Improving health equity through action across the life course

SUMMARY OF EVIDENCE AND RECOMMENDATIONS FROM THE DRIVERS PROJECT

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Economic growth, democratisation and improved living conditions have contributed to improved health and longevity in Europe, but profound and systematic differences in health persist. These differences form a gradient that runs from the top to the bottom of society, and this pattern holds true for all European countries (1, 2). These health inequalities have existed for centuries and much is now known about their causes – many of which are potentially avoidable. However, there are gaps in the evidence base in terms of what is effective in reducing them and in applying what is known elsewhere in a European context.

The main aim of the DRIVERS project is to deepen understanding of the relationships that exist in a European context between some of the key influences on health over the course of a person’s life - early childhood, employment, and income and social protection - and to find solutions to improve health and reduce health inequalities.

This document begins by providing an overview of DRIVERS and its most significant findings. It then describes headline principles and recommendations to help reduce health inequalities across Europe. More detailed recommendations from the project may be found in Annex A and observations from case studies in Annex B. The goal of DRIVERS is to leave a lasting legacy, by providing evidence that informs the implementation of policies and programmes across different sectors that are effective in reducing health inequalities, improving social justice and contributing to societal and economic progress for all.

Previous summary reports

Several important reports have been published over the last few years that have brought together evidence and suggested measures that would improve health equity. The World Health Organization Commission on Social Determinants of Health (3) at the global level, Fair society, healthy lives: the Marmot Review (4) in England, and the Review of social determinants and the health divide in the WHO European region (1) all highlighted the role of the social determinants of health in driving both overall levels of health and health inequalities, and recommended actions to improve them based on available evidence. Such a challenge can only be met by coherent policy responses from across the whole of society and government. Indeed, many of the actions required lie outside the health sector. However, important gaps in knowledge remained regarding the relationships between determinants, as their effects combine and accumulate over the life course, and health outcomes.

The 2009 publication of the European Commission’s Solidarity in health: reducing health inequalities in the EU (5) was an important step forward in meeting this challenge at EU, national and sub-national levels. Since then, the financial crisis has adversely affected the social determinants of health in many European countries. A recent report, Health inequalities in the EU (2), found that the financial crisis in 2007-2009 and subsequent fiscal measures had reduced efforts to tackle health inequalities. The report found that only a minority of countries appeared to tackle health inequalities at the national level through explicit cross-government action plans to reduce them, while the majority had isolated policies that took action on the social determinants of health but not in a co-ordinated manner or did not seem to tackle them at all. Pan-European initiatives, such as Equity Action, explored possible policy actions, leading to the development of a range of tools and information on how policies at national and regional levels can take equity into account. Nevertheless, the findings of reports and other projects have not been widely implemented in policy making.
THE DRIVERS PROJECT

DRIVERS (2012-2015) is a research project funded by the European Union’s Seventh Framework Programme, which aimed to identify and fill knowledge gaps about factors that drive the three social determinants of health inequalities mentioned above, and the impact they have on avoidable health inequalities. In addition, the project aimed to analyse the methods used to assess these effects, so that they can be improved or new methods developed, in order to better determine the differential outcomes of policies and programmes on health equity.

DRIVERS has:

- Brought together existing knowledge and tested theories about how different influences across the life course affect health inequalities using systematic reviews, meta-analysis and comparative data analysis across EU member states.
- Assessed existing research methodologies and developed more effective ones to determine the differential outcomes of actions to tackle health inequalities using longitudinal data sets.
- Implemented diverse methodologies in case studies across Europe, to supplement and shed further light on the research findings.
- Actively sought out the involvement of a range of stakeholders, so as to benefit from citizens’, practitioners’ and civil society perspectives.
- Published numerous academic articles and public reports (6), organised several workshops and final events, and actively disseminated findings to a broad range of stakeholders.
- Developed a set of overarching principles and more detailed practical recommendations for policy and practice, ranging from individual-level interventions to European-level policies, to reduce health inequalities and improve health equity.
Early childhood is a major driver of inequalities in health. This is because adversity at this early stage of life tends to have a negative effect on all the different domains of child development – cognitive, communication and language, social and emotional skills. Inadequate development of these skills has a profound effect on outcomes across the remainder of the life course. The evidence for this, however, comes mainly from a small number of European countries and from outside of Europe. Comparatively little is known about the extent to which social inequalities in childhood health and development differ in scale across Europe, how the mechanisms that explain these inequalities operate in different contexts, or the impact that programmes and policies that aim to address social inequalities in early childhood have in different contexts.

