

Addressing the strategic Determinants to Reduce health Inequity Via Early childhood, Realising fair employment, and Social protection (DRIVERS)



Final summary report

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1. Foreword

This is the final publishable report of DRIVERS, an international project funded by the European Union's Seventh Framework Programme.

DRIVERS aimed to synthesise and produce new knowledge to inform the implementation of policies that help reduce health inequalities in the fields of early childhood, employment and working conditions, and income and social protection. In doing so, it sought to develop new and improved research methods, implement case studies across Europe, and examine advocacy for health equity. A unique perspective was brought to the work as a result of the involvement of people directly experiencing poverty, organisations working with children, the public health community and businesses working in communities.

The format of this report follows the guidance provided by the European Commission (EC)¹, and includes an executive summary, a description of the main result in each of the work packages, explanation of how the project disseminated its results, and the expected policy and research impacts. The report draws on the many publications and peer-reviewed articles produced by the project, which are listed at the end of this report and on the project website (www.health-gradient.eu).

We would like to thank all the individuals and organisations who contributed to the project for their insight, expertise and immense hard work over the last three years. We would also like to thank our EC desk officer who provided timely support when it was needed. Finally, we would like to thank the many participants of workshops during the project who provided feedback on draft recommendations, attended the final events and ultimately helped DRIVERS achieve its goals by taking up and disseminating DRIVERS recommendations as part of their own work.

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¹ See http://ec.europa.eu/research/participants/data/ref/fp7/89692/project-reporting_en.pdf.

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3. Executive summary

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. 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 applying what is known from elsewhere in the world in a European context.

The main aim of the DRIVERS project was to deepen understanding of the relationships that exist in the European context between some of the key influences on health over the course of a person's life - early childhood, employment and working conditions, and income and social protection - and to find solutions to improve health and reduce health inequalities through policy and practice in those areas.

DRIVERS:

- Brought together existing knowledge and tested theories about how 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, organised three 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 to improve health equity.

DRIVERS reinforced understanding that many of the causes of health inequalities are avoidable. This is because they relate 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 collectively lead to unequal living conditions and affect the chances of living a healthy life. These factors also contribute to the intergenerational transmission of inequalities and lifestyles and behaviours, which impact on health. Action is therefore needed to address these structures and conditions of daily life directly, and their differential consequences across social groups and the life course.

The challenge of reducing health inequalities can only be met by coherent policy responses across the whole of society and government. 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 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, policies, practices and services need to be 'fit for purpose'. Early preventative action should be taken at every stage of life to enable people to thrive, with improved health and well-being across all of society, through policies that are contextually appropriate and build on societal assets. Overall, policies should aim to be 'right the first time', preventing the need for more costly future interventions.

4. Summary description of project context and objectives

Context

Previous research has shown that a social gradient in health exists within and between countries. The magnitude of the gradient varies between countries, but in many progress tackling them has stagnated and in some they are even becoming steeper. The World Health Organisation (WHO) Commission on Social Determinants of Health (CSDH) and the Marmot Review of Health Inequalities in England (MRHIE) reviewed the evidence and identified the most important drivers of health inequalities. They argued that they constituted a major health challenge. What is currently less well understood is what can be done to reduce inequalities: how knowledge of the main drivers, of effective policy interventions, and of the impact of different policy options can be transferred into policy action.

A key challenge identified by the above reviews is not only how the health of the worst off can be improved, but also how changes can be implemented across the whole of society to reduce the social gradient in health. The MRHIE termed the approach for doing so “proportionate universalism”. Both the CSDH and MRHIE identified (1) early childhood development, (2) employment and the work environment, and (3) income, welfare and social protection as key potential drivers for promoting and enhancing health equity.

DRIVERS built on the CSDH and MRHIE, as well as the Review of Social Determinants of Health and the Health Divide in the WHO European Region, and the EU Review of Health Inequalities, to put forward solutions for improving health equity in these three areas in the European context.

Aims and objectives

DRIVERS was funded by the Seventh Framework Programme. It brought together leading researchers, civil society organisations, businesses, and a European network of public health bodies and aimed to understand and promote health equity through policy and practice in the fields of early childhood, employment and working conditions, and income and social protection.

Main objectives:

1. To review existing evidence and generate new knowledge about policies that drive the three social determinants of health mentioned above and the impact they have on health and health inequities using systematic review and meta-analysis approaches, as well as comparative data analysis across EU member states.
2. To analyse the methods that have been applied to assess these effects, and improve existing methods and/or develop new ones to determine the differential outcomes of policies and programmes on health inequities using longitudinal data sets available to the consortium.
3. To assess how research findings reflect and are applicable to real-life environments, explore opportunities for transferring them to potential users with maximum effectiveness, and provide guidelines for effective advocacy – including policy recommendations to reduce health inequities.

