Health Working Papers

OECD Health Working Paper No. 97
UNDERSTANDING EFFECTIVE APPROACHES TO PROMOTING MENTAL HEALTH AND PREVENTING MENTAL ILLNESS

David McDaid**, Emily Hewlett*, A-La Park**

JEL Classification: I100; I120

Authorized for publication by Stefano Scarpetta, Director, Directorate for Employment, Labour and Social Affairs

(*) OECD, Directorate for Employment, Labour and Social Affairs, Health Division
(**) London School of Economics and Political Science

All health Working Papers are now available through the OECD’s website at:
http://www.oecd.org/health/health-working-papers.htm

JT03420251

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.
OECD HEALTH WORKING PAPERS

http://www.oecd.org/health/health-working-papers.htm

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Working Papers describe preliminary results or research in progress by the author(s) and are published to stimulate discussion on a broad range of issues on which the OECD works. Comments on Working Papers are welcomed, and may be sent to health.contact@oecd.org.

This series is designed to make available to a wider readership selected health studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
ACKNOWLEDGEMENTS

This paper has benefited from comments from delegates of the OECD Health Committee. The authors are particularly grateful to the many countries that shared national examples of actions to promote mental wellbeing and prevent mental illness, and who responded to the policy survey. The authors also wish to thank Francesca Colombo, Mark Pearson and Stefano Scarpetta from the OECD Directorate of Employment, Labour and Social Affairs for their comments. The authors are also grateful to Dan Chisholm at the World Health Organization for his helpful insights. Thanks to Duniya Dedeyn, Isabelle Vallard and Lukasz Lech for editing support.

The opinions expressed in the paper are the responsibility of the authors and do not necessarily reflect those of the OECD or its Member Countries.
ABSTRACT

The health, social and economic consequences of poor mental health are substantial. More attention is focusing now on the development of actions to promote better mental health and well-being and prevent mental ill-health. If effective and well-implemented, such actions may potentially help avoid some of these substantial adverse individual, social and economic impacts of poor mental health.

This paper provides an overview of the development of approaches to promoting mental wellbeing and preventing mental ill-health in OECD countries, together with an assessment of what is known on their effectiveness and cost effectiveness. The paper finds that there is a sound and quite extensive evidence base for effective and cost effective actions which can promote mental wellbeing and prevent mental ill-health. However, the existence of actions and programmes in mental health promotion and prevention is uneven both between countries, and across different points of the life course. Many countries could stand to scale-up their promotion and prevention efforts in the mental health field, and further efforts are particularly needed to introduce interventions targeted at unemployed and older populations.

RÉSUMÉ

Les conséquences sanitaires, sociales et économiques de la mauvaise santé mentale sont considérables. Une plus grande attention est désormais donnée au développement d'actions visant à promouvoir une meilleure santé mentale et à prévenir les maladies mentales. Si elles sont efficaces et bien mises en œuvre, ces actions peuvent potentiellement contribuer à réduire certaines des conséquences néfastes individuelles, sociales et économiques qu’entraîne une mauvaise santé mentale.

Ce document de travail offre un aperçu des approches développées pour promouvoir le bien-être mental et prévenir les maladies mentales dans les pays de l'OCDE, ainsi qu'une évaluation de leur efficacité et de leur rapport coût-éfficacité. Le document de travail montre qu'il existe un nombre important d’exemples pouvant mener à des actions efficaces et coûts-éfficaces pour promouvoir le bien-être mental et prévenir les maladies mentales. Cependant, l'existence d'actions et de programmes en matière de promotion et de prévention de la santé mentale reste inégalement distribuée à la fois à travers les pays, mais aussi tout au long de la vie. De nombreux pays pourraient faire davantage d’efforts de promotion et de prévention dans le domaine de la santé mentale. Des efforts supplémentaires sont particulièrement nécessaires pour introduire des interventions destinées aux populations âgées et sans emploi.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS .................................................................................................................. 3

ABSTRACT ........................................................................................................................................ 4

RÉSUMÉ .............................................................................................................................................. 4

INTRODUCTION ................................................................................................................................. 6

1. AVAILABLE EVIDENCE OF EFFECTIVE APPROACHES TO MENTAL HEALTH PROMOTION AND PREVENTING MENTAL ILL-HEALTH ACROSS THE LIFE COURSE ......................................................... 6

2. MENTAL HEALTH PROMOTION AND PREVENTING MENTAL ILL-HEALTH IN OECD COUNTRIES ........................................................................................................................................... 15

3. POLICIES TO EFFECTIVELY PROMOTE MENTAL HEALTH AND PREVENT MENTAL ILLNESS .................................................................................................................................................. 30

4. CONCLUSIONS ............................................................................................................................ 35

REFERENCES ....................................................................................................................................... 37

## Tables

Table 1. Identified Mental Health Promotion and Mental Disorder Prevention Actions by Country¹ .............................................................................................................................................................. 18

## Figures

Figure 1. Unemployment rate (unemployed people as a proportion of the labour force) ................. 12

Figure 2. Total number of Mental Health Promotion and Mental Disorder Prevention Actions Reported to the OECD .............................................................................................................................................. 16

Figure 3. Total Number of Identified Mental Health Promotion and Mental Disorder Prevention Actions (all sources) .................................................................................................................. 16

Figure 4. Number of countries reporting at least one action ........................................................................ 17

Figure 5. Suicide rate in OECD countries, 1990 and 2014 (or nearest year) ........................................ 29

## Boxes

Box 1. Methodology and background ............................................................................................... 7

Box 2. Evidence of effective interventions to tackle bullying .......................................................... 10

Box 3. Psychological support and active labour market programmes can protect the mental wellbeing of unemployed people, and improve reemployment rates ........................................................................ 13

Box 4. Perinatal mental health screening in Australia, Israel, New Zealand, England and Japan .......... 19

Box 5. Mental health promotion in schools ....................................................................................... 21

Box 6. Tackling bullying and cyber-bulling in schools ..................................................................... 22

Box 7. Protecting the mental wellbeing of older people by reducing loneliness and improving social integration .............................................................................................................................. 27
INTRODUCTION

1. The social and economic consequences of poor mental health are substantial; measuring the costs of poor mental health remains challenging but one estimate suggests that globally between 2010 and 2030 this will be more than US$16 trillion (Bloom et al., 2011). The majority of these impacts fall beyond health care systems, due in the main to lost economic productivity, as well as an increased risk of premature mortality linked to poorer physical health. The consequences for health care systems are also substantial; estimates of the direct costs of treating mental disorders in some OECD countries were reported to range between 5% and 18% of all health expenditure (OECD, 2014).

2. More attention is now focused on the development of actions to promote better mental health and wellbeing, and to prevent mental ill-health. If effective and well-implemented, such actions may potentially help avoid some of these substantial adverse economic impacts. This paper provides an overview of the development of approaches to promoting mental wellbeing and preventing mental ill-health in OECD countries, together with an assessment of what is known on their effectiveness and cost effectiveness.

3. The paper is structured as follows: Section 2 provides an insight into what is known about the effectiveness and cost effectiveness of different prevention and promotion actions across the life course. Section 3 then presents a snapshot of national approaches or interventions that have been implemented in some OECD countries. Section 4 reflects on these developments and considers the extent to which promotion and prevention measures could be more effectively introduced or strengthened. The paper concludes with some broad policy recommendations for consideration.

1. AVAILABLE EVIDENCE OF EFFECTIVE APPROACHES TO MENTAL HEALTH PROMOTION AND PREVENTING MENTAL ILL-HEALTH ACROSS THE LIFE COURSE

4. This section of the paper provides a brief overview and references to further material on the state of the art on what is known about the effectiveness and cost effectiveness of different approaches to mental health promotion and mental disorder prevention. Mental health promotion in this paper is defined as ‘aiming to promote positive mental health by increasing psychological well-being, competence and resilience, and by creating supporting living conditions and environments’ (Saxena, Jane-Llopis and Hosman, 2006). Mental ill-health prevention is defined as ‘having as its target the reduction of symptoms and ultimately of mental disorders. It uses mental health promotion strategies as one of the means to achieve these goals’ (Saxena, Jane-Llopis and Hosman, 2006).

5. The focus of this paper is mainly on primary prevention covering universal actions delivered to the general population, or everyone in a specific setting, e.g. in a school, as well as selective actions targeted at specific population groups who have previously been identified as being at higher risk of developing mental health problems, such as those in insecure employment or the long term unemployed. It also covers indicative actions targeted at those who are already displaying signs of having mental health problems, but do not meet the diagnostic criteria for mental disorders. The paper also builds on previous OECD work, and is informed by a rapid policy survey as well as additional searches of the literature and analysis of recent efforts to map some services in the EU and globally (see Box 1).
6. These actions may be developed and implemented at national, regional or local levels. Many may be implemented and delivered outside of the health sector, for instance involving working with kindergartens, schools, workplaces, employment agencies, the criminal justice system, social welfare services, housing or community development services.

Box 1. Methodology and background

Previous OECD work on mental health (OECD, 2012, OECD, 2014, OECD, 2015) has taken the high prevalence of mental disorders – some 20% of the working-age population is living with a mental illness at any given moment – as a starting point. This work has focused on the need to assure that the right structures and interventions are in place to meet people’s mental health needs, and to reduce the impact of mental illness on people’s health, social and labour market outcomes. This paper begins to unpack the question of whether it is possible to reduce this prevalence.

The OECD has also developed a set of policy guidelines for an integrated approach to address the impact of mental health problems on health, education, employment and social outcomes (OECD, 2015). These guidelines were adopted in December 2015 and published in January 2016 as the OECD Recommendation of the Council on Integrated Mental Health, Skills and Work Policy (OECD, 2016).

Adopting a life course perspective recognises that there are risks to mental health right from the beginning of life, and then at different transition points, e.g. from school to work, across the life course. As the literature will indicate, some of the most substantial potential economic benefits of better mental health are achieved through actions in childhood that can help to reduce the risk of adverse events later in life, but intervening in adulthood and later life is also effective at reducing mental health problems, supporting recovery and preventing losses for those who are currently at risk.

This overview of effective approaches to mental health promotion and preventing mental ill-health is based on a rapid review of systematic reviews, meta analyses and individual empirical journal articles, as well as peer reviewed reports predominantly published in the last five years; the search has been limited to English language databases and English language search terms. In addition relevant references identified from material included in this review and forward citation tracking have been used to supplement the initial results of the review.

This paper also collates responses to a rapid policy survey which was completed – in full or in part - by 30 countries. The policy survey sought to identify trends in policy development, whether funding levels could be identified and the extent of evaluation, as well as requesting examples of relevant interventions across the life course. Examples of the relevant interventions shared by countries are presented online at www.oecd.org/els/health-systems/mental-health-systems.htm. It has been supplemented by additional searches of the literature and analysis of recent efforts to map some services in the EU and globally (World Health Organization, 2015, Samele, Frew and Urquia, 2013). The review also draws on findings from the recently published reports from the Joint Action on Mental Health and Wellbeing in the EU on actions in the workplace (Fine et al., 2015) and in schools (Rampazzo et al., 2016). The evidence is presented from a life course perspective, beginning with interventions targeted at women in the perinatal period and then looking at interventions targeted at children (and their parents) and then on into adulthood. Specific attention is given to actions in schools and workplaces and those which protect the mental health of those who have become unemployed; the latter can be considered a specific high risk group. Suicide prevention measures are also assessed.