In order to bridge this gap in evidence, a systematic review of social inequalities in early child development and early child health was conducted (8). This showed that neighbourhood deprivation, lower parental income/wealth, educational attainment, occupational social class, higher parental job strain, parental unemployment, lack of housing tenure and material deprivation in the household were all key factors associated with a wide range of adverse child health and developmental outcomes. The direction of these associations was similar across most European countries, with only minor country-level differences. In addition, the effects on outcomes became clearer with increasing age.

Second, a systematic review was undertaken to identify interventions that improve health during early childhood (9). It examined interventions in EU member states from 1999-2013 and found that most interventions detailed in the scientific literature had been carried out in the United Kingdom and the Republic of Ireland. The majority aimed to improve parenting capacities by supporting both parents, and some had additional components such as day care provision, improving housing conditions, or speech or psychological therapies for children. More favourable outcomes were demonstrated by programmes offering intensive support, information and home visits using a psycho-educational approach, and which aimed to develop children’s and parents’ skills. Only two of the identified studies were delivered across social groups and all the others were aimed at children and families living in deprived areas.

Longitudinal analyses were then conducted to further explore these findings using birth cohort data from 12 countries across Europe (10). The results obtained from most cohorts suggested that children born to mothers with a low level of education subsequently experienced adverse health, although the size of the effect varied. The results from the larger cohorts also suggested that several social factors influence the pathway to ill health. For example, household income and neighbourhood deprivation were found to be important determinants of childhood asthma, even after adjustment for other previously established individual risk factors. Similarly, maternal psychological distress and socio-economic disadvantage during the early years were found to negatively impact children’s mental health and well-being.

In summary, these findings suggest the importance of providing access to a comprehensive range of quality early years services to reduce inequalities during the early development of children, especially for those who come from disadvantaged backgrounds. To be delivered effectively, the services should be universal but tailored to social and economic need and recognise parents’ knowledge and capacities concerning the development of their children.
Employment and working conditions are of central importance to the lives of many people. They affect health both directly (e.g. through good or poor conditions) and indirectly (e.g. through level of income). Both effects follow a social gradient. People with fewer skills or a lower socio-economic position are more likely to be exposed to adverse job conditions, whether physical or psychosocial in nature, than those who are more highly skilled or from a higher socio-economic background.

Several systematic reviews were conducted to establish an updated and comprehensive knowledge base. There was evidence in two reviews that lower-skilled employees suffer higher rates of exposure to chemical and biological hazards, and experience a higher frequency of musculoskeletal disorders. A further review of 26 prospective cohort studies was performed to assess the contribution of stressful psychosocial conditions in the work environment to social inequalities in health. The results suggested that jobs defined by high demand and low control and those characterised by an imbalance between efforts expended and rewards received to some extent explained the relationship between low occupational position and increased risk of ill health (12).

Secondary data analyses of recent Europe-wide data sets were then carried out to further substantiate the associations between work and unequal health. A major finding was the almost linear relationship between the percentage of GDP spent by a country on active labour market policies that aim to integrate disadvantaged population groups and the mean level of stressful work in the country’s employed workforce. It shows that more developed labour market policies are associated with lower levels of stressful work. These policies are less developed in southern and eastern countries, and the burden of work-related disease is higher there than in western and northern countries (13).

How effective are interventions that aim to reduce the social gradient in health by tackling adverse work? Answers to this question were provided by two systematic reviews and meta-analyses, one based on 39 studies of organisation-level interventions, and one based on 36 randomised controlled trials. They demonstrated that the effects of individual and organisation-level interventions are generally small and consistent, and that the employment groups at the highest risk of psychosocial and physical stressors are under-represented in standard worksite intervention research (14).