Achievements

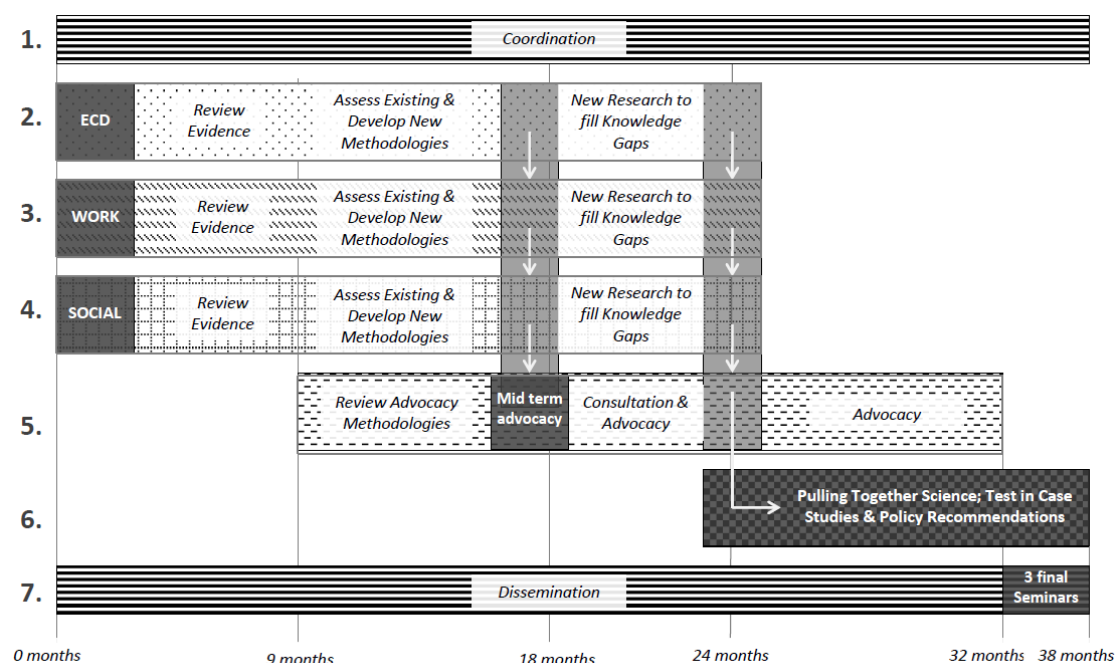
DRIVERS:

- Identified and filled-in key gaps in knowledge about policies driving the three social determinants of health using systematic reviews, meta-analysis, comparative and other research approaches across EU member states;
- Analysed the methods that have been applied to assess the effects of policies so far, and improved existing methods and/or developed new ones to determine the differential outcomes of policies and programmes on health inequities using longitudinal data sets available to the consortium;
- Assessed how research findings reflect and are applicable to real-life environments, explored opportunities for transferring findings to users with maximum effectiveness, provided guidelines for effective advocacy, and published recommendations for policy, research and practice to improve health equity.

The project examined which measures of child development (physical, cognitive and educational) and health are most strongly related to measures of socio-economic position in childhood, and identified the features of childhood socio-economic position and development that are the most important determinants of gradients in both social and health outcomes in adulthood. DRIVERS evaluated the role of health-adverse psychosocial work environments in explaining socially unequal health within and between EU member states. The project also analysed the mechanisms linking income and health inequalities, and the role of income and social protection in determining health and health inequalities in people entering and leaving the labour market. Key gaps and opportunities were identified during the first half of the project to inform selection and design of case studies in the second half.

Finally, DRIVERS engaged with policy makers to provide them with clear policy recommendations to reduce health inequities. This put into practice the findings of innovative work concentrating on advocacy for health equity, in line with the theme of the FP7 HEALTH 2011.3.3-1 call, which stated that *“the research should identify... opportunities to transfer the findings of research to potential users with maximum effectiveness”*.

Project structure and timeline



The DRIVERS project and its work packages

Methodological approach

The work package on early child development used systematic review methodologies to look at associations between social inequalities, early child development and child health, and interventions to improve unequal child development and health. Birth cohort data from across Europe was then analysed to assess the strength of the relationship between social disadvantage and health and development outcomes. The quantitative scientific findings were complemented by qualitative case studies of interventions across Europe to better understand the contextual and generalisable elements of existing interventions. The systematic reviews were designed to capture as wide a range of medical, social and grey literature on European inequalities in child health and development as possible. The cohort studies analyses involved gaining access to very different cohorts in 12 countries and identifying comparable data and outcomes in as many as possible. This methodology extended the very limited range of countries for which there are data on inequalities in the literature. The development of a template for conducting focus groups on child health and development projects across Europe similarly helped to extend the range of countries for which evidence exists, facilitate comparisons and make recommendations concerning interventions.