This mapping exercise cannot be considered to be comprehensive, but provides a snapshot of policies and actions, a sense of where mental health promotion and disorder prevention are on the policy agenda and whether actions are being planned and/or implemented. There will be additional programmes and actions that are beneficial to mental health and wellbeing, but have been implemented for other reasons, such as the availability of social welfare safety nets for the economically inactive, the provision of parks and green spaces or the availability of housing and accommodation support. Additionally, given limitations in time and available information, it was not possible for the authors to exclude programmes that may not have been a good-fit for broader understandings of prevention and promotion. For instance, country respondents may have included generalised ‘health life’ promotion activities, while other countries restricted their responses to actions explicitly tailored to mental wellbeing. Similarly, the likely quality and relevance of individual country actions and interventions could not be considered in detail. An eventual more in-depth analysis of reported actions, country-by-country, region-by-region within countries, and programme-by-programme, could well be a valuable undertaking.

The discussions of available evidence should be treated with caution; they provide an indication on what is known about what works, but there will be other actions to promote mental health that will not have been identified. While some of these will be mental health specific, many may not, for instance measures to alleviate poverty, homeless and income inequalities. Measures to promote physical health may also have an impact on mental health.
e.g. regular physical exercise. There are other areas that have not been explored in any depth. For instance measures to improve the physical and natural environment, and actions to promote the mental health of many different potential at risk groups such as military personnel and prisoners.

A further important caveat to the conclusions and recommendations of the paper is that this is a brief review of documentation and questionnaire responses may not fully reflect actions delivered outside of the health care system, especially if some of these (such as emotional support for children in schools) are not always viewed as being mental health actions. In some countries there may also be strong non-governmental organisations that are active in supporting mental health promotion and disorder prevention.

**Early intervention and prevention programmes to promote child mental health and wellbeing can support better long term mental, physical and social outcomes**

7. Good mental health in the first few years of life has been associated with better long-term mental, physical and social outcomes. A growing body of literature highlights the importance of early intervention and prevention programmes for the prevention and treatment of early childhood behavioural problems and promotion of child mental health and wellbeing (Regan, Elliot and Goldie, 2016).

8. Reviews suggest that effective interventions to promote and protect the psychological wellbeing of children include support for maternal mental health during the perinatal period, parenting support programmes in both infancy and pre-school years and specialist parent support programmes for very high risk groups, where parents may have severe mental health problems or may be neglecting their children (Stewart-Brown and Schrader-McMillan, 2011).

**Interventions during pregnancy and infancy are effective for both parents and infants**

9. Globally between 10% and 20% of women in the perinatal period (covering pregnancy to 1 year post birth) may experience mental health problems (Gavin et al., 2005) including anxiety, depression, post-traumatic stress and psychosis. There are also impacts on men; recent studies in the United Kingdom and Italy identified that between 4% and 6% of new fathers experience depressive symptoms (Nath et al., 2016, Epifanio et al., 2015) with some studies reporting that as many as 18% of fathers will experience anxiety disorders (Leach et al., 2016). Perinatal depression also is a risk factor for suicide (Khalifeh et al., 2016).

10. As well as these negative impacts on parents, poor perinatal mental health can have long lasting adverse impacts for child emotional health, as well as for their physical and cognitive development (Ibanez et al., 2015). A meta-analysis of 23 studies reports that perinatal depression has been associated with an increased risk of pre-term births and low birth weight (Jarde et al., 2016). There can also be impacts on other family members, such as the siblings of the child. There is potentially an economic case for taking action against perinatal mental health problems; the lifetime economic costs of perinatal depression and anxiety disorders to mothers and their children alone in the United Kingdom have been estimated to be approximately GBP 75 000 and GBP35 000 respectively (Bauer, Knapp and Parsonage, 2016).

11. A range of interventions have been identified as effective for parents and children during pregnancy and infancy:

- A Cochrane review found that women who received any psychological or psychosocial intervention had a 22% reduction in their chance of developing perinatal depression compared with those who received standard care (Dennis and Dowswell, 2013).

- Subgroup analysis found that the most effective types of intervention for the perinatal and postpartum period were intensive, individualised postpartum home visits, lay (peer)-based telephone support, and interpersonal psychotherapy.
Selecting women for intervention based on the presence of risk factors for the development of postpartum depression decreased the onset of postpartum depression by 34%. For infants and young children, parenting programmes can also help promote positive mental wellbeing and reduce the risk of emotional poor development in children. These can be delivered to parents with children of all ages from 0 to 16. Many programmes tend to focus on children already identified as being at risk of emotional health problems rather than being delivered to the population as a whole. Well known parenting programmes include the Webster-Stratton Incredible Years (IY) programme (Webster-Stratton and Hancock, 1998), a group-based behavioural therapy approach to promoting positive parenting, and the Triple P Parenting Programme, often delivered universally rather than being targeted.

School-based interventions can improving wellbeing and improve academic performance

12. Given the global drive toward compulsory education, schools are places where almost all children and young people are to be found on a regular basis. They are, therefore, considered an ideal setting for the delivery of many interventions aimed at preventing mental health problems or improving wellbeing.

13. A range of interventions can be delivered in school for the benefit of mental health, social, emotional and educational outcomes (Weare and Nind, 2011). In addition to longer term benefits associated with better mental health, there may be more immediate impacts including better school attachment (or the sense of belonging that children have about the school that they attend), as well as having less risky behaviours, and development of assets including better resilience and cognitive skills. A meta-analysis of 213 universal school-based programmes delivered to promote pupils’ social and emotional development found that programmes were associated with a significant 11% improvement in academic performance (Durlak et al., 2011). Significant effects were maintained in studies in the 15% of studies that reported at least a six month follow up.

14. The characteristics of more effective school interventions include teaching skills, focusing on positive mental health, starting early with the youngest children and continuing with older ones; operating for a lengthy period of time, embedding this work within the school curriculum and better liaison with parents. Preventing bullying and cyberbullying has also been the focus of a number of initiatives (Box 2).

15. Universal school-based programmes, including RULER from the United States (Hagelskamp et al., 2013) and an adapted version of the Penn Resilience Programme trialled in England (Challen et al., 2011) have been found to have positive impacts on child emotional, behavioural, social, and school wellbeing, as well as on their school performance. The Penn study found that on average children whose psychological wellbeing improved in the short-term had higher levels of academic achievement and were more engaged in school than children who did not experience those increases in levels of emotional wellbeing.

16. The economic evidence for interventions to promote better psychological wellbeing interventions, including emotional literacy, is limited but promising. The Seattle Social Development Project implemented a teacher and parent intervention, including child social and emotional development, for six years. These children were then followed up from age 12 to 21 (Hawkins et al., 2005). Costs of USD 5 412 per child for the project were outweighed by benefits from the avoidance of violence, smoking and drug abuse that were three times as great. This analysis is conservative, as no monetary value was placed on significant improvements seen in mental and emotional health (Aos et al., 2004). Another example of a school-based intervention is the Good Behaviour Game (GBG) which seeks to instil positive behaviours in children through a rewards-based game. It has been associated with longer term favourable
mental, physical and educational outcomes (Kellam et al., 2014, Ialongo et al., 1999) and has been implemented in multiple locations within and beyond the US.

**Box 2. Evidence of effective interventions to tackle bullying**

Bullying (e.g., physical intimidation, verbal threats, exclusion, rejection) is a phenomena that can affect children and young people of all ages. Both bullying and cyberbullying have been found to be very common; estimates suggest that some 30-40% of children and adolescents experience bullying and/or cyber bullying (Brooks et al., 2015). There are immediate impacts of bullying on mental health and emotional wellbeing, including the risk of self-harm. A meta-analysis of 34 studies found a 2.5 times increased risk of suicide attempts in children who had been the victims of bullying compared to other children (van Geel, Vedder and Tanilon, 2014). Young people who have been bullied also have an increased risk of depression and psychological distress in adulthood (Ttofi et al., 2011). Lower levels of bullying have been shown in analysis in schools in the US to have a positive impact on future academic achievements (Derosier and Lloyd, 2011).

A number of promising interventions to tackling bullying have been identified, reducing the level of bullying victimisation by around 20% (Ttofi and Farrington, 2012), although little is known about their long term impact (Cantone et al., 2015). There have been few previous economic studies of these interventions, however economic models in the United Kingdom and Sweden suggest that there are potentially large positive long term returns on investment due to the avoidance of adverse societal impacts in adulthood if bullying is avoided (Beckman and Svensson, 2015, Knapp, McDaid and Parsonage, 2011).

**Actions to promote mental health in workplaces and for unemployed adults have potential to bring significant economic and societal benefits**

17. Many of the economic costs of poor mental health are driven by poor performance at work and/or withdrawal from the workplace. OECD has shown conclusively that mental ill-health contributes to reduced productivity at work, greater likeliness of sickness absence, and a higher probability of being unemployed (OECD, 2012, OECD, 2015). Mental illness amongst working-age adults also represents a growing burden for social protection systems; in all OECD countries, people diagnosed with a mental disorder account for 30-40% of disability benefit caseloads, and total disability benefit expenditure related to mental illness accounts for around 0.7% of GDP on average (OECD, 2015). If improved mental wellbeing, or mental illness prevention, can help employees stay in work, and work to their full productive potential, then the economic and societal benefits are potentially very significant.

Cognitive behavioural therapy, physical relaxation techniques and changing work schedules can bring benefits to individual employees, while the evidence of the effectiveness of workplace-wide measures is less conclusive.

18. Organisational measures which can be applied across the workplace include promoting awareness of the importance of mental health and wellbeing at work for managers, as well as risk assessment and management for stress and poor mental health, can help improve the mental wellbeing of all employees. Workplace programmes may examine the physical working environment, terms of employment, social relations at work and opportunities for career progression. However, the evidence base on what works remains limited; in part this is because many organisational level measures are not easily evaluated in a controlled manner, although one recent systematic review of 39 organisational level interventions was able to find positive impacts in about half of the studies examined (Montano, Hoven and Siegrist, 2014).

19. There is some evidence on the benefits to business of organisational level measures. In research conducted for the Health and Safety Executive (HSE) in the United Kingdom to evaluate their approach to reducing workplace stress (the Management Standards), several benefits were found of organisational level interventions: improved performance (measured both objectively and subjectively), lower absenteeism,
reduced turnover intention, better team performance, and fewer work withdrawal behaviours (Health and Safety Executive, 2006). Modelling analysis of a comprehensive approach to promote mental wellbeing at work, quantifying some of the business case benefits of improved productivity and reduced absenteeism was produced as part of guidance developed by the National Institute for Health and Care Excellence for England. It suggested that productivity losses to employers, including sickness absence and presenteeism, as a result of undue stress and poor mental health could fall by 30%; that work-site interventions to promote the mental wellbeing of employees can reduce absence costs by between GBP 145 and GBP 1,295 per affected employee per year, and reduce presenteeism costs by between GBP 350 and GBP 3,865 per affected employee per year (National Institute for Health and Care Excellence, 2009).

20. Interventions targeted at individuals, which might include modifying workloads and flexible working hours, providing cognitive behavioural therapy, relaxation and time management training, exercise programmes and goal setting are easier to evaluate. A Cochrane review focused on prevention of stress in health care workers found limited evidence that cognitive behavioural therapy, physical relaxation techniques and changing work schedules could be effective (Ruotsalainen et al., 2015). Other reviews have been more definitive in supporting the effectiveness of individual levels interventions, particularly cognitive behaviour therapy (CBT) (Bhui et al., 2012, Tan et al., 2014).

21. Indeed, most existing economic literature has focused on the case for interventions targeted at individuals rather than at the organisational level (Hamberg-van Reenen, Proper and van den Berg, 2012, McDaid and Park, 2011). Implementing a multi-component wellness programme similar to that shown to be effective in the US (Mills et al., 2007), from a business perspective alone, they can have a substantial return on investment in such a workplace health promotion programme of USD9 for every USD1 invested. In addition there would be further economic benefits to the health and social security systems from a reduction in health problems (mental and physical developing in the workplace) (McDaid et al., 2011). The net range of economic benefits generated by several different workplace organisational and individual level mental health promotion measures over a 1 year period have been estimated to range between EURO 0.81 to EURO 13.62 for every Euro of expenditure in the programme (Matrix Insight, 2013). The greatest return on investment was seen programmes to improve knowledge of line managers and workers of risks for mental health, as well as the provision of personalised exercise programmes.

