.shakyo.or.jp/hhk/helper/helper%20sigoto.htm>, accessed on 1 October, 2008.
- Hofmarcher, M. M. (unpublished), *Austria's New Home Care Law: An Assessment in the Context of Long-Term Care Policy*, unpublished, OECD, Paris.
- Hofmarcher, M. M., H. Oxley and E. Rusticelli (2007), "Improved Health System Performance through Better Care Coordination", *OECD Health Working Papers No. 30*, Directorate for Employment, Labour and Social Affairs, Paris.
- Home Office (2005), *Five Year Strategy for Asylum and Immigration*, presented to Parliament by the Secretary of State for the Home Department, by Command of Her Majesty, London.
- Home Office (2008), Migration Advisory Committee's first recommended shortage occupation lists, www.ukba.homeoffice.gov.uk/aboutus/workingwithus/indbodies/mac/macfirstshortagelist/, London, accessed on 1 October 2008.
- Hoppe, R. (2005), "Looking Abroad to Meet the Demands for Caregivers", AARP Global Aging Program, Washington, DC.
- Houtven, C. H. van and E. D. Norton (2006), "Economic Effects of Informal Care", *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*.

- Howes, C. (2005), "Living Wages and Retention of Homecare Workers in San Francisco", *Industrial Relations*, Vol. 44, No. 1, Institute for Industrial Relations, University of California, Berkeley, pp. 139-163.
- Howes, C. (2006), "Building a High Quality Home Care Workforce: Wages, Benefits and Flexibility Matter", <http://www.iowacaregivers.org/uploads/pdf/053106conncollegeexecutivesummaryfinal.pdf>, accessed 4 November 2008.
- Huber, M. *et al.* (2006), "Study on Social and Health Services of General Interest in the European Union: Final Synthesis Report", prepared for DG Employment, Social Affairs and Equal Opportunities.
- Hudak, S. and S. Sharkey (2007), "Health Information Technology: Are Long Term Care Provider Ready?", California HealthCare Foundation, Oakland.
- Hugo, G. (2007), "Contextualising the 'Crisis in Aged Care' in Australia: A Demographic Perspective", *Australian Journal of Social Issues*, Vol. 42, No. 2, Australian Council of Social Services, Melbourne.
- Hwalek, M. *et al.* (2008), "Older Workers: An Opportunity to Expand the Long-Term Care/Direct Care Labor Force", *The Gerontologist*, Vol. 48, The Gerontological Society of America, Washington, D.C., pp. 90-103.
- Institute of Medicine (2001), "Improving the Quality of Long-Term Care" Wunderlich, G. S. and P. O. Kohler (eds.), National Academy Press, Washington, DC.
- Institute of Medicine (2008), "Retooling for an Aging America: Building the Health Care Workforce", National Academies Press, Washington DC.
- International Labour Office (2005), "Migration of Health Workers: Country Case Study: the Philippines", Geneva.
- Jacobzone, S. *et al.* (1999), "The Health of Older Persons in OECD Countries: Is it Improving Fast Enough to Compensate for Population Ageing?", *Labour Market and Social Policy Occasional Paper No. 37*, OECD, Paris.
- Jensen, J.J. and H.K. Hansen (2002), "Care Work in Europe, Current Understandings and Future Directions, Surveying Demand, Supply and Use of Care – Denmark".
- Johansson, S. and P. Moss (2004), "Care Work in Europe, Current Understandings and Future Directions, Work with Elderly People: A Case Study of Sweden, Spain and England with Additional Material from Hungary, Consolidated Report".
- Johnston, B. *et al.* (2000), "Outcomes of the Kaiser Permanente Tele-Home Health Research Project", *Archive of Family Medicine*, Vol. 9, Chicago, pp. 40-45.
- Epping- Jordan, J. *et al.* (2004), "Improving the Quality of Health Care for Chronic Conditions", *Quality & Safety in Health Care* 2004, 13, London, pp. 299-305.
- Kane, R. A. (1997), "Boundaries of Home Care: Can a Home Care Approach Transform Long-Term Care Institutions?", in D. Fox and C. Raphael (eds.), *Home-Based Care for a New Century*, Malden, Massachusetts, Black Mill Publishing Inc., pp. 23-46.