The work package on employment and working conditions used systematic review methods, and secondary data analyses of recent Europe-wide data sets were then carried out to further substantiate the associations between work and unequal health. The systematic reviews and meta-analyses, performed on the basis of established quality criteria, were essential to evaluate the degree of consistency of scientific evidence related to specific topics of interest. Moreover, they enabled the research team to develop recommendations on how research methods and study designs can be improved in future investigations in areas where inconsistent knowledge prevents clear-cut conclusions. Secondary data analyses based on harmonised European-wide longitudinal surveys on working conditions, and health, in particular the 'Survey of Health, Ageing and Retirement in Europe' (SHARE), were used to study the extent of cross-country variations of work and employment conditions as well as different effect sizes of quality of work, on working people's health. Importantly, cross-country secondary data analyses provided a unique opportunity to evaluate the

potential impact of distinct national labour and social policies on the quality of work and employment (see publication list below).

The work package on income and social protection developed an analytic review method and undertook secondary data analyses of recent European data linked with unique data on legislated social rights to provide new knowledge on the associations between social policies, income and health inequalities. The review followed established criteria for systematic reviews, but added an analytical element by stratifying recent literature by their main approach to capture welfare state efforts: the expenditure, institutional (legal) and welfare regime approaches. A series of empirical analyses were undertaken in order to further explore and deepen the knowledge of how specific aspects of social protection are linked to health inequalities. This was done through analyses where Europe-wide data sets covering individual living conditions and health, such as the European Social Survey and EU-SILC, were combined with new and unique data on legislated social rights by means of multi-level modelling. This approach made it possible to analyse how specific elements of social protection policies, such as the coverage and replacement rates of unemployment benefit schemes across Europe, are related to health in different educational groups.

The work package on advocacy for health equity undertook a systematic review of the academic and grey literature and used qualitative synthesis methods to analyse literature in pre-defined 'six dimensions of advocacy'; this allowed the literature to be synthesised and critically appraised. The advocacy workshop was organised around interactive group activities designed to explore the expertise of participants across six dimensions of advocacy, focusing on those areas where the then on-going systematic review indicated there might be gaps in the literature. The advocacy mapping exercise involved desk-based research to gather all directly relevant policies and interlocutors concerning advocacy for health equity at the EU level and then appraisal to identify important interlocutors and policies.

As mentioned above, the case studies on the three key drivers for promoting health equity complemented the research on the three areas and contributed to the contextual content of the overarching recommendations. The case studies on advocacy similarly provided context to the guidelines on advocacy for health equity. Nineteen case studies were undertaken in total, across the four areas of research. In each area attempts were made to harmonise the research approach. Most of the case studies utilised qualitative methods, such as interviews and focus groups, but some also used quantitative methods.

Dissemination and communication was not funded as a scientific work package. Nevertheless, the final activities and outputs were informed by the findings on advocacy for health equity.

5. Main results

In this section we group the main results by DRIVERS area, describe methodological commonalities across the areas, and describe the four principles by which policy makers and practitioners can implement policies to improve health equity. The text is adapted from:

- Goldblatt P, Siegrist J, Lundberg O, Marinetti C, Farrer L & Costongs C (2015). [Improving health equity through action across the life course: Summary of evidence and recommendations from the DRIVERS project.](#)

a. Early child development

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. However, the evidence for this 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 impacts 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. 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. 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. 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.

b. Employment and working conditions

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 are 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.

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.

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 (RCTs). 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 underrepresented in standard worksite intervention research.

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.

c. Income and social protection

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.

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. 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. 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.

d. Case studies

Nineteen case studies were conducted across Europe as part of the DRIVERS project. 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. 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 requirements. 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.

e. Methodological commonalities

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. This new evidence has direct policy implications at national and European levels 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, DRIVERS 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 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.