22. Evaluation of an occupational health programme, including psychotherapy for individuals identified as having depression, was found to be less expensive than the costs of absence that were avoided as a result of successful support in an analysis of 233 employees with depression in Finland (Kaila et al., 2012). In Japan analysis of a multi-action workplace mental disorder prevention programme in 11 companies found that the return on investment was 1.4 yen for every yen spent, but that this varied considerably depending on structure of programmes and the intensity of implementation (Iijima et al., 2013). Unemployment increases the risks of mental ill-health, which can be mitigated by psychological support and active labour market programmes.

23. Meta-analyses of individual level studies in the main suggest that socio-economic disadvantage, such as rising involuntary unemployment, income inequalities and poverty have been associated with an increased incidence of stress, anxiety, depression and poor psychological wellbeing (Paul and Moser, 2009). For instance, one review identified 10 longitudinal studies following individuals between 1970 and 2011, all of which showed a causal relationship between increasing levels of unemployment and subsequent incidence of mental disorders (Zhang and Bhavsar, 2013). OECD (2015) has shown that there is an important relationship between mental ill-health and unemployment; people with mild-to-moderate mental illness are twice as likely to be unemployed, while jobless rates among people with severe mental disorders are in many countries four or five times higher (see Figure 1). A large literature also indicates that risks to mental health among those who experience job insecurity and fear job loss may be as great as for those who are unemployed (Kim and von dem Knesebeck, 2015, ten Have, van Dorsselaer and de
Graaf, 2015), as well as for employees who ‘survive’ a workplace downsizing (Brenner et al., 2014). Occupational health services therefore may have an important role to play in providing psychological support to protect psychological wellbeing of employees during and following any business restructuring (Anaf et al., 2013).

**Figure 1. Unemployment rate (unemployed people as a proportion of the labour force), by severity of mental ill-health, latest available year**

![Unemployment rate graph](source)


24. There is also a substantive body of literature looking specifically at many aspects of socio-economic disadvantage and suicide. Many, but not all, analyses of the 2008 global recession point to an association between deteriorating employment and uncertainty about employment and rates of suicide (McDaid, 2017). Longitudinal individual level analysis following more than 3 million Swedes who had been employed in 1990 indicates that suicide rates for those who lost their jobs in the economic crisis in the mid-1990s and were still unemployed when the country was recovering were at greater risk of suicide than during the crisis itself. Individual level data were also used to show that the risks of suicide in Sweden and Denmark (men only) in those who had lost their jobs were almost double those of individuals who remain in employment for up to four years following job loss (Browning and Heinesen, 2012, Eliason and Storrie, 2009). Interventions shown to be effective at protecting the mental wellbeing of unemployed people, and improving reemployment rates, include psychological support and active labour market programmes (Box 3).
Box 3. Psychological support and active labour market programmes can protect the mental wellbeing of unemployed people, and improve reemployment rates

Occupational health services have an important role to play in providing psychological support to protect psychological wellbeing; there can also be good economic benefits for business through enhanced physical and psychological health of their employees. Given the adverse economic impacts of unemployment for physical and mental health, there is an argument for embedding these types of services routinely into redundancy packages provided by employers (Anaf et al., 2013). Employees who ‘survive’ a business restructuring can also benefit from supportive interventions, including psychological support and better communication throughout the whole downsizing process (Vinten and Lane, 2002).

Psychological support for unemployed people to promote mental health can help increase re-employment rates (Proudfoot et al., 1997, Vuori and Silvonen, 2005). OECD recommends that earlier intervention for jobseekers with mental ill-health be prioritised, and can stop people slipping into long term unemployment and/or reliance on disability benefits (OECD, 2015). Cost-effectiveness evaluations of such interventions have reported savings for social welfare payers and employers alike, through increased rates of employment, higher earnings and fewer job changes (Vinokur et al., 2000).

Active labour market programmes may also mitigate against the negative effects of economic shocks on wellbeing. These programmes aim at improving prospects of finding gainful employment and include public employment services, labour market training, special programmes for young people in transition from school to work, and programmes to provide or promote employment for people with disabilities. In European Union countries, each additional $100 per head of population spending on active labour market programmes per year reduced by 0.4% the effect of a 1% rise in the unemployment rate on suicides (Stuckler et al., 2009).

Investing in measures to promote wellbeing helps promote healthy ageing

25. Healthy ageing is a key policy objective in many countries to try and counter the effects of demographic change. As OECD populations age – 27% of the OECD population will be 65 or older by 2050, rising to more than 30% in countries like Japan, Korea, Germany and Spain – mental and physical wellbeing in later life must become a policy priority. In addition to the consequences of dementia (which are not discussed in this paper) there are other risks to mental health linked to the transition from work to retirement and as a consequence of the ageing process. Studies suggest that in high income countries at least 12% of older people are affected by clinically significant levels of depression at any one time (Copeland et al., 2004); rates as high as 16% have been reported in some studies (Forlani et al., 2013, Regan et al., 2013).

26. One risk factor which has been associated with depression is involuntary social isolation and loneliness (Holvast et al., 2015, Peerenboom et al., 2015). Lower levels of contact with friends and neighbours were associated with significantly greater rates of depression in a survey of more than 6 800 older people living in two areas of Sweden and Finland. Increased feelings of loneliness are significantly associated with higher levels of suicidal ideation and attempted suicide events in analysis of the Adult Psychiatric Morbidity Study in England, 2007; the 2014 Adult Psychiatric Morbidity Study in England found that people under 60 who lived on their own were more likely to have suicidal thoughts, have made a suicide attempt, and have self-harmed than those of the same age living with others. In this cross sectional survey the risks of serious deliberate self-harm in a year were reported to be up to 17.37 times greater for those who are highly lonely and 3.6 times greater for those that are sometimes lonely (Stickley and Koyanagi, 2016).

27. Systematic reviews of interventions targeting the mental wellbeing and independence of older people identify some ways to promote mentally healthy ageing:

- Actions to improve access to social contacts and networks and participation in social activities, including various arts and cultural activities, initiatives to signpost individuals to social activities
and friendship building programmes could all help protect mental wellbeing of older people (McDaid et al., 2015).

- Volunteering or enrolling on an educational course could reduce the risk of mental health problems (Carlson, 2011). Meta-analyses of studies with psychological or social interventions to prevent depression in older people have reported a small but statistical effect; use of social activities showed the most pronounced impact (Forsman, Schierenbeck and Wahlbeck, 2011, Forsman, Nordmyr and Wahlbeck, 2011, Lee et al., 2012).

- As well as universally delivered interventions, there is evidence that actions targeted at high risk groups of older people for depression, such as those with chronic physical illness or the bereaved, can be effective (Cuijpers et al., 2011).

28. Evidence on the cost effectiveness of non-medical interventions to tackle social isolation and loneliness is limited. One exception is economic analysis alongside a pilot randomised controlled trial in the United Kingdom, looking at the impact of participation in a 14-week professionally led community choir group on mental wellbeing. This trial reported a significant improvement in mean SF-12 mental health scores for the intervention at 6 month follow up and an approximate 60% chance of being cost effective at a cost per QALY gained of GBP 20,000 (Coulton et al., 2015).

29. Some economic analysis also supports the use of stepped care as a cost effective means of preventing depression and anxiety among at risk older people. Stepped-care encompassing (i) watchful waiting, (ii) guided self-help using bibliotherapy 1, (iii) problem solving and (iv) referral to a primary care physician for further evaluation and treatment when required, was successful in reducing the incidence of anxiety or depressive disorders in the Netherlands by 50%, with effects maintained over twelve months (van't Veer-Tazelaar et al., 2011).

Restricting access to lethal means, awareness raising programmes, assessment for at-risk individuals, appropriate treatment for mental disorders – and combining such actions in a comprehensive prevention strategy – can help reduce suicides and suicide attempts

30. There are substantial personal and economic costs associated with both completed and non-fatality suicidal events (McDaid, 2016b). Numerous effective suicide prevention measures have been identified (Zalsman et al., 2016) (Hawton et al., 2016), including: restricting access to lethal means; awareness raising programmes for young people in school; the use of drug and psychological therapies; taking action to provide information and signposting, as well as physical barriers, in suicide hotspots; and reducing risk of subsequent suicidal events through psychosocial assessment upon presentation to hospital followed by cognitive behavioural therapy. A comprehensive suicide prevention strategy will typically involve a number of different actions rather than relying on any one measure (van der Feltz-Cornelis et al., 2011).

31. The evidence is inconclusive on the value of training professionals that are likely to come into contact with individuals in distress, including the police, social workers, teachers, primary care doctors and religious leaders, but in one Australian example, training, followed by audit and feedback, for primary care doctors to recognise suicidal risks has been associated with a 20% reduction in two-year subsequent suicide risk (Almeida et al., 2012). Research on the effectiveness of mobile phone and internet delivered

1 Bibliotherapy uses tailored or specially selected literature to support mental well-being, for instance self-help books. As a low-intensity intervention bibliotherapy has, for example, been used in the United Kingdom where GPs can prescribe books off an approved range of literature NICE-appropriate for mild depression, anxiety, coping with grief, and obsessive compulsive disorder (OCD) (OECD, 2014).
supports to people with mental health needs, including some work related to suicide prevention (Christensen, Batterham and O’Dea, 2014) is promising but remains at an early stage.

32. There is a small literature on the economic case for investing in suicide prevention measures. Potentially they may be highly cost effective from a health system perspective given the high costs to health care systems of non-fatal suicidal behaviour (McDaid, 2016b). Using effectiveness data assumptions from a trial in Nuremberg, Germany, researchers in Canada have recently modelled the potential cost effectiveness of implementing this multi-level suicide prevention intervention in Quebec, taking into account both health care costs and productivity impacts. They have reported a cost per life year saved of CAN 3 979 – a figure likely to be considered highly cost effective in a Canadian context (Vasiliadis et al., 2015). Major suicide prevention measures, such as bridge barriers can also be cost effective (Atkins Whitmer and Woods, 2013).

33. There can also be an economic case for sector-specific suicide prevention strategies. The potential economic benefits of investing in a multi-component strategy to prevent suicide in the construction industry in New South Wales, Australia have been modelled (Doran and Ling, 2014). The programme – MATES in Construction – consists of three elements: general awareness training on suicide in workplaces, ‘connectors’ – workers trained to keep their colleagues safe and connecting them to help, and workers being trained to have skills to know how to support someone who may be suicidal. Published research on the effectiveness of MATES suggested that total costs averted (including those associated with non-fatal events) per annum would be AUD 2.52 million compared to an implementation cost of AUD 0.55 million, generating a return on investment to the government funding the programme of nearly 5:1.

2. MENTAL HEALTH PROMOTION AND PREVENTING MENTAL ILL-HEALTH IN OECD COUNTRIES

34. There have been very few attempts to map the availability of promotion and prevention services at an international level; to begin to fill in this gap in knowledge, this paper offers an insight into the extent to which initiatives to promote mental health and prevent mental ill-health are in place in OECD countries.

35. Overall, the survey provided a mixed picture across OECD countries in the development of policies and plans for mental health promotion. Some OECD members have mental health promotion and mental-ill health prevention policies, the vast majority of which are included within other mental health strategies, plans and acts. Countries embedded policies within broader mental health policy documents or within documents on health promotion for different age groups (e.g. children) or sectors (e.g. workplaces), while 13 countries (or regions within countries) have published separate standalone mental health promotion/disorder prevention policy documents for some aspects of mental health policy. Some policies and programmes have been, or are, the subject of evaluation, but this is not the norm.