In summary, DRIVERS highlights the need to improve the quality of work and employment by structural measures at different policy levels. Such measures offer promising entry points for reducing health inequalities among employed populations across Europe.
Income and material living conditions are important for health, and vary considerably between social groups. Social protection policies and wider welfare state arrangements can reduce the consequences of income loss, and are therefore also potentially important in terms of reducing inequalities in health. However, much of the research examining associations between welfare systems and health inequalities is based on analyses that group countries into so-called welfare regime types, that is to say, based on a summary of how welfare provision is organised. By bringing together the research evidence, DRIVERS has shown that this approach yields divergent and unclear results. In addition, the policy relevance of such analyses is questionable, because it is not clear what it is about a group of countries that leads to better health or lower levels of inequalities. Instead, it is more useful to investigate specific aspects of social policies (16).

This approach was followed by a series of empirical analyses using Europe-wide data sets, such as the European Social Survey and EU-SILC, to explore and deepen knowledge of how specific aspects of social protection are linked to health inequalities. An important piece of work disentangled two central aspects of unemployment benefit programmes, namely the share of the workforce covered (coverage) and the level of benefits in relation to wages (replacement). It showed that higher replacement rates are linked to better health, and that this relationship is stronger among those with a lower level of education. However, this relationship only holds true when coverage rates are high, and not in countries with low or intermediate coverage. This suggests that replacement rates are only important for health and health inequalities if the social protection programmes in question cover nearly all people – for example, in the case of unemployment insurance, 90 per cent or more. Interestingly, these positive benefits are not confined to unemployed people as their existence even seems to improve quality of life of people who do not have to rely on them (17).

In another study, distinct active labour market policies and higher levels of unemployment benefits were shown to have a positive effect on the self-rated health of young adults. However, they did not markedly reduce the social gradient in health.

Given the strong influence of poverty on poor health, minimum income benefits are another important component of national welfare policies. An analysis based on OECD and other data showed that countries providing higher levels of minimum income benefits exhibit lower mortality rates (18). A separate analysis, using longitudinal data, showed that income-related policies are relevant in case of premature labour market exit, for example as a result of serious disease or disability.

Overall, these findings underline the important contribution made to levels of health and health inequalities by both coverage and replacement rates associated with social protection policies as well as active labour market policies designed to get people (back) into work.
Case studies were conducted in close collaboration with partners representing the public health sector, civil society and business.

**CASE STUDIES**

Nineteen case studies were conducted across Europe as part of the DRIVERS project (19). Of these, 14 were designed to shed further light on the findings highlighted above and five contributed to a better understanding of the evidence base for advocacy for health equity, another field studied in depth during the project. They were conducted in close collaboration with partners representing the public health sector, civil society and business, and contributed to providing information about context and how interventions and policies are experienced by those most affected, and to developing practicable recommendations on how action on the three ‘drivers’ can contribute towards achieving greater health equity.

**Specific objectives were:**

- To identify and describe early years interventions with the potential to reduce inequalities in health and development among children.
- To assess the potential health and psychosocial benefits of vocational rehabilitation programmes and return-to-work schemes in Switzerland and the UK.
- To explore the perceptions and experiences of social protection systems among people accessing them, and the impact of these systems on health inequalities.

The main observations were that:

- **Delivering flexible services, educational activities** and structured play supervised by a multidisciplinary team adapted to children in the early stages of life and their families improves healthy development, especially in those situations where there is a low level of provision of these services. A comprehensive range of early years services should be on offer to all parents and children, with the level of support tailored to need and starting during pregnancy. The additional tailored support should have the potential to reduce social inequalities in early childhood.

- **Social and labour market policies and specialised agency programmes** can successfully improve the chances of socially disadvantaged and at-risk groups gaining work that meets their full potential. Employers can play an important role, either as a result of self-motivation or legislative regulations. Achieving these improvements would reduce the social and health inequalities experienced by these groups.

- **Social protection systems are vital resources** and lower coverage and replacement rates are likely to negatively affect less advantaged people and their health. Those with complex needs may require personalised and tailored support to access services. People need to know they can rely on social protection to help maintain a healthy standard of living, if and when they face adverse circumstances. The ‘interface’ between those accessing social protection and the frontline staff administering it seems to be crucial in increasing uptake and reducing barriers to uptake.
**First**, the three research teams used comparative data covering a large number of European countries. In doing so, they extended the knowledge base on the social determinants of health beyond the few European countries that have so far provided the strongest empirical evidence (6). This new evidence has direct policy implications at national and European level because social adversities are generally more pronounced in countries where data and analysis are less well developed.