- Kanellopoulos, C. N. and M. Gregou (2006), "Managed Migration and the Labour Market – The Health Sector in Greece", Center of Planning and Economic Research, Athens.
- Keefe, J. *et al.* (2005), "Consultation on Financial Compensation Initiatives for Family Caregivers of Dependent Adults: Final Report", Maritime Data Centre for Aging Research and Policy Analysis, Department of Family Studies and Gerontology, Mount Saint Vincent University, Halifax.
- Knocke, W. (2005), "Migrant Women and the Labour Market Diversity and Challenges – Immigrant Women on the Swedish Labour Market – Past and Present Situation" presented at OECD and European Commission Seminar, 26-27 September 2005.
- Korczyk, S. (2004), "Long-Term Workers in Five Countries: Issues and Options", American Association of Retired Persons (AARP), Washington, D.C.
- Krajcic, K., M. Vyslouzil, and P. Nowak (2003), "Pflegenotstand in Österreich? Diagnosen und Lösungsmöglichkeiten mit einem Schwerpunkt auf Entwicklung der Arbeitsbedingungen des diplomierten Pflegepersonals", www.univie.ac.at/lbimngs/berichte/pnoe_gutachten.pdf, accessed in June 2007.
- Lafortune, G., G. Balestat *et al.* (2007), "Trends in Severe Disability among Elderly People: Assessing the Evidence in 12 OECD Countries and the Future Implications", *OECD Health Working Paper No. 26*, OECD, Paris.
- Lamura, G. (2003), "Supporting Carers of Older People in Europe: A Comparative Report on Six European Countries", Health and Social Services: Partners for a Social Europe, 11th European Social Services Conference, Venice, 2-4 July 2003, I.N.R.C.A., Department of Gerontological Research, Ancona.
- Lamura, G. *et al.* (2008), "Les travailleurs immigrés dans le secteur de l'aide aux personnes âgées: l'exemple de l'Italie", *Retraite et société*, Vol. 3, No. 55, pp.71-97.
- Lazaridis, G. (2000), "Filipino and Albanian Women Migrant Workers in Greece: Multiple Layers of Oppression", in F. Anthias and G. Lazaridis (eds.), *Gender and Migration in Southern Europe*, Berg, Oxford, pp. 49–79.
- Leon, J. *et al.* (2001), "Pennsylvania's Frontline Workers in Long-Term Care: The Provider Perspective", Jenkintown, PA., Polisher Research Institute at the Philadelphia Geriatric Center.
- Leppo, K. (2006), "Health Care and Long-Term Care – A View from Finland", AARP International World Perspectives, Washington, DC.
- Leutz, W. N. (2007), "Immigration and the Elderly: Foreign-Born Workers in Long-Term Care", *Immigration Policy in Focus*, Vol. 5, Issue 12, Immigration Policy Center, Washington, D.C.
- Li, F. *et al.* (2002), "Delineating the Impact of Tai Chi Training on Physical Function among the Elderly", *American Journal of Preventive Medicine*, Vol. 23(2 Suppl. 1), New York, pp. 92-97.
- Li, F. *et al.* (2005), "Tai Chi and Fall Reductions in Older Adults: A Randomized Controlled Trial", *Journals of Gerontology—Series A Biological Sciences and Medical Sciences*, Vol. 60, No. 2, Washington, D.C., pp. 187-194.