36. Figure 2 gives an overview of individual mental health promotion and prevention programmes and initiatives that were identified exclusively from survey responses from OECD Member and Associate countries at different points across the life course. Countries were asked to provide up to two examples of mental health promotion and mental disorder prevention actions in the following areas: prenatal, perinatal and infancy; children and their parents aged 3-10 years; children and young people aged 11-25 years; workplace mental health; unemployed populations; older people. The majority of programmes reported by countries responding to the survey focused on children and young people. Far fewer actions focused on
unemployed populations and older people were reported. Most of the actions aimed at the general population concern suicide prevention.

Figure 2. Total number of Mental Health Promotion and Mental Disorder Prevention Actions Reported to the OECD

![Bar chart showing the total number of mental health promotion and mental disorder prevention actions reported to the OECD by different populations and age groups.](chart2)

Source: OECD survey ‘Understanding effective approaches to promoting mental health and preventing mental illness across the life course’, 2016

37. When supplemented with additional research and review of published literature, the authors identified 302 actions targeted at mental health prevention and promotion in OECD countries. Again, the majority of programmes identified were focused on children and young people (Figure 3).

Figure 3. Total Number of Identified Mental Health Promotion and Mental Disorder Prevention Actions (all sources)

![Bar chart showing the total number of identified mental health promotion and mental disorder prevention actions by different populations and age groups.](chart3)
38. Figure 4 identifies the number of countries that reported at least one action in the given life course area; i.e. 26 countries had at least one action in the area of prenatal, perinatal and infancy, while only 12 countries reported actions targeted to unemployed populations some of which were focused on helping people who already had mental health problems. It should also be noted that all of these actions are at national level, for instance initiatives in Switzerland mainly apply to specific cantons rather than the whole country; this may mask variation in the level of action for mental health adopted in some countries.

Figure 4. Number of countries reporting at least one action

39. When survey responses and findings from the authors’ literature review were combined, actions to promote mental wellbeing and prevent mental ill-health could be identified in 35 countries, as shown in Table 1. Actions were capped at 2 per country; in some countries more than two actions are in place in place for any given population group.
Table 1. Identified Mental Health Promotion and Mental Disorder Prevention Actions by Country¹

<table>
<thead>
<tr>
<th>Country</th>
<th>Pre-natal period to age 2</th>
<th>Children aged 3-10</th>
<th>Young People Aged 11-25</th>
<th>Workplace Mental Health Promotion</th>
<th>Mental Health Promotion for the Unemployed</th>
<th>Older People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Austria</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Belgium*</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Czech Republic²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France*</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea*</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom (England)*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Actions were capped at 2 per country; in some countries more than two actions are in place in place for any given population group.
²The Czech Republic was unable to divide programmes into target groups; programs supported by the Ministry of health of Czech Republic are mostly designed for all persons with mental illness.

Source: OECD survey ‘Understanding effective approaches to promoting mental health and preventing mental illness across the life course’, 2016 and supplemental sources identified by authors.
40. It remains difficult to identify funding that is allocated to mental health promotion/disorder prevention. In some countries it is possible to identify specific budgets for specific projects rather than for global budgets. This is not surprising; many of the programmes identified in this review may not be funded by health systems as they are instead located in other sectors such as education or labour.

41. Some countries also have highly devolved responsibilities for health and other sectors making it difficult to identify funding at a national level. Only two countries, Poland and Portugal, were able to give a total estimate of spending on mental health promotion and mental ill-health prevention; in Poland this amounted to up to PLN 17 million per year, funded from the public budget under the National Health Program, while in Portugal an estimated 5% of total health expenditure was directed towards mental health, of which some 10% was spent on promotion and prevention of mental health activities.

42. Nonetheless, the review has identified specific dedicated budgets in a number of countries for specific projects, which can be substantial. It also highlights the continued importance of time limited research and/or international support, e.g. from European Social Funds in countries with more limited resources for mental health.

**Significant attention is given to the mental health of children and young people in OECD countries**

43. 101 examples of measures for infants, children and young people and their parents were reported in 26 countries. When additional programmes identified by the authors are included, 150 actions could be found in 33 countries. More programmes were identified in this area than any other stage across the life course.

*In many countries perinatal screening and/or monitoring is becoming routine*

44. Examples of substantive initiatives to tackle perinatal depression were identified in 26 OECD and partner countries. These include measures to routinely screen women for depressive symptoms in countries including Australia, Israel, and New Zealand, England, and Japan (Box 4).

**Box 4. Perinatal mental health screening in Australia, Israel, New Zealand, England and Japan**

The National Perinatal Depression Initiative in Australia includes routine and universal screening for depression for women during the perinatal period (once during pregnancy and again about four to six weeks after the birth) by a range of primary and maternal health care professionals. Health care professionals receive training to help screen and identify women with perinatal depression. Appropriate follow up treatment for women with, or at risk of perinatal depression, include focused psychological treatment, counselling services, networks of support groups for new mothers, acute inpatient mental health care and community-based care and support. In total $120 million from all jurisdictions has been invested in the scheme to support the roll out of the service. Specific additional Commonwealth funding of $2m over four years (until 2016-17) was allocated to the national depression initiative BeyondBlue to continue to provide on-line training for health professionals and to raise community awareness about perinatal depression nationally.

Other examples of universal screening programmes for perinatal depression at national level were identified in Israel; the current mental health strategy in New Zealand builds on recommendations on screening in primary care (Ministry of Health, 2011) by including a commitment to develop the capacity of primary care professionals to screen more accurately for post-natal depression (Ministry of Health, 2012). In England NICE guidelines on the management of perinatal mental health recommend that a general discussion about mental health and wellbeing is had with all women upon first contact with primary care (or her booking visit) and during the early postnatal period. Routine health check-ups for expectant and new mothers in Japan also provide a potential opportunity to assess risk of perinatal depression and anxiety, with at least 45% of prefectural health centres making use of well-known screening instruments (Sugishita et al., 2013). Health visitors screen and then provide treatment for early signs of depression in new mothers as one element of the Chile Crece Contigo (Chile Grows with You) national programme that supports children from the pre-natal period until they start school.
45. Not all countries have national level actions. In Canada the national mental health strategy (Mental Health Commission of Canada, 2012) does not explicitly mention perinatal mental health, but strategies have been developed at provincial and territory level, for instance the ten year mental health strategy in British Columbia includes action to screen women in the perinatal period for mental health risk factors and provide appropriate follow-up (British Columbia Ministry of Health Services and British Columbia Ministry of Children and Family Development, 2010). This built upon existing guidelines to help develop a strategy for perinatal depression at local level in the province (BC Reproductive Mental Health Program: BC Women’s Hospital & Health Centre, 2006). However, screening strategies in the pre-natal period are not routinely provided (Kingston et al., 2014).

**Parenting programmes are recognised by countries as an important part of child mental health promotion strategies**

46. Parenting programmes, which are shown by the academic literature to be considered an important element of mental health (and child health) promotion strategies (Regan, Elliot and Goldie, 2016), are in place in many OECD countries. Such programmes have attracted national and/or regional governmental support in many jurisdictions such as the UK, Ireland and Germany.

47. These programmes often sit beyond the boundaries of the traditional mental health system, and are more commonly delivered under the jurisdiction of local authorities, social care authorities, or Ministries of Education. In England, for example, the Parenting Early Intervention Programme provided funding from the Department for Education to deliver evidence-based parenting programmes in all local authorities (Lindsay and Strand, 2013). Local authorities across the country continue to offer parenting programmes; they can choose what to provide. There are also NGO funded programmes. One example, Families and Schools Together (FAST), which is offered to parents of children aged 3 to 5 and has been shown to be effective in the United States, is provided predominantly to 6,000 families with 11,000 children living in poverty in the United Kingdom by the charity Save the Children.

48. In Germany the Federal ‘Early Help’ Initiative provides support to Lander, city and municipal districts to support parents of children age 0 to 3. With a budget of EUR 51 million in 2016 the initiative helps strengthen regional Early Support networks and promotes the use of family midwives or comparable professional groups. The scheme is available to all families, with more intense services available for higher risk groups. The initiative helps promote parenting skills and improved relationships between parents and their children.

49. The link between the role of the health system and parenting interventions has been framed explicitly in some countries. In Spain, the health promotion and disease prevention strategy within the health system recognises the importance of providing infants and young children with a good start in life. In early 2016 the Ministry of Health, Social Services and Equality began developing a pilot online course for parents –“Positive parenting: earning good health and wellbeing for 0 to 3 year olds.” Health literacy training provided to professionals working with parents of pre-school aged children in Slovenia includes information on emotional development of a child (attachment, communication, separation anxiety) and upbringing (self-image, raising borders, supporting independency, rewarding and punishing). Parenting programmes underscore the value of Ministries and sectors working together, which some countries have already recognised; the Ministries of Gender Equality and Family, Health and Welfare, and Education in Korea have published a joint plan to introduce continuous parenting courses across the life course (Kim, 2016).

50. International organisations have also supported the development of good parenting programmes as part of building long-term mental and physical good health. The EU, for instance, has supported parenting programmes in Lithuania, while in both Chile and Peru a PAHO developed programme “Strong
Families” (Corea et al., 2012) has been implemented with both parents and their teenagers to improve parenting styles and decrease risky behaviours in the young people.

A range of school-based resilience, social and emotional health, and anti-bullying programmes are effective at improving classroom atmosphere, improving academic performance, and reducing bullying; many programmes are transferrable across countries

51. Many countries have developed preventative mental health programmes for schools, including social and emotional literacy programmes, alongside measures to prevent and address bullying. As OECD (2015) has previously noted, the education system is the ideal setting for investing in ways to prevent adverse outcomes related to poor mental health, both given that 50% of all mental illnesses begin before the age of 14, and given the fact that almost all children in the OECD are in organised educational systems.

52. Numerous examples of social and emotional literacy programmes were reported by countries, often embedded as one element of school health promotion programmes, and delivered by teachers or by health professionals. The extent to which programmes are fully rolled out across all schools across countries is unclear, although in some instances very comprehensive initiatives have been undertaken. In Norway for instance the Mental Health in Schools co-operative project, which ran from 2004 to 2011, delivered mental health training directly to teachers and students as part of efforts to improve mental health literacy. Other examples of emotional literacy and health promotion programmes include major initiatives in Australia, New Zealand and Slovenia (see Box 5), but there are also many examples of programmes, perhaps only delivered in a small number of schools, that can be seen in OECD countries, e.g. in Latvia and Switzerland.

**Box 5. Mental health promotion in schools**

Both Australia and New Zealand have well established, nationally rolled-out programmes in school to promote mental wellbeing and help prevent mental illness.

In Australia KidsMatter is a national multicomponent programme targeted at primary school aged children (as well as early childhood education and care services) that teaches children skills for good social and emotional development. It received $A66 million from the Australian government between 2012 and 2016 in addition to funding from BeyondBlue. For older children MindMatters provides teacher training and resources to increase the capacity of secondary schools (11-18 years) to implement a ‘whole-school’ approach to mental health promotion, prevention and early intervention.

In New Zealand initiatives linked to the Prime Minister’s Youth Mental Health project have included a current evaluation of the My FRIENDS programme for children aged 11 to 18 to build students’ self-esteem and resilience to help them cope with depression and anxiety. If successful the programme may be rolled out further. New Zealand also has adopted the Positive Behaviour for Learning School-Wide framework, otherwise known as PB4L School-Wide, to help schools build a culture where positive behaviour and learning is a way of life.

Efforts in Slovenia show that a mental-health focus can be introduced broader health promotion in schools. The Slovenian Network of Health Promoting Schools covering 324 schools (around 50% of all schools) adopted the theme of mental health in for the years 2015/16 (National Institute for Public Health, 2016), which included the development of a manual for teachers on promoting mental health. Slovenia has also offered a Ministry of Health supported programme ‘This is me!’ since 2001, which supports adolescents in developing positive self-image and life-skills and includes e-counselling for adolescents and training teachers to deliver prevention workshops on building better self-image. The web portal allows young people free, anonymous access to advice. More than 50 professionals (doctors, psychologists, health educators, social workers and other counsellors) volunteer their services.