For instance, concerning the first commonality, the research team on working life demonstrated substantially worse working and employment conditions in the Southern and Eastern European countries participating in the SHARE study compared to those in Northern and Western European countries. Moreover, associations of work with selected health indicators were stronger in the former countries. Findings point to the differential extent of related policy measures. Likewise, the research team on child development managed to gain access to cohort data from a range of European countries, including several outside the north and west of Europe where the vast majority of previous studies have been made. On the basis of identifying comparable information in these cohort data it could be shown that the mother's level of education had an appreciable impact on the risk of preterm births, childhood asthma and overweight among children across European countries

With regard to the second commonality, research teams applied multilevel analysis techniques to test the impact of integrative and protective national social and labour policies on individual outcomes across European populations. The team on working life could thereby study policies in relation to the occurrence and level of stressful work in respective national working populations. Moreover, they analysed whether the effects of work stress on depressive symptoms were mitigated to some extent by the presence of strongly established active labour market policies, using cross-level interactions. The team on income and social protection was able to use this methodological approach to link individual health status among people in different educational groups across Europe with detailed aspects of unemployment protections schemes. By doing so it was, for example, found that the coverage level is of vital importance. This common approach of analysing the individual level consequences of macro-level policy set-ups provided a major methodological development to this field of research. Using the largest European birth cohorts, the team studying inequalities in childhood were able to focus on interactions between socio-economic characteristics at small area, household and individual levels to provide better explanations of social inequalities in health and child development.

All three research teams combined reviewing techniques with data analysis that targeted the knowledge gaps and methodological concerns revealed by the reviews. To fill in current gaps of knowledge on working conditions and health inequalities, the research team on working life introduced methods of measuring two theoretical models of a stressful psychosocial work environment, effort-reward imbalance and low control at work, which demonstrated a strong social gradient: the lower people's socioeconomic standing, the higher the levels of health-adverse psychosocial working conditions. Moreover, mediation and moderation effects were explored to provide explanations of the links between social inequalities, work and health.

On the basis of the analytical review, the team on income and social protection could make a good case for recommending a social expenditure or institutional social rights approach to measure social policy ambition and content rather than the most commonly used welfare regime approach. In fact, most of the contradictory and unclear findings reported on welfare state efforts and health inequalities could be attributed to the fact that the actual content of welfare regimes approaches varied substantially across the many papers that have adopted this approach. Consequently, the empirical analyses carried out mainly used data on institutional social rights or social expenditures to capture the content of social protection policies.

The team on child development discovered in their reviews that there are multiple adverse social factors operating at both the household and neighbourhood level that are independently associated with a range of health and developmental outcomes. Most of the existing published literature on

interventions focuses on child development outcomes and only a few on parenting. But where both were studied interventions that addressed both determinants were more effective than those addressing only one.

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.

f. 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. Some of these recommendations directly concern the three DRIVERS areas and have informed the recommendations which follow.

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. 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.

g. Recommendations

The challenge of reducing health inequalities can only be met by coherent policy responses across the whole of society and government. As noted above, only a minority of EU member states have so far tackled health inequalities through explicit cross-government action. 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 disadvantages 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 interrelated 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.

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.

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.

h. Increasing the uptake of recommendations

DRIVERS examined how evidence can be more readily taken up to inform the design and implementation of policies.

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 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, 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 and working conditions, and income and social protection.

6. The potential impact, the main dissemination activities and exploitation of results

a. Communication and dissemination

Communication and dissemination was an important part of the DRIVERS project, as it increased the likelihood that policy recommendations would be taken up. Later on in the project the work on advocacy for health equity informed efforts to communicate and disseminate.

Developing a strategy, visual identity, website and social media engagement

The first step was to develop and agree a Communications & Dissemination Strategy, which laid out the steps necessary for ensuring maximum project impact. It identified key stakeholder groups and relevant policy areas. All partners were involved in helping develop the strategy and agreed its content.

Shortly afterwards the visual identity was completed. The logo had three main colours and 'swirls' representing the DRIVERS areas and lifecycle approach. All partners were consulted and provided feedback on prototypes. The visual identity enabled work to commence on the DRIVERS website, which was launched in April 2012. It contained information about the project as well as regular news posts designed to attract visitors. A Members' Section provided access to internal documents. A leaflet was published and copies circulated at conferences and other events. Later on, an advocacy toolkit was launched to present information on advocacy for health equity.

Once scientific final reports were nearing publication and final events being organised, efforts were made to increase DRIVERS' profile on social media. A Twitter account was set up and documents were uploaded to Slideshare, which increased downloads, views, and dissemination of the main outputs of the project.

Newsletters

The project had two newsletters. The first was the "Consortium Update", which provided information to partners and third parties about administrative issues, progress towards key objectives, project evaluation and upcoming meetings. A total of four issues were produced.

The second newsletter aimed to inform external stakeholders about the project and its findings. It was the primary means of reaching out to stakeholders while the research was underway. Each issue had a standard format and a particular focus. Articles were contributed by every partner, and some partners also helped EuroHealthNet edit and co-ordinate production. Considerable collective effort went into this newsletter, and six issues were sent to more than 1560 recipient:

- [Issue 1](#) (Dec 2012): Interview with Prof. Johannes Siegrist; Introduction to income and social protection; Introduction to early childhood.
- [Issue 2](#) (Aug 2013): The importance of early childhood health and development in the life course; The burden of mothers' unpaid work on children's well-being; Social inequalities in early childhood health and development: a European-wide systematic review.
- [Issue 3](#) (Nov 2013): The importance of work and employment for health equity; Social inequalities, working conditions and health: evidence from cohort and intervention studies; Comments on the Keeping Work research led by UK homelessness charity Broadway; Work, income and health: the role of social security programmes; The European Union, 'social Europe' and the macro-drivers of health.