- Lilly, M. B. *et al.* (2007), “Labor Market Work and Home Care’s Unpaid Caregivers: A Systematic Review of Labor Force Participation Rates, Predictors of Labor Market Withdrawal, and Hours of Work”, *The Milbank Quarterly*, Vol. 85, No. 4, Blackwell Publishing, pp. 41-690.
- Loader, B. D. *et al.* (2008), “Health Informatics for Older People: A Review of ICT Facilitated Integrated Care for Older People”, *International Journal of Social Welfare*, Vol. 17, Stockholm, pp.46–53.
- Magnusson, L. *et al.* (2002), “Supporting Family Carers through the Use of Information and Communication Technology: the EU Project ACTION”, *International Journal of Nursing Studies*, Vol. 39, London, pp. 369–381.
- Mann, W. C. *et al.* (1999), “Effectiveness of Assistive Technology and Environmental Interventions in Maintaining Independence and Reducing Home Care Costs for the Frail Elderly: A Randomized Controlled Trial”, *Archives of Family Medicine* 8(3), pp. 210-217.
- Martin, B. and D. King (2008), “Who Cares for Older Australians? A Picture of the Residential and Community Based Aged Care Workforce, 2007”, Commonwealth of Australia, Barton.
- M. McKee and E. Nolte (2004), “Responding to the Challenge of Chronic Diseases: Ideas from Europe”, *Journal of the Royal College of Physicians*, Vol. 4, No. 4, 1 July 2004, London, pp. 336-342(7).
- Ministry of Economics, Trade and Industry (2008), Tokyo, www.meti.go.jp/press/20080929007/20080929007-2.pdf, accessed on 1 October 2008.
- Ministry of Health, Labour and Welfare (2002), “Long-Term Care Insurance in Japan”, Tokyo, www.mhlw.go.jp/english/topics/elderly/care/1.html accessed on 24 July 2008.
- _____ (2006), Tokyo, www.mhlw.go.jp/bunya/seikatsuhogo/shakai-kaigo-fukushi5.html, accessed on 1 October 2008.
- _____ (2008a), Tokyo, www.mhlw.go.jp/bunya/koyou/other21/index.html accessed on 1 October 2008.
- _____ (2008b), Tokyo, www.mhlw.go.jp/shingi/2008/07/dl/s0724-4b.pdf accessed on 1 October 2008.
- _____ (2008c), Tokyo, www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa07/4-3.html accessed on 15 October 2008.
- _____ (2008d), Tokyo, www.mhlw.go.jp/bunya/seikatsuhogo/dl/shakai-kaigo-yousei02.pdf accessed on 15 October 2008.
- Montgomery, R. J. V., *et al.* (2005), “A Profile of Home Care Workers from the 2000 Census: How It Changes What We Know”, *The Gerontologist*, Vol. 45, No. 5, 2005, The Gerontological Society of America, Washington, D.C., pp. 593-600.
- Moriarty, J. *et al.* (2008), “Staff Shortages and Immigration in the Social Care Sector”, Prepared for the Migration Advisory Committee.
- Moss, P. and Cameron C. (2002), “Care Work in Europe, Current Understandings and Future Directions, Care Work and the Care Workforce, Report on Stage One and State of the Art Review”, Thomas Coram Research Unit, Institute of Education, University of London.

Occupational Safety and Health Administration (OSHA) (2002), “OSHA Announces National Emphasis Program for Nursing and Personal Care Facilities”, www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=1311, accessed 4 November 2008.

_____ (2008), “Guidelines for Nursing Homes: Ergonomics for the Prevention of Musculoskeletal Disorders”, www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.pdf, accessed 4 November 2008.

OECD (2005), *Long-Term Care for Older People*, p. 16, 37, 39, 40, OECD, Paris.

OECD (2007a), *International Migration Outlook*, OECD, Paris.

OECD (2007b), *Pension at a Glance*, OECD, Paris.

OECD (2008a), *Education at a Glance*, OECD, Paris.

OECD (2008b), *International Migration Outlook*, OECD, Paris.

OECD (2008c), *OECD Health Data 2008*, OECD, Paris.

OECD (2008d), OECD Pilot data collection on long-term care workers, Paris.

OECD (2008e), OECD Demographic and Labour Force Database, Paris.

OECD (2008f), OECD.Stat, OECD, Paris.

OECD (2009), *Society at a Glance*, OECD, Paris.

Oliveira Martins, M. J. and C. de la Maisonnette (2006), "The Drivers of Public Expenditure on Health and Long-Term Care: An Integrated Approach", *OECD Economic Studies*, No. 42, OECD, Paris.

Oxley, H. (2008), “Healthy Ageing Policy Assessment: Draft Reports and Options for Next Steps”, OECD Directorate of Employment, Labour and Social Affairs Health Committee, Paris.

Pavalko, E. K. and J. E. Artis (1997), “Women's Caregiving and Paid Work: Causal Relationships in Late Midlife”, *EK Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, Vol. 52, Issue 4, S170-S179, The Gerontological Society of America, Washington, D.C.

Pezzin, L. *et al.* (2006), “Marital Disruption, Step Children, and Transfers to the Elderly”, *Schweizerische Zeitschrift für Volkswirtschaft und Statistik Sondernummer 2006*, pp. 103–106.

Price, K. *et al.* (2002), “Project Overview – What Helps and What Hinders? Identifying Factors that Influence the Provision of an Aged Care Workforce”, University of South Australia, Adelaide.

Priester, R. and J. R. Reinardy (2003), “Recruiting Immigrants for Long-Term Care Nursing Positions”, *Journal of Aging & Social Policy*, Vol. 15, No. 4, The Haworth Press, Inc., Philadelphia.

Prime Minister of Japan and His Cabinet, www.kantei.go.jp/jp/asospeech/2008/09/29housin.html, accessed on 1 October, 2008.