There are, too, examples of programmes that have been delivered in multiple countries. For instance, Zippy’s Friends – a universal school-based programme that helps young children to develop coping and social skills - can be found in 27, mainly OECD, countries, with evaluations in countries including Canada, Denmark, Ireland and Lithuania (Clarke, Bunting and Barry, 2014). In Norway the evaluation looked at implementation over 24 one hour sessions delivered once a week by a teacher over a school year. Using a cluster randomised evaluation design the programme was found to have had a positive effect on classroom atmosphere, as well as significantly reducing bullying and improving academic scores (Holen et al., 2013).
53. Actions targeted at children in school settings also include measures to prevent and address bullying, both physical and cyberbullying. In many instances it will be up to schools or regional school authorities to decide on implementation of these programmes, but schools may have a legal duty to prevent bullying. Many examples can be found; these were the most frequently reported school based mental health promotion programmes in a survey of EU Member States and Iceland (Samele, Frew and Urquia, 2013).

54. For instance Finland, Estonia, England, Wales and Italy have implemented the KiVA antibullying programme designed for children between the ages of 8 and 16, seven OECD countries have used the Olweus Programme, and Germany, France and Australia have developed anti-cyberbullying programmes (Box 6).

Box 6. Tackling bullying and cyber-bullying in schools

The KiVa anti-bullying programme in Finland has both universal actions, including student lessons and online supports directed at all students and focused mainly on preventing bullying. Actions are also targeted at children and adolescents who have been involved in bullying as either perpetrators or victims. KiVa has also been implemented in several OECD countries, including a pilot study in 3 schools in England and 14 schools in Wales that has demonstrated the feasibility of implementation (Yahner et al., 2015). In Wales the KiVa curriculum was able to fit within existing time for Personal, Social, Health, and Economic (PSHE) lessons in schools. Early evaluation reported significant reductions in victimisation, with positive feedback from pupils and teachers on the approach. Following this initial positive evaluation, a larger scale evaluation is taking place across Wales (Clarkson et al., 2016).

In a non-randomised trial involving more than 150,000 students, participants in the control group were 22% more likely to be victims and 18% more likely to be perpetrators of bullying during the first 9 months of the study (Karna et al., 2011). In another large cluster randomised trial in Finland there was also small but significant reduction specifically in cyberbullying among KiVA participants whose mean age was below 13 (Williford et al., 2013).

The KiVa programme has also been implemented in other countries, including pilot and ongoing studies in schools in Estonia, England, Wales and Italy (Yahner et al., 2015, Clarkson et al., 2016, Nocentini and Menesini, 2016). The Olweus Programme, another well known antibullying measure has been implemented by schools in countries including United States, Canada, Mexico, Lithuania (3 year EU funded pilot project), Iceland, Germany, Sweden and the United Kingdom. In Germany the school based ‘Medienhelden’ (Media Heroes) cyberbullying programme has been shown to have a positive effect on cognitive empathy (which has been associated with cyberbullying) (Chaux et al., 2016, Schultze-Krumbholz et al., 2016), while in Australia the Cyber Strong Schools initiative which involves actions for teachers and pupils, when examined in a randomised controlled trial involving more than 3,000 students in 35 schools, was found to be associated with lower levels of pupil involvement in cyberbullying at one year follow up (Cross et al., 2016).

Beyond the school-system, but still focused on bullying prevention, the Ministry of Education in France supports a free national telephone helpline to address both physical and cyberbullying, as well as a website advice service. By the end of 2016 1,500 trainers were due to be in place to reach more than 300,000 people. November 5, 2015 was also the first national day of action against bullying in school and it is also mandatory for schools to have prevention plans in place (Ministere de l’education nationale de l’enseignement supérieur et de la recherche, 2015). In the U.S. a federal government website managed by the U.S. Department of Health & Human Services – stopbullying.gov - provides information from various government agencies on what bullying is, what cyberbullying is, who is at risk, and how to prevent and respond to bullying. This pulls together resources across the government to address bullying, including app development (KNOWBullying) and a map of state laws and policies.

Initiatives targeted at high risk groups appear to be less common interventions for children and young people

55. While school-based programmes that cover all of a given age group (e.g. all school children, primary children, or a particular class or curriculum stage) are commonly reported across OECD countries,
interventions targeted at at-risk children and young people appear to be less common. A few initiatives – in Finland, Norway, the UK and Canada – were reported by countries or identified by the authors.

56. Children whose parents have mental health problems are at increased risk of poor mental health themselves. Multi-component programmes are emerging that identify and then support these children to protect their mental health. Examples of these initiatives can be seen in Finland, Norway and the United Kingdom.

57. Programmes may also be targeted at indigenous and minority populations. In Canada for example the federal government invests more than CAN 32.1 million each year in its Aboriginal Head Start in Urban and Northern Communities (AHSUNC) programme. This provides culturally appropriate early childhood development and parenting programmes, focused on emotional, social, health, nutritional, cultural and psychological needs for First Nations, Inuit and Metis children aged 3-5, and their families living off-reserve in urban and northern communities. CAN 47 million is invested annually in a similar programme for families of children aged 0-6 living on reserves.

Many countries have recognised the importance of good mental health in the workplace

58. While fewer countries reported actions targeted at the workplace and the unemployed that those in childhood and early years, and a smaller total number of actions were reported, many countries appear to have recognised the importance of good mental health in the workplace. Reported actions may also significantly underestimate actions that will be taking place across the OECD. 44 actions targeting either the workforce/workplace, or unemployed populations, were identified in 18 countries; when programmes identified by the authors were added, 70 actions could be found in 31 countries.

Health and safety legislation and labour laws are acting as catalysts for action to promote the mental wellbeing of employees

59. Health and safety legislation and labour laws can be catalyst for taking action to improve the mental wellbeing of working-age adults. Finland, Norway, Sweden, Denmark, the Netherlands, Austria and Belgium have all tackled psychosocial workplace risks and job strain through labour legislation (OECD, 2015). Countries are using labour laws to require employers to routinely assess, prevent and control psychosocial risks at work. In Australia, for example, the Model Work Health and Safety laws stipulate that employers have a duty to provide and maintain a working environment that is safe and without risk to the mental health of their employees (Safe Work Australia, 2014).

60. Finland, Lithuania, New Zealand and Japan are examples of countries that require employers to assess and respond to mental stress and strain at work. In Finland employers must identify and address psychosocial risk factors to employee health. In Lithuania, legislation which obliges employers to ensure safety and health of workers at work should mean that most employers will carry out a risk assessment psychosocial risk factors to health. Methodological regulations on psychosocial risk assessment were approved by the Ministry of Social Security and Labour and the Minister of Health in 2005. In New Zealand, the Health and Safety at Work Act 2015 explicitly includes mental health in the workplace. Employers and organisations need to consider the mental health of their workers when planning a safe workplace. Employers who ignore the potential for non-physical harms could find themselves facing penalties for not providing a safe workplace, including imprisonment (of up to 5 years) and fines (of potentially up to $3 million) (Chen, 2016). Japan, through the Ministry of Health, Labour and Welfare established a mental health at work programme in 2015. Employers are legally obliged to offer stress checks in workplaces with 50 or more employees. An advertising campaign to increase awareness of the right to a stress check was also developed. Grants are available to workplaces with less than 50 employees.
to provide these stress checks. Employers must provide specific supports to employees identified as having high levels of stress.

61. Governments can also establish and promote guidelines for the prevention, identification and management of mental health problems, including excess work-related stress; in many European countries the voluntary European Social Partners Framework Agreement on Stress published in 2004 acted as a catalyst (Leka et al., 2015). Workplace mental health promotion and illness prevention has also been a major focus of the work of the Mental Health Commission of Canada to develop voluntarily guidelines (CSA Group and BNQ, 2013). Designed for workplaces of all sizes and sectors, the guidance provides information on identification and assessment of risks to psychological health and on practices to reduce and mitigate this risk, and promote a mentally healthy workplace culture. Some workplaces may use the guidance to focus on creating policies and processes to promote good mental health, while others may use it to inform training programmes. Austrian updated guidelines on the assessment and evaluation of work-related stress were published in 2013 while Health Promotion Switzerland provides advice on how to identify stress in workplaces; it also has a website dedicated to providing information to companies on how to protect the mental health of young people who are on vocational training courses and apprenticeships.

While many workplace mental health promotion initiatives can be identified, they will not cover the whole working-age population

62. Interventions to promote mental wellbeing and prevent mental ill-health in the workplace include awareness raising and information sharing, psychosocial risk assessment, support for training, and bullying prevention. Even the largest of these initiatives, though, will cover only a proportion of the adults in work. Indeed, actions in the workplace depend heavily on the willingness of public and private sector organisations to invest in mental health promotion and larger business’ in many high income countries are likely to have workplace health promotion programmes or employee assistance programmes (EAPs) in place, many of which will cover stress and other mental health problems. Some trends do emerge:

- **Many of the efforts undertaken under health and safety legislation or labour laws involve awareness raising and information sharing**: for instance, the Canadian guidance provides information on identification, assessment and mitigation of risks to psychological health, Japan introduced an advertising campaign around its workplace stress check, while Finland and Switzerland are amongst other countries that have informational webpages. In Latvia, the Ministry of Health has organised lectures on mental health at work as one element of a broad mental health promotion programme. This has involved lectures on mental health, stress and burnout being delivered in 11 predominantly private sector workplaces reaching 315 employees. A website for the programme contains infographics and material on how to recognise risk of burnout in the workplace.

- **Collaboration and cross-funding between sectors** – be that employers and trade unions, government and businesses, advocacy groups and medical professionals – has contributed to building comprehensive workplace information and awareness campaigns in Australia, Lithuania and Slovenia:

  - In Slovenia, the National Institute of Public Health has teamed up with trade unions to provide lectures and workshops to 70-100 trade union informants and members on workplace mental health promotion (Bajt, Jeriček Klanšček and Britovšek, 2015); a manual looking at mental health and mental ill-health, mental ill-health prevention, workplace stress and burnout, depression, different stress coping techniques and related topics is also freely available online.
Funding has been provided by the Department of Health in Australia for targeted workplace initiatives as part of the national BeyondBlue programme to raise awareness and tackle depression, anxiety and other problems. This includes an initiative since 2014 to support the police, ambulance, fire and other state emergency services and reduce their risk of suicide. The National Mental Health Commission in Australia also established the Mentally Healthy Workplace Alliance (the Alliance) in 2013, a collaboration between business, community, academia and government. The Alliance has partnered with BeyondBlue on the roll out of a national campaign – Heads Up – to support and create mentally healthy workplaces for all businesses across all sectors. Heads Up has produced resources for businesses, large and small, for managers, the boardroom and employees.

At a regional level, funded by the Lithuanian Ministry of Health and led by the Vilnius Public Health Bureau, in 2016 a broad workplace health promotion initiative, involving more than 10 public and private sector workplaces received support and courses on health, including on exercise and the management of stress and use of stress relaxation techniques, including music therapy were established (Cholopova, 2016).

- **Training programmes for workplaces** are found in several countries, many of them financially supported by governments. In Germany the Federal Ministry of Labour and Social Affairs, in partnership with regional government and the accident insurance funds operates a Joint German Health and Safety Initiative “Gemeinsame Deutsche Arbeitsschutzstrategie”. It provides EUR 200 000 per annum to run a programme to reduce the risk of undue psychosocial stress in workplaces. The programme informs and trains company owners, managers, personnel officers and those responsible for health and safety in the workplace on ways to detect and avoid health risks due to psychological stresses at work at an early stage. Prevention advisers in Belgium also advise workplaces on measures to take for psychosocial wellbeing, while annual risk assessment plans prepared by workplaces aim to minimise stress and violence at work (Samele, Frew and Urquia, 2013).