- [Issue 4](#) (April 2014): The importance of social protection and income maintenance for health equity; Decomposing the effect of social protection on population health and inequalities; Interview with Prof. Joakim Palme; Financial hardship and stressful work: an unhealthy and cumulative burden; Children's risk of poverty and implications for health and development in Europe.
- [Issue 5](#) (July 2014): Reflections on the advocacy work in DRIVERS; The private sector – does it have a role in reducing health inequalities?; Children as advocates for change; Case studies to expand the knowledge base for advocacy.
- [Issue 6](#) (January 2015): Overview of DRIVERS case studies; Summary of case studies in each area; The importance of early child development and early years programmes for health equity; Employment and working conditions case studies; Unemployment among graduate youths in Tenerife; Programme on Food Aid and Promotion of Healthy Nutrition – DIATROFI.

Tracking statistics indicate that the external newsletter beat the industry average for 'open rates' by a considerable margin (attaining an open rate of 33.6 per cent versus an "industry average" of 20.9 per cent). They also indicate that many recipients at the European Parliament, European Commission, national- and regional-level public health institutions and international organisations such as the OECD opened the mail multiple times and therefore potentially forwarded it to colleagues. These statistics do not include those who read the newsletter using the links provided on the website. A final mail-out will be sent to subscribers in the coming months, listing all of the publications produced by the project.

Press releases and presentations

Three press releases were issued during the course of the project:

- [EuroHealthNet calls for actions on "the right start to a Healthy Life"](#) (June 2012).
- [Yes we can reduce health inequalities through policies acting on early childhood, employment and social protection!](#) (November 2012).
- [European decision makers take forward DRIVERS recommendations to improve health equity](#) (February 2015).

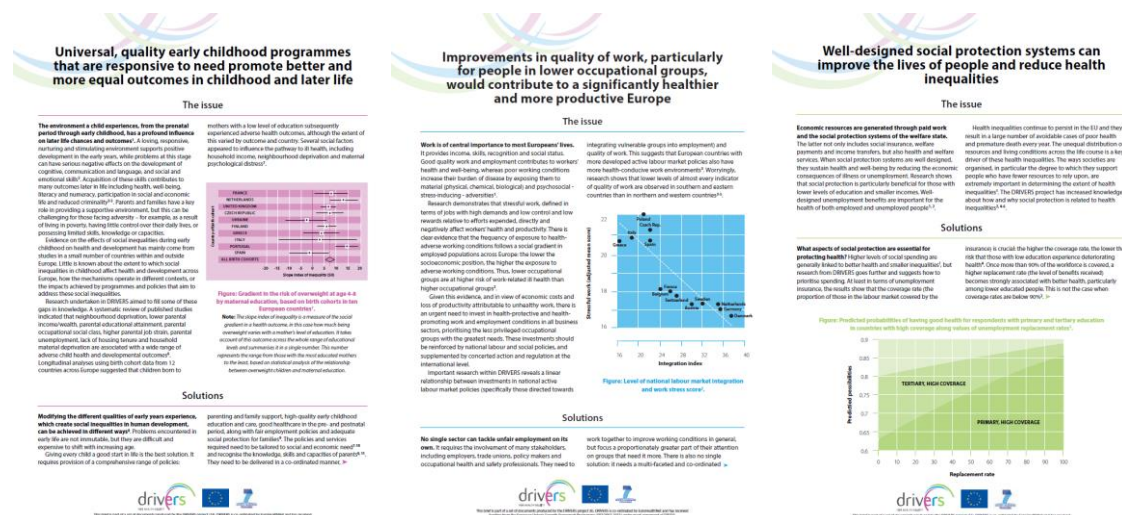
Press releases were amplified by press agencies such as Dods, reaching thousands of potential readers. After being sent, they were added to the 'Press page' of the DRIVERS website and tracking statistics indicate that they were downloaded regularly.

Throughout the project partners were encouraged to make presentations at external events. These aimed to raise the profile of the project and specific pieces of research, obtain feedback, and obtain buy in from important groups of stakeholders. More than 55 DRIVERS-related presentations were made at workshops, seminars, conferences, webinars and board meetings.