**Second**, by capitalising on recent advances in statistical analysis (e.g. multi-level modelling), the research teams revealed the strong impact of the wider social context on individual health, independent from - and in addition to - more ‘proximal’ circumstances that have mainly been analysed in traditional health inequalities research. Extending the frame of analysis to broader social contexts has far-reaching implications for the development of inter-sectoral and cross-cutting policies. In particular, it emphasises the need for cross-sectoral and multi-sectoral approaches and interventions to improve health equity.

**Third**, each research team applied a combination of systematic review and data analysis in generating an updated knowledge base. This enabled the teams to identify relevant gaps in knowledge and research, to develop recommendations on how to improve and advance research, and to generate innovative scientific findings. For instance, new aspects of welfare state policies and stressful psychosocial conditions in the work environment were identified and their associations with unequal health established.

**Fourth**, it became obvious from the systematic reviews of interventions that randomised control trials (RCTs) have only a limited role in assessing major public health interventions dealing with population health and its determinants. This is also evident from wider policy evaluation frameworks. Complementary approaches to building the scientific evidence base therefore need to be implemented or developed alongside RCTs. Some of these complementary approaches to assessing the role of determinants and the effectiveness of interventions were explored by analysing longitudinal data and through the case studies, which used qualitative methods such as focus groups and interviews.

**Overall**, the research teams produced new evidence of pervasive social gradients of health across Europe. These gradients are seen across the life course, from conception, through childhood, working life and family building, right through to retirement. They show that those in less privileged conditions have much poorer health than those in more privileged conditions. In addition to social gradients of health across the whole of a society, certain population groups with high vulnerability and subject to multiple and cumulative disadvantages were identified as having particularly worse health and a particularly high need of support.
CONCLUSIONS

DRIVERS has extended and critically evaluated the existing evidence base through a series of systematic reviews and new data analyses. Based on the analyses outlined above, it was possible to build on previous research and policy review recommendations. Of particular importance in this respect are the recommendations of the WHO European Review (1). Some of these recommendations directly concern the three DRIVERS areas and have informed the recommendations below. For the sake of clarity and ease of reference, these are detailed in Annex C.

An overarching conclusion of the research in the three DRIVERS areas is that to improve health and reduce health inequalities everyone should have the right to access high-quality services and social protection. The goal should be to attain high-quality early years, working, and living conditions across Europe for all. Policies, practices and services should be provided universally and at a level of intensity that accords with social and health needs. This includes personalised support for those who need it. In short, they need to be 'fit for purpose'. Early preventative action should be taken at each stage in the life course to enable people to thrive, with improved health and well-being across all segments of society, through policies that are contextually appropriate and built on societal assets. Overall, service provision should aim to be 'right the first time', preventing the need for more costly future interventions. Effective cross-sectoral and cross-agency approaches are needed to make the best use of resources.

DRIVERS reinforces understanding that many of the causes of health inequalities are potentially avoidable. This is because they relate both to the conditions of daily life - the circumstances in which people are born, grow, live, work and age - and the structural conditions in a society, which lead to unequal living conditions and affect the chances of living a healthy life (3). These factors also contribute to the intergenerational transmission of inequalities and lifestyles and behaviours which impact on health. Apart from addressing these structures and conditions of daily life directly, a proper policy response must also address their differential consequences across social groups and the life course. DRIVERS suggests that this must entail universality of access as well as addressing various forms of disadvantage.
The challenge of reducing health inequalities can only be met by coherent policy responses across the whole of society and government (20). As noted above, only a minority of EU member states have so far tackled health inequalities through explicit cross-government action (2). DRIVERS has deepened understanding of the relationships between the three key areas examined in the project and identified coherent solutions emerging from this for policy and practice. It has also examined how to improve the effectiveness of advocacy for health equity in order to ensure that scientific evidence better informs the development and implementation of policy.

The recommendations are organised under four broad principles:

1 Universality of access,
2 Addressing disadvantage,
3 Accounting for context and respecting rights, and
4 Evidence-based policy.