- **Measures to tackle bullying in the workplace**, including mobbing (bullying by a group of co-workers), can also be identified. In the Veneto region of Italy a law promoting and supporting actions aimed at preventing psycho-social distress at work, including tackling mobbing, was passed in 2010 (Regione del Veneto, 2010). EUR 700,000 per annum is available from the regional government to support implementation and the work of a regional observatory which produces annual reports. Training is provided to primary care doctors, mental health services and occupational health services. Local health services also have to provide advice services on bullying and stress in the workplace and refer individuals to relevant support services; they also have to provide ‘reference centres for wellbeing in the workplace’ containing a multidisciplinary team of experts, including occupational health professionals, psychologists and psychiatrists. Guides on this issue are published by health and safety regulatory authorities in some countries such as Finland, the UK and New Zealand where an updated 46-page Preventing and Responding to Bullying at Work includes an extensive list of bullying behaviours, only one of which refers to physical actions (Worksafe New Zealand, 2017). These New Zealand guidelines were in part informed by similar guidance in Australia (Safe Work Australia, 2016). Australian workers can seek assistance from work health and safety regulators to address concerns about workplace bullying. They may also apply to the Australian Fair Work Commission for a ‘stop-bullying order’ which allows Commission members to make any orders that they believe will prevent future bullying and allow normal working relationship to resume.

- In Finland, as a part of a Forum for Wellbeing at Work Programme, which was funded by the Ministry of Social Affairs and Health and carried out by the Finnish Institute for Occupational
Health, a programme for tackling workplace bullying and mobbing was carried out between 2013-2015. In collaboration with trade unions, guidelines and practical tools for workplaces on how to prevent bullying and mobbing, how to handle such cases in workplaces and how to create a zero-tolerance culture in one's workplace concerning bullying and mobbing were provided. All materials are freely available online and several seminars and training events aimed at workplaces have been organised.

Few specific initiatives target the long term unemployed

63. Unemployment is a risk factor for poor mental health; but there appear to be few specific initiatives targeted at the long term unemployed. While 21 programmes in 12 countries were identified, many in fact focus on helping to reintegrate individuals who already had mental health problems into the workforce, or were generic public employment services rather than actions to promote and protect the mental health of both the newly unemployed, e.g. as a result of an economic downturn, or the long term unemployed. Certainly, these flexible opportunities to partially return to the labour market for those with health problems, such as in Norway or Finland, can by facilitating return to work help promote better mental health. Similarly effective identification of mental ill-health amongst jobseekers, and appropriate support, are critical, as emphasised in previous OECD work (OECD, 2012, OECD, 2015). There may be a gap, though, in interventions that protect the mental wellbeing of jobseekers who are struggling find work for reasons other existing mental ill-health.

64. Where programmes were reported, they aligned well with the available academic evidence of effective approaches to protecting the mental wellbeing of unemployed people. Notably, the programmes focused on delivering psychological support – including through employment services –, and training and active labour market programmes:

- A psychological support service that has emerged as a direct result of the economic downturn can be seen in Greece. In a suburb of Athens a centre for the psychosocial support of the long term unemployed was established in 2013 with a budget for its first two years of approximately €0.57 million, supported by the European Social Fund and Ministry of Health (Center of Psychosocial Support of Long-term Unemployed, 2016). The centre staffed by five psychologists, two social workers, an employment advisor and two psychiatrists offers the chance for up to 20 sessions of counselling and psychological support. The service is also provided in other locations in the Athens area. The centre supported more than 1,200 people in this time period.

- Psychological support may potentially be embedded into public employment services in some countries. One example of this can be seen in Lithuania where a programme supported by the European Social Fund between 2014 and 2017 for the unskilled unemployed provides psychological support and counselling centres to help promote self-confidence and motivation to seek employment. 3,500 individuals have so far participated in these psychological support and guidance services (Lithuanian Labour Exchange, 2016). In Finland, although not specifically offering mental health support, a “Youth Guarantee” with funding of €5 million between 2016 and 2018 ensures that young people who contact public employment services will be offered a job within three months; this the government argues can help reduce the risk of poor mental wellbeing (Valtioneuvosto, 2016). Eight apprenticeship scheme projects in Austria for young people to enter employment also address the issue of mental health and stress in the workplace.

- Costa Rica has in place a programme intended to boost the mental wellbeing of people from 17 to 24 years who do not study or work and also are in an unfavourable socioeconomic status. Alongside conditional transfers to support technical and occupational training, according to labour market needs – to improve employment prospects – the training process is supported through
motivational talks, monitoring and support, which are understood as related to mental ill-health prevention.

- There has also been recent focus on promoting the mental health of the unemployed in Portugal, another country significantly affected by the economic downturn. With an EEA grant a programme of work on employment and mental health (Emprego Saudavel) has been undertaken with the aim of developing interventions and indicators to monitor measures to protect the mental health of those who have become unemployed, as well as those in precarious employment.

**Efforts to protect the mental wellbeing of older people appear under-developed**

An area that appears to have been the focus of much less action concerns the mental health of older people; 22 actions were reported in 14 countries; the authors identified an additional 8 actions, including in a further five countries (a total of 30 actions in 19 countries). Many of those initiatives that are in place focus on addressing loneliness and social isolation, often through the provision and/or signposting of social and cultural activities (see Box 7).

---
**Box 7. Protecting the mental wellbeing of older people by reducing loneliness and improving social integration**

As demonstrated in the review of academic evidence, loneliness and social isolation are particularly common amongst older populations, and can endanger mental health. Social lunch and activity clubs provided by local groups in most countries, some of which receive some public funding, and local hubs, such as clubs and community cafes, provide opportunities for providing various physical and social activities, and can protect mental wellbeing. Services may be universally available to all older people or targeted at specific high risk groups (such as the bereaved, those with physical health problems or lack of access to transport). One example of a targeted scheme is the Men’s Sheds movement that originated in Australia and now can also be seen in other countries including the UK. This started off with local groups of men meeting in ‘sheds’ where men could participate in shared (often creative activities) and build friendships.

One recent mapping of services to tackle loneliness in six different local areas in England identified a very broad mix of local activities services, including lunch clubs, dance afternoons, befriending services and sports groups. Information, signposting and home visiting services were also found in localities. There were also opportunities for older people to engage in volunteering activities. Some of these different initiatives receive some funding from public sources while others are funded through the national lottery, charitable donations or user charges (McDaid, Park and Matosevic, 2015). Government grants may be awarded to non-governmental organisations and community groups to deliver services, as for instance in Norway, where various initiatives to counteract loneliness, passivity and social withdrawal have been introduced. One national project managed by the Directorate of Health “The Grand Activity Scheme”, with a budget of 18.8 million Krones in 2016, provides grants for local areas to create social activities with inclusive participation, as well as provide access to local community venues to meet and strengthen the sense of community. Meanwhile in Iceland the Home Visiting Programme is a national programme maintained by the Icelandic Red Cross where trained volunteers make weekly visits to older, ill, or socially isolated individuals to reduce loneliness and increase well-being.

In addition, face to face befriending and telephone befriending/ counselling services set up to provide regular social contact between older people and volunteers (who may be peers or of different generations) can be identified, as for instance seen in Italy, where a scheme originally developed to address risks of suicide linked to loneliness in Trieste in the 1990s is now available at a nationwide level, while there are several national helplines and services in England, including the high profile Silver Line service, a confidential, NGO run free helpline for older people across the UK that has been open 24 hours a day since 2013. Psychological support services have been developed in the Netherlands.

---

Online supports and services that go beyond efforts to increase interactions have also emerged; they may take the form of chat type services, but may also offer online cognitive behavioural therapy wellbeing courses specifically tailored to older people with clinical and sub-clinical levels of depression.
and anxiety disorders, as seen in Australia. Funding may also be provided to promote digital inclusion through internet and computer training courses; these courses (and indeed various education activities for older people, such as face to face and/or university based courses for older people offered in Spain as well as local non-governmental organisation schemes, such as the University of the Third Age found in several countries also can help tackle loneliness (McDaid et al., 2015).

67. Programmes that will in effect support the mental health and wellbeing of older people may also be set within broader healthy ageing initiatives and healthy ageing communities. Some of these schemes can be characterised by the provision of information and advice on mental health issues, including depression and risk factors for poor mental health including loneliness. There are also initiatives such as Age Friendly Communities (AFC): an approach to creating built and social environments which support and enable older people to enjoy good mental and physical health, participate actively, and live in security. The Canadian government is working with the WHO and all provinces across Canada to make communities more age-friendly and enhance quality of life for people of all ages. More than 1,000 communities in all ten provinces are making their communities more age-friendly.

68. Examples of preventive home visits to identify risks of physical and mental health problems in older people can be seen in some regions of Norway. National funding and support was provided for the development of the programme; but implementation is a decision for regional authorities. Another example of this type of service is provided by the Fire Service in Merseyside, UK, during routine visits to homes to install or maintain smoke alarms.

**Most OECD countries have suicide prevention strategies in place, which may well have contributed to falling suicide rates**

69. Much has been written about suicide prevention strategies around the world. Most suicidal behaviour is associated with poor mental health, and early actions to identify individuals at risk of depression in particular may help to reduce cases of suicidal behaviour. Longstanding commitment to suicide reduction across OECD countries can be understood – along with improvements in mental health care – as having made a contribution to significant reductions in the OECD suicide rate. Indeed, since 1990, suicide rates have decreased by around 30% across OECD countries, with the rates being halved in countries such as Hungary and Finland (Figure 5). While suicide rates have not fallen in a uniform way across countries – Estonia and Japan, for instance, both saw rising suicide rates in the 1990s before rates began to fall, while suicide rates began to fall only in 2010 in Korea – decreases have been seen amongst all countries. In some countries suicide rates rose slightly at the start of the economic crisis; in Greece, suicide rates were stable in 2009 and 2010, but have increased from a very low baseline rate since 2011.
Figure 5. Suicide rate in OECD countries, 1990 and 2014 (or nearest year)


70. Many countries have national suicide prevention plans. There are also examples of strategies and initiatives targeted at different age groups, e.g. young people, or environments, e.g. workplace, schools or prisons. Actions to prevent suicide can be found in most OECD countries, such as restrictions in access to lethal means, as well as examples of safety measures e.g. on bridges. These are not discussed in detail here, but examples of programmes that receive public sector support to increase awareness of risk signs for suicide can be identified across the OECD. Guidelines on media reporting and web based information are also found in most countries. Telephone and, more recently, online counselling services, are also to be found in many OECD countries. For instance, ‘113Online’ is an independent organisation in the Netherlands that provides an online suicide prevention and intervention programme subsidised by the Ministry of Health, Welfare and Sport. Its main activity is to provide a website with information about suicide and mental health problems, offering 24/7 access to a telephone helpline for those who are suicidal, their relatives and bereaved next of kin. It also provides crisis intervention by telephone or by web chat, self-tests (to offer an indication of the severity of troubles and symptoms) and brief solution-focused psychotherapy.

71. Training programmes for gatekeepers, such as the police, teacher and primary health care staff, to recognise risk factors for suicide are available in many countries. Multi-component programmes can be identified, e.g. in many different local areas in Europe that have established suicide prevention initiatives as part of the European Alliance Against Depression.