Policy briefs

All partners contributed to three policy briefs. The aim was to create impactful outputs that conveyed the scientific research carried out on the three drivers of health equity and make links to existing and emerging policy processes. Two-sided synopses of the three DRIVERS areas were produced, with sections on "the issue", "solutions", and "opportunities to take action". The three briefs were graphically designed to increase their visual appeal. Feedback on them has been extremely positive. Statistics collected by Twitter, Slideshare and the DRIVERS website suggest they are widely downloaded. The briefs have been translated, alongside the main recommendations of the project, into several different European languages. The three briefs are:

- Early child development - [Universal, quality early childhood programmes that are responsive to need promote better and more equal outcomes in childhood and later life.](#)
- Employment and working conditions - [Improvements in quality of work, particularly for people in lower occupational groups, would contribute to a significantly healthier and more productive Europe.](#)
- Income and social protection - [Well-designed social protection systems can improve the lives of people and reduce health inequalities.](#)



The first sides of the three policy briefs produced by DRIVERS

Three final seminars

Three events (“seminars”) were organised:

1. [Recommendations for equity and well-being working seminar \(23 October 2014\)](#)
2. [European Public Health Conference \(19-22 November 2014\)](#)
3. [Tackling societal challenges: solutions from DRIVERS for Health Equity \(3 February 2015\)](#)

The aim of these seminars was to gather key stakeholders connected to the three drivers of health equity at different levels (local, national, EU, and international), in order to gain feedback on DRIVERS’ work and to disseminate DRIVERS’ findings and recommendations to key stakeholder groups.

Seminar 1 – Recommendations for equity and well-being working seminar (23 October 2014)


This was organised to provide information on the emerging recommendations of the project to a wide range of stakeholders and obtain feedback from them. Twenty-three participants were carefully selected for their expertise in early child development, employment and working conditions, and income and social protection, and represented organisations active at local, regional, national, EU and international levels. They included representatives of the OECD, four DGs of the European Commission, the International Labour Organisation, national- and regional-level representations to the European institutions, trade unions, civil society, public health and global foundations. A draft version of the DRIVERS recommendations was forwarded to participants, and they were asked to prepare comments and feedback. The project, an overview of the main findings, and the draft recommendations were presented by EuroHealthNet and UCL. Presentations were followed by wide-ranging discussions on the content of the recommendations, which went on to inform their development.



Photos taken during the first seminar

Seminar 2 – European Public Health Conference (19-22 November 2014)

The aim of this seminar (or, more precisely, series of activities as part of a conference,) was to disseminate DRIVERS' work to the scientific community. In collaboration with the other FP7 projects funded under the same call, DRIVERS co-organised a pre-conference at the European Public Health Conference. Several sessions were shared between DRIVERS and the other projects. Over 100 participants from the research community were present. DRIVERS also collaborated with the other FP7 projects to organise a plenary session. This saw policy pitches made, to try and persuade a 'government minister' to take action to improve health equity. This session had hundreds of people in attendance. In addition, DRIVERS organised several individual sessions, as illustrated by the flyer (below), which was included in delegates' arrival packs.



DRIVERS is at the EPH Conference on Thursday 20 November

- **How to tackle health inequalities? Results from four EU-funded projects**
(Olle Lundberg, CHES; Claudia Marinetti, EuroHealthNet; Hynek Pikhart, UCL);
Pre conference at 8:30-12:00 – *Gala room*
- **Improving the effectiveness of advocacy for health equity: Results from the DRIVERS project**
(Linden Farrer, EuroHealthNet); poster O1.T2., poster walk O.1. "the evidence base (track evidence-informed policy)" 13:40-15:10 – *Poster area*
- **Systematic review of early childhood interventions in European countries (1990-2013) that aimed to address health and development** (Joana Morrison, UCL);
Track: Child and adolescent public health at 16:00-17:00 – *Alsh 2 room*
- **Inequalities in the population: Large scale interventions: How to tackle health inequalities? Recommendations to government ministers from four EU-funded projects**
(Johannes Siegrist, UDUS).
Plenary 1 at 17:15-18:15 – *Clyde Auditorium*

One side of the flyer produced for the European Public Health Conference



Claudia Marinetti presenting during the pre-conference; Johannes Siegrist presenting during the plenary session

Seminar 3 - Tackling societal challenges: solutions from DRIVERS for Health Equity (3 February 2015)

The third seminar was organised to promote take-up of the recommendations by key stakeholders from local, regional, national, EU and international levels. We avoided framing the event as a ‘final event’, and instead marketed it as the launch of the evidence-based principles to improve health equity. We selected speakers to try and ensure political, policy area and geographical coverage, and invited those who would be able to take forward the agenda developed by DRIVERS in current and emerging policy processes. The agenda included a keynote speech by Michael Marmot from UCL, presentations by the scientific leads, statements responding to the findings by five Members of the European Parliament (MEPs), comment from a representative of the Social Protection Committee and a supportive closing statement from the European Commission.