The first two principles reflect the need to address different types of risks associated with two different aspects of health inequalities – the general social gradient and the multiple disadvantage experienced by a smaller part of the population. Proportionate universalism is therefore most likely to be achieved by a set of different programmes that cover these two dimensions in combination. The last two principles address issues relating to implementation and the knowledge base for policies and programmes. Overall, the aim is to highlight how action across areas are inter-related and will produce the greatest long-term benefits across the life course when implemented together as part of a coherent society-wide strategy.

Universality of access

Universal access to high-quality early years and employment services and welfare helps prevent disadvantage and promotes health. For example, investment in labour market policies should enhance employment prospects for all, through active labour market programmes and promoting high-quality work. By contrast, targeted services are insufficient to reduce health inequalities and can easily become socially stigmatising ‘poor services for poor people’.

We recommend:

- **Promoting affordable, high-quality pre-natal and early years provision** alongside supportive employment policies and parenting and family support services, to help parents combine work with parental responsibilities.
- **Instituting a comprehensive set of measures** to promote fair employment by addressing employment- and work-related adversities, stressful psychosocial conditions in the work environment and traditional occupational hazards.
- **Ensuring the availability of work** and that wages provide a sufficient income for a decent quality of life.
- **Prioritising appropriate social protection** support for individuals and families in budget allocations and taxation.
- **Increasing the coverage and range of social protection packages and active labour market policies** so that everyone, in particular the most vulnerable and least well-off, can benefit from them.

We recommend:
RECOMMENDATIONS

Addressing disadvantage

Exposure to adversity and the accumulation of protective factors (skills, money, and other resources) across the life course follows a social gradient. For example, social advantage is associated with less adverse exposure and greater accumulation of protective factors across the life course. Intergenerational transmission of inequality to children is a key contributor to these inequalities. Individuals and groups who face multiple disadvantages and exclusionary processes in their lives become particularly vulnerable to poor health. The greater the level of disadvantage experienced, the greater the effort required both to level up life chances towards those enjoyed by more advantaged groups and to address the specific risks not handled adequately by universal systems. Conditionalities in universal schemes often create barriers to access by more vulnerable groups.

We recommend:

- Ensuring that early years education and care is both universal and provided at levels tailored to social need, so as to reduce social inequalities in health and child development; this includes providing personalised support and services where appropriate.
- Identifying families at risk of poorer health early on, referring them to appropriate services and making special efforts to foster the social inclusion of children who are most vulnerable and at risk of exclusion.
- Increasing the focus of workplace interventions to improve effort/reward and demand/control imbalances, and targeting them at the lower status occupational groups that are most likely to experience workplace stress in modern economies.
- Putting in place publicly funded occupational health services that prioritise underserved occupational groups and are independent of employers. This includes increasing the integration of sick and disabled workers into employment using evidence-based models.
- Making sure that within a universal system of social protection coverage different kinds of support are offered to people according to the type and level of risk they experience. This includes cash transfer programmes of different kinds - both contributory and minimum income benefits - as well as access to high-quality welfare services and extensive active labour market programmes.
- Encouraging access to - and uptake of - social protection. This includes providing support to individuals and groups with complex needs or severe adversity to access the social protection to which they are entitled. It also involves ensuring that frontline staff have the training necessary to treat their clients in an appropriate and professional manner.
RECOMMENDATIONS

Accounting for context and respecting rights

Europe is a continent of markedly different contexts. Amongst others, they relate to cultures and norms, social structures, geography, governance and the provision of support and care. People are exposed to a wide range of conditions and their life chances are determined by factors that extend well beyond the resources they directly control – the community, wider society and trans-nationally. They act, react and adapt to these contexts in different ways. Evidence from DRIVERS suggests that the implementation of policies and interventions needs to be adapted to these different contexts whilst ensuring that the principles derived from the evidence base are retained (in particular those relating to universality and addressing disadvantage). Furthermore, it is important to have regard for the rights and needs of each individual, so that they are treated with respect.