72. Detailed suicide prevention strategies continue to be developed, for instance in Korea there has been a recent emphasis on the importance of training gatekeepers to be able to identify the risks for suicide. Reflecting the general tendency for Korean people to be less likely to explicitly express their emotions and/or difficulties to others, a programme developed by the Korean Association for Suicide Prevention put an emphasis on seeing people and reading visual cues by looking at videos and role-playing with all age groups. In 2013 from March to December alone, a total of 32,285 lay people completed this “See, Listen, Talk” course nationwide (Ministry of Health and Welfare, 2013).
3. POLICIES TO EFFECTIVELY PROMOTE MENTAL HEALTH AND PREVENT MENTAL ILLNESS

73. Drawing on country-reported activities, and through an overview of available academic literature, this paper presents an overview of approaches to promoting mental wellbeing and preventing mental ill-health in OECD countries. The findings of this review are fully consistent with recent OECD work on mental health which has emphasised the importance of increasing efforts in workplaces and schools (OECD, 2016), as well as other important recent international research, notably the Disease Control Priorities Project published by the World Bank on mental disorders which places a strong emphasis on the value of investing in promotion and prevention (Patel et al., 2015).

There is a clear economic case to be made for mental health prevention and promotion interventions across the life course

74. The best available evidence shows that there is a case for OECD countries to invest in actions with a robust evidence base from systematic reviews and meta-analyses. There is also a clear economic argument that can be made for many investments right across the life course.

75. OECD countries have already recognised that the mental health of young people and the working age populations are critical issues for achieving high employment and inclusive growth (OECD, 2016); the OECD’s Recommendation Of The Council on Integrated Mental Health, Skills and Work Policy already recognises the importance of prevention to reduce the incidence of mental illness and to ensure mental resilience and awareness early in life. This recommends that adherent members and non-members take action, including promotion and prevention activities, to foster mental wellbeing.

76. There is a clear case for action – and an economic case for action – in later life also. While investment in better mental health in the early years of life and for young people is likely to be associated with the greatest potential overall levels of return on investment, the evidence base makes clear that cost effective actions can also be targeted to individuals of all ages, for instance by promoting the mental health of older people through measures to address loneliness.

77. However, OECD countries may also wish to consider producing their own country specific estimates of the economic return from investment. It is probably no coincidence that some of the countries that appear to have given more prominent attention to developing measures to promote mental health, including Australia, Canada, the Netherlands and the United Kingdom, are among those that have generated a substantial evidence base on the economic case for investing in mental health promotion and disorder prevention. A related issue is the need to improve what is known about existing spending on and provision of services across sectors. Most countries were unable to document spending in this area and measures to better report expenditure on mental health promotion and disorder prevention could be considered. Furthermore, many of the initiatives identified in the survey for this report have time limited funding, creating uncertainty over the long term sustainability.

There is substantial disparity in the profile of promotion and prevention between OECD countries

78. Despite the compelling evidence base, there still appears to be a substantial disparity in the profile of promotion and prevention between OECD Member States. Although some OECD countries have been very active in this field, questionnaire responses suggest that in many countries actions appear to be limited, only available in a small number of locations, and without obvious sustainable sources of funding (see Table 1). While in some countries two or more prevention or promotion programmes were in place across all or most of the life course (e.g. Australia, England, Iceland, Switzerland), in other far fewer or no
programmes could be identified (e.g. Czech Republic, Hungary, Poland). This may reflect misperceptions that may persist on the relative merits of supporting mental rather than physical health; the stigma associated with poor mental health may also act as a barrier to action in some contexts. Public health and health promotion actions in general may be seen as a low priority in some settings; in this already neglected area, mental health prevention and promotion risks being neglected further.

79. Evidence of substantial investments in specific programmes in some OECD countries can be identified but a continued challenge in mapping actions across the OECD is the lack of standardised information to allow for meaningful comparisons of the level of investment in mental health promotion and prevention across countries. Even with an increased availability of accurate data on spending within mental health systems any comparisons would potentially be highly misleading without efforts to co-ordinate and share information on spending on relevant activities in other sectors, especially when mapping actions targeted at children and young people.

Infant, child and adolescent mental health promotion and disorder prevention, along with suicide prevention, are the areas that have received the most attention

80. Despite challenges in mapping activities, infant, child and adolescent mental health promotion and disorder prevention, along with suicide prevention, are the areas that have received the most attention. Most countries are taking, or beginning to take action to promote good psychological and emotional development in children, whilst being mindful of the importance of parenting and a good attachment between children and both their parents.

81. Many examples of programmes delivered in schools can be identified; in some countries such as Australia, the UK, New Zealand and the Netherlands, mental health promotion activities are seen in most schools; in others settings or countries however programmes are still limited and little beyond online information and resources may be available. There is clearly scope for further potential economic returns from better mental health and wellbeing in childhood that could be realised through further expansion of programmes targeted at children across OECD countries.

82. Many examples of actions in workplaces are found in OECD countries; the challenge here is the need to work in partnership with employers, many of whom are likely to be in the private sector. While many large scale enterprises (500 plus employees) in most countries will consider stress and mental health issues as part of their occupational health programmes, the availability of these services in small and medium sized business is much more limited. More still can be done to change the misperception that some employers may have that there is no strong business case for workplace mental health programmes. The strength of legislation and regulations on stress and mental health at work will also have an impact on these efforts. The public sector can also lead by example by strengthening and evaluating workplace mental health programmes.

83. There is a growing evidence base indicating sustained risks to mental health not only from long-term unemployment but also from job insecurity and downsizing within workplaces (McDaid and Park, 2014, Eliason and Storrie, 2009), yet only a handful of services were identified that focus on strengthening the resilience and coping skills of individuals when faced with unemployment.

84. OECD countries may wish to consider whether more can be done to support these population groups. For example, there may be scope for providing psychological support not only to all individuals who lose their job in a downsizing, but also those that ‘survive’ the downsizing process. There is evidence that poor handling by human resources of the downsizing process is associated with poor mental health outcomes, some of which may be as harmful as those experienced by the unemployed (Brenner et al., 2014, Kim and von dem Knesebeck, 2015). Better mental health can help individuals from becoming
demotivated from continuing to seek employment; there is scope for investment in psychological support for both the long term and newly unemployed.

85. Questionnaire responses also provided only a few examples of measures in countries to protect the mental health and mental wellbeing of older people. This may in part be because many actions, such as those to address risk factors for poor mental health such as social isolation, might be taken at very local level and perhaps not involve governmental agencies in any significant way. As populations continue to age it is important to consider whether more can be done to support the mental health of this age group.

86. There is likely to be a need for individuals to stay in the workforce for longer; older people also make substantial contributions to the economy through volunteering and informal care. Poor mental health can be a primary reason for premature retirement and withdrawal from these activities. Although the potential for the prevention of dementia is not discussed in this review, actions to protect the mental health of older people, including group based participation in activities such as education, may also help to preserve cognitive function for longer, although this area needs careful research.

There may be a case for targeted and/or opportunistic screening for mental ill-health

87. While screening programmes are often an element of public health policies, there are equivocal views on whether population wide screening for mental health problems such as depression is practical and effective. Opportunistic screening is feasible in specific settings such as schools and workplaces and many examples of training programmes to raise awareness of risk factors for poor mental health delivered to teachers and workplace managers and other employees can be seen in OECD countries. Recently the United States Preventive Service Task Force has also recommended that all adults, including women in the perinatal period, be screened for depression when they visit a doctor (Siu et al., 2016).

88. Routine screening for poor mental health has also been recommended in multiple countries for individuals living with long term physical health problems and in other potential high risk groups such as ‘looked-after children’, i.e. children who do not live with their families. Universal screening for perinatal depression is common amongst OECD countries.

As countries seek to implement the OECD Council Recommendation, and safeguard the mental wellbeing of their populations, there are many good examples to learn from

89. There are clear opportunities for countries to share learning about the development and implementation of mental health promotion and disorder prevention actions. As OECD countries seek to implement the Recommendation of the Council on Integrated Mental Health, Skills and Work Policy, this paper seeks to offer examples that countries with weaker mental health promotion and prevention provision could follow. The rich academic literature and evidence base, and extensive OECD country experience, should give encouragement to those countries who have more work to do in order to foster mental wellbeing and improve awareness and self-awareness of mental health, secure the mental wellbeing of children and young people and improve the educational outcomes, and foster mental resilience in adults throughout their working lives and into old age.

90. There is already some evidence of successful cross-country transfer of programmes; the KiVa antibullying programme for school children established in Finland has since been implemented or piloted in countries including Estonia, England, Wales and Italy, while the school programme Zippy’s Friends can be found in 27 countries worldwide.

91. One action that countries may wish to consider is to ensure that they have an up to date and comprehensive strategy for promoting mental health across the life course. Australia, Canada, Finland, and the United Kingdom are highly active in promotion and prevention activities, and have well developed and
detailed mental health promotion policies and strategies – typically included within broader mental health, health, or wellbeing strategies – that have considered issues from a life course perspective. These plans have either been developed and/or endorsed by government and draw heavily on published evidence on the effectiveness of interventions, sometimes considering how this evidence can be transferred to a local context. The further development of such plans and strategies in OECD countries, either as standalone documents or within mental health plans, could help drive implementation. Developing an evidence-based, sustainable, costed mental health plan will likely be particularly valuable for those countries with weaker mental health systems and/or less develop prevention and promotion activities.

**Effective actions can be identified and adopted even for resource-limited setting**

92. Many of the initiatives identified in the survey for this report have time limited funding, creating uncertainty over the long term sustainability. Countries can consider measures to ensure that funding is provided from within core recurrent budgets within health and other sectors. Financial and regulatory mechanisms, such as shared budgets and conditional funding based on partnership working, can also be used to help encourage intersectoral collaboration (McDaid and Park, 2016).

93. Limited resources are clearly having an impact on the scope of activities in some countries, where the focus primarily may be on the provision of information, as for instance seen in Slovenia, although Slovenia is also investing in the development of concrete actions in this area. However, the review has highlighted several examples of programmes that have been adapted and implemented across different OECD countries, including adaptation to lower resource settings, such as Peru and Chile. Opportunities for exchanges may also help to build research and implementation capacity across the OECD. In Italy a limited national government funded initiative with just EUR 250,000 funding found that psychological interventions targeted at high risk women, including cognitive behaviour therapy and counselling significantly reduced the symptoms of perinatal depression. As a result similar initiatives are being developed by some regional health authorities.

94. Countries might also consider how best to incentivise non-governmental organisations that have developed specialist skills in mental health promotion and disorder prevention; such organisations have played an important role in the diffusion of these actions in several highly active OECD countries. In some countries there will also be additional programmes and initiatives supported/delivered by the non-governmental sector. In Australia, for example, the country has a number of non-governmental organisations focused on this area, for example PANDA (Perinatal Anxiety and Depression Australia), which receives some governmental support, operates a national specialist perinatal mental health telephone counselling service, as well as reducing stigma around perinatal anxiety and depression, and providing education services to health professionals and the wider community.

95. In Ireland, the NGO Barnardo’s operates a database providing information on parenting courses that are available around the country; some are provided free of charge. The government’s Child and Family Agency has a strong focus on helping positive parenting, with online information for parents of children of all ages; this advice covers topics including communication, bonding and attachment, dealing with stress and bullying. It also has a guide on how to help parents help their children to cope with the emotional impact of the recent recession.

**Mental health prevention necessitates health, employment, education and social care sectors and others to work closely together.**

96. This issue of intersectoral collaboration is critical. This can work more easily when sectors are already used to working together with some intimacy (e.g. related to school health promotion), less well when sectors are more diffuse (e.g. in workplaces) and poorly when opportunities for contact are more
limited e.g. links between services supporting the unemployed. The need to prioritise cross-sectoral collaboration in the area of mental health has been stressed throughout the OECD’s work in this area (OECD, 2012, OECD, 2014, OECD, 2015); the costs of mental illness outside of the mental health sector have also been well-established, be that in costs incurred in the social benefit system, lost productivity, or elsewhere in the health system.