Photos taken during the third seminar. In the left-hand photo are Julie Ward (MEP), Sir Michael Marmot (Institute of Health Equity, UCL) and Caroline Costongs (EuroHealthNet). In the right-hand photo are Nessa Childers (MEP), Cristian-Silviu Buşoi (MEP), Biljana Borzan (MEP), Rudi Van Dam (Social Protection Committee) and Caroline Costongs (EuroHealthNet).

b. Policy impact

The main impact of DRIVERS will come through its clear conveyance of the science and recommendations on how to improve health equity. The four principles for improving health equity across the life course should provide a useful guide for policy makers. The availability of this knowledge should maintain and increase political momentum to take action, and therefore reduce health inequalities.

While we are well aware that the policy impacts are likely to come beyond the lifetime of the project, efforts were made to ensure policy impact during the course of the project by making clear the links with European policies and their specific targets, such as the 20 per cent poverty reduction target as part of Europe 2020, and the positive gains that can be realised by improving health equity, such as increasing the sustainability of health and social security systems. Activities as part of communication and dissemination were designed to support these efforts. The policy briefs, in particular, were developed to explain the importance of considering the social gradient to policy makers and solutions for improving health equity. Translation of these briefs into different European languages should help assure they go beyond the EU level and international academics, and reach those who often have direct responsibility for implementing policies and services at local, regional and national levels.

The research on advocacy for health equity was also intended to have an impact. This was novel work, and efforts have been made to disseminate the results through an online 'toolkit', which provides information about the six dimensions of advocacy for health equity and the EU policy landscape. Work will be undertaken with the WHO to discuss how it can inform and support their Essential Public Health Operations, in particular [EPHO 9 - Advocacy communication and social mobilisation for health](#).

The three final seminars raised the profile of the project and its findings to a large number of stakeholders. Importantly, the five MEPs broadly agreed with the principles and several made specific commitments (which were followed-up on in the third press release) to take actions in favour of health equity. One early result of this conference is a planned meeting with the Indicators Sub-Group of the Social Protection Committee to discuss the results of the scientific work. This could lead to presentation of the results at a meeting of the Social Protection Committee itself. Recent statements by officials in DG EMPL have referred to several principles laid out in the policy briefs, such as the importance of action across the life course and for social protection to be adapted so that it protects people during critical periods of transition.

The findings of the DRIVERS project are being taken up by EuroHealthNet in its core work. Specifically, it will draw on DRIVERS in supporting implementation of Social Investment Package 'pilots' in several European countries, organise meetings with decision makers to discuss the findings of the project, and continue to present the project at conferences and other events.

Finally, the project website and all of the resources and publications will be hosted in an unchanged format for at least one year. Adaptations have been made to change the primary purpose of the website from 'raising awareness' to 'disseminating findings'. The website will continue to be updated to include new publications arising from the project.

c. Research impacts

The research impact of the three main aims of DRIVERS was achieved by the research teams in the following ways:

- 1. An updated review of evidence from across Europe on the role of child development interventions, work and employment, and social protection in explaining social inequities in health in EU member states.*

To this end, systematic reviews and original papers providing results from secondary data analysis were published in international scientific journals, thus providing a unique condensation of currently available research evidence on the impact of the three drivers on health inequalities.

2. *All scientific work packages will help provide a better understanding of methodological limitations of existing approaches to assess the effects of interventions in the three areas of research on health inequalities, and the identification or development of more promising methods to assess these effects.*

Methodological limitations of existing approaches became evident by the systematic reviews and meta-analyses performed. First, the findings documented the problems of using and relying on evidence from RCTs in these areas of public health research and, as a result, generalisation of findings from RCTs is severely restricted. Second, inconsistencies in the current state of knowledge appeared in several of the systematic reviews, providing opportunities to develop recommendations on how future research methods can be improved. Third, by combining quantitative and qualitative methods of social science research, more comprehensive approaches towards assessing intervention effects can be achieved.

3. *The production of new empirical evidence on the impact of social policies, occupational health policies and child development initiatives on health inequalities, using data from comparative European studies.*

The majority of original data analysis papers produced by the research teams applied multilevel analysis techniques to explore effects of macro-social policies on health inequalities and their determinants. For instance, in one paper it was shown that unemployment insurance regulations are consistently associated with self-rated health across a wide range of European countries. Another paper demonstrated a strong linear relationship between the extent to which national integrative labour policies are established and the quality of work in respective countries. Another, while showing the importance of mother's education to birth outcomes, identified the variability of effect sizes in different European contexts.