- Quinn, E. (2006), "Managed Migration and the Labour Market – the Health Sector in Ireland", <http://emn.sarenet.es/Downloads/prepareShowFiles.do;jsessionid=4F6E3FB66B5A21818D6E5CB1F57FF775?directoryID=71>, European Migration Network, accessed 27 May 2008.
- Redfoot, D. L. and A. N. Houser (2005), "We Shall Travel On": Quality of Care, Economic Development, and the International Migration of Long-Term Care Workers", AARP Public Policy Institute, Washington D.C.
- Rothgang, H. and G. Igl, (2007), "Long-Term Care in Germany", *Japanese Journal of Social Security Policy*, 6(1), pp. 54-85.
- Scanlon, W. J. (2001), "Nursing Workforce: Recruitment and Retention of Nurses and Nurse Aides Is a Growing Concern", Testimony before Committee on Health, Education, Labor, and Pensions, US Senate, 17 May, 2001, p. 9. (GAO-01-750T)
- Schütz, B. (2006), *Second Small Scale Study II, Managed Migration and the Labour Market – The Health Sector: Austrian Report*, International Organization for Migration, Vienna.
- Scott, T. *et al.* (2002), "Health Literacy and Preventive Health Care Use among Medicare Enrolees in a Managed Care Organization", *Medical Care*, Vol. 40, p. 5.
- Seavey, D. (2004), "The Cost of Frontline Turnover in Long-Term Care", Better Jobs Better Care Practice and Policy Report, Washington D.C.
- Service Canada (2008), www.hrsdc.gc.ca/eng/ei/types/compassionate_care.shtml, accessed 4 November 2008.
- Sherard, B. D. (2002), "Report to the Joint Appropriations Committee on the Impact of Funding for Direct Staff Salary Increases in Adult Developmental Disabilities Community-Based Programs", www.pascenter.org/documents/WY_2002.pdf, accessed 4 November 2008.
- Smith, R. (2003), "European Perspectives on Community Care", *School for Policy Studies Working Paper Series Paper Number 2*, University of Bristol, Bristol.
- Spieß, C. K. and A. U. Schneider (2001), "More or Less or All the Same? The Difference Midlife Caregiving Makes for Women's Adjustments of Work Hours", iHEA 2007 6th World Congress: Explorations in Health Economics Paper.
- Stewart, M. *et al.* (2000), "The Impact of Patient-Centered Care on Outcomes", *Journal of Family Practice*, Sept., 49(9), Dowden Health Media, Montvale, New Jersey, pp. 805-7.
- Stille, C. J. *et al.* (2005), "Coordinating Care across Diseases, Settings, and Clinicians: A Key Role for the Generalist in Practice", *Ann Intern Med.* 2005, 142, American College of Physicians, Philadelphia, pp. 700-708.
- Stone, R. I. (2000), *Long-Term Care for the Elderly with Disabilities: Current Policy, Emerging Trends, and Implications for the Twenty-First Century*, Milbank Memorial Fund, New York.
- Stone, R. I. and J. M. Wiener (2001), "Who Will Care for Us? Addressing the Long-Term Care Workforce Crisis", The Urban Institute and the American Association of Homes and Services for the Aging, Washington, D.C.

- Streissler, A. (2004), *Geriatrische Langzeitpflege: Eine Analyse aus österreichischer Sicht*, *Wirtschaft und Gesellschaft*, 30, 2, pp. 247–71.
- Stuart, M. and M. Weinrich (2001), “Home- and Community-Based Long-Term Care: Lessons from Denmark”, *Gerontologist* 41, pp. 474–480.
- Selwyn, N. (2004), “The Information Aged: A Qualitative Study of Older Adults’ Use of Information and Communications Technology”, *Journal of Aging Studies* 18, Oxford, pp. 369–384.
- Viitanen, T. K. (2007), “Informal and Formal Care in Europe”, *IZA Discussion Paper No. 2648*, Institute for the Study of Labor, Bonn.
- Waidmann, T. A. and K. G. Manton (1998), “International Evidence on Disability Trends among the Elderly”, US Department of Health and Human Services, Washington D.C.
- Wolf, S. L. *et al.* (1996), “Reducing Frailty and Falls in Older Persons: An Investigation of Tai Chi and Computerized Balance Training”, *Journal of the American Geriatrics Society*, Vol. 44, No. 5, New York, pp. 489-497.
- Yoo, B.-K. *et al.* (2004), “Impacts of Informal Caregiver Availability on Long-Term Care Expenditures in OECD Countries”, *Health Services Research* 39:6, Part II Health Research & Educational Trust, Chicago.

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