We recommend:

- **Implementing interventions shown to be effective in other countries**, with contextual adaptations made for local conditions; this requires systematic development and evaluation to ensure that effectiveness is not compromised by these adaptations.
- **Ensuring that organisational-level interventions** take a participatory approach involving all relevant stakeholders so that the voices of those most affected are heard. This includes formalising collaboration between stakeholders, implementing voluntary agreements and undertaking different forms of social dialogue. A prerequisite for this is a leadership style based on participation and dialogue.
- **Developing and implementing policy plans at different levels**, such as at organisational and national levels, using available guidance materials, accumulated evidence and the experiences of people affected.
Evidence-based policy

Ensuring quality for all requires policies that use evidence from many different sources and make use of different types of research, evaluation and monitoring. It requires a pluralistic approach to high-quality scientific research that is specific to the European context, the collection of comparable cross-European national data, rigorous evaluation of the effectiveness of new policies and initiatives, and regular monitoring and review of routine policies and practices.

We recommend:

Focus of research

- Increasing the capacity to conduct research on health inequalities where the current evidence is weak (but the need for action acute), or where it needs to be updated to reflect changes in society. At the moment, the least evidence is available for those countries and social groups where the need to take action is the greatest.
- Increasing funding for cross-country comparative research, particularly at the European level.
- Exploring, in the context of the social determinants of health framework, how people are able to use their resources to manage the conditions in which they live.
- Extending the criteria for public health evidence to a pluralistic approach, which includes a range of study designs appropriate to large-scale population-wide interventions and policies, especially population-based cohort studies and multi-level analyses.

Harmonisation of data and methods and evaluation

- Ensuring that the design, reporting and evaluation of interventions complies with the best available procedures in social science research designs and statistics.
- Increasing investment in sustaining long-term, harmonised birth cohort studies so as to better understand the variation across countries and regions of the European Union - in the lifelong effects of early childhood conditions on health and developmental outcomes. This investment would be analogous to the current investment in labour force surveys and surveys of income and lifestyles.
- Making a combined approach to social protection analysis possible by ensuring the availability of good data on institutional arrangements, social expenditure, as well as the full range of individual living conditions that constitute the individual-level social determinants of health.

Monitoring and review

- Monitoring adverse social and work conditions and their effects on health with reliable tools by all stakeholders concerned.
- Routinely monitoring and regularly reviewing policies and interventions to reduce adversity and to strengthen health. This should include assessment of the use of available models of good practice and information on their return on investment in terms of both economic and social benefits, so as to strengthen the business case for implementing equitable policies.
- Considering equity in all monitoring and reviewing activities.
Throughout the project, DRIVERS has examined how evidence can be more readily taken up to inform the design and implementation of policies (21, 22). Advocates should:

- **Make use of different kinds of evidence**, both qualitative and quantitative, which may appeal to different target audiences (e.g. the media, the general public, different policy sectors, etc.) or answer different research questions (e.g. associations, causality, practical elements related to implementation of policies and services) related to improving health equity.

- **Make use of established good practices** as part of knowledge transfer and translation, such as simplifying language and concepts, concentrating on solutions rather than problems and limitations, and encouraging contacts between policy makers and researchers to increase the effectiveness of advocacy efforts.

- **Recognise the potential advocacy roles** that can be played by a wide range of different kinds of stakeholders, including scientists, practitioners, civil society and the individuals concerned, advocacy organisations, supportive policy makers, employers and the media.

- **Find ‘win-win’ or compromise objectives** concerning the social determinants of health in discussion with the sectors concerned, as this is necessary for successful cross-sectoral co-operation.

This means that the objective is likely to be an improvement in a specific social determinant of health, rather than health *per se*.

- **Adapt messages used in advocacy efforts** to target and context. These messages may include health as a value in itself, social justice, sustainable development, human rights, various economic arguments or even appealing to the self-interest of particular groups.

- **Taking a more long-term perspective**, work to overcome barriers that hinder the implementation of policies that would improve health equity. This could include training on advocacy and communication for health professions, research alongside disadvantaged communities in academic syllabuses, and increasing public understanding and awareness of the social determinants of health.

Drawing on these points, DRIVERS has prepared several focused policy briefs that aim to be used by advocates to push forward the political agenda in the three main areas of interest. They are available from the website (6), alongside links to all papers published in peer-reviewed journals, synthesis reports of the case studies, and the final public reports of scientific work conducted on early child development, employment & working conditions, and income & social protection.
REFERENCES

1 WHO. Review of social determinants and the health divide in the WHO European Region: Final report. 2014.
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The research is undertaken by a consortium including leading research centres and organisations representing the public health sector, civil society and businesses.