DRIVERS research teams have published 19 scientific papers in relevant peer-reviewed journals to date. In the majority of cases, these are in leading journals in their respective fields. While it is too early to assess their impact in terms of citation indicators, some of these papers are already widely disseminated and highly accessed by the scientific community. In addition, scientific reports were produced on the three main drivers as well as on the case studies performed, which may be more accessible for a more general readership.

d. Exploitation

DRIVERS did not intend to produce commercially valuable knowledge. However, the findings have potential to improve health equity if taken into account by decision makers and practitioners. This would help make Europe healthier, more productive, and increase economic growth and well-being.

As a result, we have tried to make the findings as publicly available as possible, in a number of ways:

- Implementing an active communication and dissemination plan, to publicise reports and findings and to go beyond the scientific community and to identified stakeholder groups;
- Developing materials specially designed to have impact on targets;
- Writing high-quality original articles for the external newsletter, which was circulated to a large yet targeted mailing list;
- Search engine optimisation (SEO) to increase the flow of visitors to the website;
- Use of social media to disseminate key messages, papers, publications and information about events;
- Making presentations at events throughout the lifetime of the project;

- Wherever possible, publication of research in open access international peer-review journals;
- Publishing final reports with Creative Commons licences to encourage others to print and circulate them;
- Organising three final seminars specially aimed at different audiences and sectors;
- Translation of the main documents into several European languages to try and break down the information paradox, where the least information is known about those situations and places where information is needed the most.

7. Contact information

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8. List of reports available from the project website

Final recommendations

- Goldblatt P, Siegrist J, Lundberg O, Marinetti C, Farrer L & Costongs C (2015). [Improving health equity through action across the life course: Summary of evidence and recommendations from the DRIVERS project](#). (See also: [Annex A](#), [Annex B](#) & [Annex C](#)).

Policy briefs

- Early child development - [Universal, quality early childhood programmes that are responsive to need promote better and more equal outcomes in childhood and later life](#).
- Employment and working conditions - [Improvements in quality of work, particularly for people in lower occupational groups, would contribute to a significantly healthier and more productive Europe](#).
- Income and social protection - [Well-designed social protection systems can improve the lives of people and reduce health inequalities](#).

Case study reports

- Darias-Curvo S & Betancort M (2014). [Young, well-educated and unemployed: The deterioration of social support and the labour market in the Canary Islands](#).
- Farrer L & Marinetti C (2015). [Advocacy for health equity: Case studies synthesis report](#).
- McHardy F & Lundberg O (2015). [Report on income and social protection for the EU DRIVERS project: Synthesis of case study evidence compiled by European Anti-Poverty Network](#).
- Morrison J, Goldblatt P, Pikhart H & Ruiz M (2015). [Early child development: Report on case studies](#).
- Morrison J & Goldblatt P (eds.) (2015). [Final case studies report: Drivers for health equity](#).
- Siegrist J, Montano D & Hoven H (2015). [Case studies on selected return-to-work services for persons with disability and social disadvantages](#).

Early childhood development

Public reports:

- Pikhart H, Ruiz M, Morrison J, Goldblatt P & Marmot M (2014). [DRIVERS final scientific report: Inequities in early childhood health and development, evidence and policy implications](#) (+ [Appendices](#)).

Peer-reviewed journal articles:

- Morrison J, Pikhart H, Ruiz M & Goldblatt P (2014). [Systematic review of parenting interventions in European countries aiming to reduce social inequalities in children's health and development](#). In: *BMC Public Health*, 14:1040. DOI: 10.1186/1471-2458-14-1040.
- Pillas D, Marmot M, Naicker K, Goldblatt P, Morrison J & Pikhart H (2014). [Social inequalities in early childhood health and development: a European-wide systematic review](#). In: *Pediatric Research*, 76(5), 418-424. DOI: 10.1038/pr.2014.122.
- Ruiz M, Goldblatt P, Morrison J, Kukla L, Švancara J, Järvelin M-R, Taanila A, Saurel-Cubizolles M-J, Lioret S, Bakoula C, Veltsista A, Porta D, Forastiere F, van Eijsden M, Vrijkotte TGM,

Eggesbø M, White RA, Barros H, Correia S, Vrijheid M, Torrent M, Rebagliato M, Larrañaga I, Ludvigsson J, Olsen Faresjö A, Hryhorczuk D, Antipkin Y, Marmot M & Pikhart H (2015). Mother's education and the risk of preterm and small for gestational age birth: a DRIVERS meta-analysis of 12 European cohorts. In: *Journal of Epidemiology and Community Health*. DOI: 10.1136/jech-2014-205387.

Employment and working conditions

Public reports:

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Peer-reviewed journal articles:

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