97. It is essential to think about how best to collaborate across sectors to optimise the potential to improve mental health and wellbeing. Generating and providing more information on the economic return on investment from actions when implemented across sectors can help inform mental health strategy documents England (Knapp, McDaid and Parsonage, 2011) and place promotion and prevention on a more level playing field with other potential areas within health systems for investment.

98. Economic and effectiveness analysis could also explicitly take account of the benefits to relevant other sectors of investing in mental health promotion. This may help increase the willingness of these sectors to invest in mental health promotion and disorder prevention activities. There is potential for improved academic performance and better classroom atmosphere in school based settings, which can improve educational outcomes (McDaid, 2016a); better mental wellbeing in workplaces can have a knock-on positive effect on productivity; mental resilience will be an advantage for jobseekers; better mental health can contribute to better physical health, and bring down the costs of treating physical illnesses (OECD, 2014, OECD, 2015).

Looking beyond mental health actions to promote mental wellbeing: housing and social welfare; good care for physical health; early-intervention

99. The breadth of the literature has meant that this report has deliberately narrowed the scope and focused predominantly on the primary prevention of mental disorders and the promotion of mental wellbeing in the population where many of these actions take place outside health care systems. This report has not therefore been able to cover all potential areas for action. It has previously noted that many actions not specifically intended to protect mental health will also have a positive impact: e.g. access to housing, social welfare income safety nets, financial debt alleviation, measures to reduce crime and improve community cohesiveness.

100. There will also be additional opportunities within health systems, including early intervention, better collaboration and co-ordination to promote and protect the mental health of individuals living with chronic physical health problems such as cardiovascular disease, diabetes, musculoskeletal health problems, as well those living with a cancer diagnosis. Examples of effective and cost effective actions to promote better collaboration between physical and mental health specialists, and with primary care, which have benefits for the management of physical as well as mental health status, can also be identified (Panagioti et al., 2016).

101. Space constraints have also limited discussion on secondary and tertiary preventive actions. One example of this evidence base includes actions to intervene to improve the health and social functioning outcomes for individuals suspected of having, or being at risk of developing, a psychotic condition for the first time. The effectiveness and cost effectiveness of specialist early detection and early intervention programmes for psychosis is strengthening, with significant implementation in some but not all OECD countries (Csillag et al., 2015). Timely access to support for mental health is likely to have a bearing on the severity and duration of psychosis symptoms. For instance, in 2008 the US Department of Health and Human Services’ National Institutes of Medicine’s National Institute of Mental Health (NIMH) launched RAISE a large-scale research initiative looking at coordinated specialty care treatments for people who were experiencing first episode psychosis. It found that this type of community-based care was associated with better outcomes and had a high probability of being cost effective compared to standard care.
(Rosenheck et al., 2016, Kane et al., 2016). These economic benefits may persist over time. Recent analysis in one region of England reported lower three year costs with better health and social functioning outcomes, e.g. independent housing status, for recipients of specialist early intervention teams rather than standard community mental health teams (Tsiachristas et al., 2016).

4. CONCLUSIONS

102. There is a clear case for further investment in introducing programmes to promote good mental health and prevent mental illness; there is a sound and quite extensive evidence base for effective and cost effective actions. For instance, actions to prevent depression and anxiety can bring life-long economic benefits to mothers and children, while certain workplace interventions could reduce the cost of lost productivity – notably sickness absence and presenteeism – by up to a third.

103. However, the highly uneven focus on mental health promotion and disorder activities is highly uneven across OECD countries. A number of OECD countries have clearly already recognised the importance and potential of preventive activities in the field of mental health, and are already very engaged. Countries like Australia, Canada, England, Finland, Norway, and Switzerland can be seen to be leading the way. For those countries with less well-developed approaches to promoting mental well-being and preventing mental ill-health, there are clear opportunities for OECD countries to share learning about the development and implementation of mental health promotion and disorder prevention actions.

104. In particular, the following recommendations can be drawn to identify and establish effective approaches to preventing mental ill-health to across OECD countries:

- In seeking to fully implement the recommendation of the OECD Council on ‘Integrated Mental Health, Skills and Work Policy’ countries can use the findings of this paper to consider shortcomings in their own countries, and leverage the promising examples identified.

- Mental wellbeing of people of all ages should be prioritised. For some countries this will demand scaling-up activities across the life course, for others it would require further targeted efforts for particular groups, notably for older people or the unemployed. There may be scope for a stepped care approach to action, making use of new opportunities provided through access to online help and support.

- An up to date and comprehensive strategy for promoting mental health across the life course ought to be developed and/or endorsed by government, and reflect best evidence on the effectiveness of interventions, as well as appropriateness of actions in a local context. Steps to monitor and evaluate the effectiveness of implementation ought also be considered.

- Country-specific estimates of the economic return from investment in promotion and prevention activities would improve understanding of existing spending on and provision of services across sectors, and build a fuller picture of the impact of spending in this area. This could include looking at economic returns to sectors other than health that may have to invest in or deliver promotion and prevention activities.
Intersectoral collaboration is also critical, across and beyond health care and mental health care systems. It will involve collaboration with many different stakeholders including social care, housing services, as well as the education sector and workplaces. Mental health prevention necessitates that sectors work closely together; effective interventions across the life course will demand that policy-making become far more joined-up that is the current norm. There is also a vital role for research agencies in funding the development of infrastructure that can support and/or incentive collaboration.

Consideration should be given to the funding mechanisms for promotion and prevention activities; time-limited or programme-specific funding can undermine longer-term sustainability of actions. Countries might look to prioritise funding provided from within core recurrent budgets within health and other sectors. Equally, financial and regulatory mechanisms, such as shared budgets and conditional funding based on partnership working, can also be used to help encourage intersectoral collaboration.
REFERENCES


Matrix Insight 2013. Economic analysis of workplace mental health promotion and mental disorder prevention programmes and of their potential contribution to EU health, social and economic policy objectives, Brussels, Executive Agency for Health and Consumers.

McDaid, D. 2016a. Investing in health literacy: what do we know about the co-benefits to the education sector of actions targeted at children and young people? , Copenhagen, World Health Organisation Regional Office for Europe.


OECD HEALTH WORKING PAPERS

A full list of the papers in this series can be found on the OECD website: http://www.oecd.org/els/health-systems/health-working-papers.htm

No. 96 THE ECONOMICS OF PATIENT SAFETY: STRENGTHENING A VALUE-BASED APPROACH TO REDUCING PATIENT HARM AT NATIONAL LEVEL (2017) Luke Slawomirski, Ane Auraaen and Niek Klazinga

No. 95 FUTURE TRENDS IN HEALTH CARE EXPENDITURE: A MODELLING FRAMEWORK FOR CROSS-COUNTRY FORECASTS (2017) Alberto Marino, Chris James, David Morgan and Luca Lorenzoni

No. 94 UNDERSTANDING VARIATIONS IN HOSPITAL LENGTH OF STAY AND COST: RESULTS OF A PILOT PROJECT (2017) Luca Lorenzoni and Alberto Marino

No. 93 MEASURING SOCIAL PROTECTION FOR LONG-TERM CARE (2017) Tim Muir

No. 92 CYCLICAL VS STRUCTURAL EFFECTS ON HEALTH CARE EXPENDITURE TRENDS IN OECD COUNTRIES (2017) Luca Lorenzoni, Jonathan Millar, Franco Sassi, Douglas Sutherland

No. 91 AN OECD ANALYSIS OF HEALTH SPENDING IN NORWAY (2017) David Morgan, Michael Gmeinder, Jens Wilkens

No. 90 HOW OECD HEALTH SYSTEMS DEFINE THE RANGE OF GOOD AND SERVICES TO BE FINANCED COLLECTIVELY (2016) Ane Auraaen, Rie Fujisawa, Grégoire de Lagasnerie, Valérie Paris

No. 89 THE ORGANISATION OF OUT-OF-HOURS PRIMARY CARE IN OECD COUNTRIES (2016) Caroline Berchet, Carol Nader

No. 88 HEALTH CARE COVERAGE IN OECD COUNTRIES IN 2012 (2016) Valérie Paris, Emily Hewlett, Ane Auraaen, Jan Alexa, Lisa Simon

No. 87 PHARMACEUTICAL EXPENDITURE AND POLICIES: PAST TRENDS AND FUTURE CHALLENGES (2016) Annalisa Belloni, David Morgan, Valérie Paris

No. 86 THE LABOUR MARKET IMPACTS OF OBESITY, SMOKING, ALCOHOL USE AND RELATED CHRONIC (2016) Marion Devaux, Franco Sassi

No. 85 INTERNATIONAL COMPARISON OF SOUTH AFRICAN PRIVATE HOSPITALS PRICE LEVELS (2015) Luca Lorenzoni, Tomas Roubal

No. 84 PUBLIC EXPENDITURE PROJECTIONS FOR HEALTH AND LONG-TERM CARE FOR CHINA UNTIL 2030 (2015) Luca Lorenzoni, David Morgan, Yuki Murakami, Chris James

No. 83 EMERGENCY CARE SERVICES: TRENDS, DRIVERS AND INTERVENTIONS TO MANAGE THE DEMAND (2015) Caroline Berchet
RECENT RELATED OECD PUBLICATIONS

OECD REVIEWS OF HEALTH SYSTEMS - COSTA RICA
Assessment and Recommendations (2017)

OBESITY UPDATE (2017)
http://www.oecd.org/health/obesity-update.htm (Electronic Format Only)

PRIMARY CARE REVIEW OF DENMARK (2017)

NEW HEALTH TECHNOLOGIES - MANAGING ACCESS, VALUE AND SUSTAINABILITY (2017)

TACKLING WASTEFUL SPENDING ON HEALTH (2017)

OECD REVIEWS OF HEALTH SYSTEMS: LATVIA (2016)

HEALTH AT A GLANCE: EUROPE (2016)

HEALTH AT A GLANCE: ASIA/PACIFIC (2016)

BETTER Ways TO PAY FOR HEALTH CARE (2016)

HEALTH WORKFORCE POLICIES IN OECD COUNTRIES: RIGHT JOBS, RIGHT SKILLS, RIGHT PLACES (2016)

OECD REVIEWS OF HEALTH CARE QUALITY: UNITED KINGDOM (2016)

OECD REVIEWS OF HEALTH SYSTEMS: MEXICO (2016)


HEALTH AT A GLANCE (2015)


FISCAL SUSTAINABILITY OF HEALTH SYSTEMS: BRIDGING HEALTH AND FINANCE PERSPECTIVES (2015)


ADDRESSING DEMENTIA – THE OECD RESPONSE (2015)

CARDIOVASCULAR DISEASE AND DIABETES – POLICIES FOR BETTER HEALTH AND QUALITY OF CARE (2015)


FIT MIND, FIT JOB – FROM EVIDENCE TO PRACTICE IN MENTAL HEALTH AND WORK (2015)

TACKLING HARMFUL ALCOHOL USE – ECONOMICS AND PUBLIC HEALTH POLICY (2015)

MAKING MENTAL HEALTH COUNT: THE SOCIAL AND ECONOMIC COSTS OF NEGLECTING MENTAL HEALTH CARE (2014)

GEOGRAPHIC VARIATIONS IN HEALTH CARE: WHAT DO WE KNOW AND WHAT CAN BE DONE TO IMPROVE HEALTH SYSTEM PERFORMANCE? (2014)

PAYING FOR PERFORMANCE IN HEALTH CARE: IMPLICATIONS FOR HEALTH SYSTEM PERFORMANCE AND ACCOUNTABILITY (2014)

OECD REVIEWS OF HEALTH CARE QUALITY – AUSTRALIA (2015)

OECD REVIEWS OF HEALTH CARE QUALITY – JAPAN (2015)

OECD REVIEWS OF HEALTH CARE QUALITY – ITALY (2015)


OECD REVIEWS OF HEALTH CARE QUALITY – CZECH REPUBLIC (2014)

For a full list, consult the OECD health web page at http://www.oecd.org/health/