Ten years of the Glasgow Centre for Population Health: the evidence and implications

October 2014
This publication is an overview of the work carried out by members of the Glasgow Centre for Population Health team in collaboration with colleagues in many organisations and communities, over the past ten years. The substantial body of learning has been brought together into this single document to reflect on what we know and to prompt further consideration of actions needed to respond to the population health challenges in Scotland. For further information about this publication or to discuss the evidence implications please contact Sara Dodds at the Glasgow Centre for Population Health.

Sara Dodds  
Research Utilisation Specialist  
Glasgow Centre for Population Health  
1st Floor, House 6  
94 Elmbank Street  
Glasgow G2 4NE

Tel: 0141 287 6959  
Email: sara.dodds@glasgow.gov.uk  
Web: www.gcph.co.uk
CONTENTS

Introduction 4
1. Mortality trends 6
2. Understanding health in Glasgow 8
3. Economy, employment and poverty 11
   3.1 Economy 11
   3.2 Employment 12
   3.3 Income maximisation 14
4. Early years, children and young people 15
   4.1 Parental and family influences 16
   4.2 Educational settings and neighbourhood environments 17
5. Urban environment 19
   5.1 Integrating health into urban planning 20
   5.2 Community engagement in planning and regeneration 20
   5.3 Physical activity and active travel 21
   5.4 Climate change 23
6. Social contexts 24
   6.1 Social capital and community cohesion 25
   6.2 Understanding alcohol in a social context 26
7. Approaches to improve outcomes 28
   7.1 Asset-based approaches 29
   7.2 Inequalities Sensitive Practice 29
   7.3 Local partnership approaches 30
   7.4 Arts-based approaches 31
8. Summary and implications 32
   8.1 Health trends in Scotland and Glasgow 32
   8.2 Implications for addressing health inequalities and improving health and wellbeing 32
9. Conclusion 37
References 38
INTRODUCTION

Scotland’s poorer health and its slower rate of improvement compared with other European countries is a major national issue. Within Scotland the most significant levels of health problems are experienced by the people of the West of Scotland, and in particular, Glasgow. The Glasgow Centre for Population Health (GCPH) was established in 2004, as part of the Scottish Government’s programme to increase action on health improvement in Scotland, to undertake thorough investigations of the issues relating to poor health and generate evidence about new approaches. The Centre is a partnership between NHS Greater Glasgow and Clyde, Glasgow City Council and the University of Glasgow, supported by the Scottish Government.

The Centre’s mission is to pursue understanding about why health in Glasgow remains stubbornly poor, in spite of efforts over 50 years, why it lags behind other places and why there are such wide inequalities within the city. The Centre set out to generate new insights and facilitate different thinking to inform action to improve the city’s health and tackle inequality. As part of this aim the GCPH, in collaboration with the International Futures Forum, also established a Seminar Series where international experts from a range of disciplines are invited to bring new perspectives about health and wellbeing to Glasgow for current and future contexts.

As the Centre marks its tenth year, this paper provides an overview of the evidence the GCPH has established and mobilised over this time, and draws out the implications of this evidence. The paper begins with an overview of mortality trends in Scotland (Section 1), and then looks at the health of people and communities in Glasgow (Section 2). Without an understanding of the wider determinants of health, there can be an assumption that the health of individuals and communities is all within their own control. A substantial body of international research, however, has demonstrated the impact of wider economic, social and environmental factors on health which in turn shape how individuals’ respond biologically and behaviourally. The GCPH evidence base (illustrated in the diagram below) similarly reflects the importance of these wider determinants. A set of interlinked issues – poverty, early life experience, urban environments and social contexts – are at the heart of inequality and consequently health inequality in Glasgow. Services, interventions and approaches to improve outcomes (represented by the red line) are woven through these issues and have their own effect.
Subsequent sections of this paper outline the Centre’s evidence relating to these key determinants: the economy, employment and poverty (Section 3); early years, children and young people (Section 4); the urban environment (Section 5); and social contexts over the life-course (section 6). Some approaches that aim to incorporate this understanding of the wider determinants, and in particular the importance of social interactions, are then discussed (Section 7). Finally, the key trends and implications for action are summarised (Section 8).

As described later in this paper, evidence from the GCPH indicates that Glasgow and the West Central Scotland region did not manage the transition to a post-industrial society as well as other comparable regions in Europe. The Centre’s work is about further enabling a recovery from the past impacts of deindustrialisation and identifying approaches which will enable resilience for future transitions. This overview paper will provide the basis for dialogue with the Centre’s partners and networks about the impact of the evidence to date, the changing contexts in which we are operating and the actions and ways of working that need to be pursued to improve health and address inequalities. The detail underpinning this paper can be accessed in the individual publications referenced and also in the topic-focused syntheses which will be published by the GCPH over the coming year. Although this paper incorporates some of the insights from the Seminar Series, it is not possible to do justice to this unique and rich resource. The GCPH website, however, provides recordings and written summaries of all the Seminar Series lectures and an overview of key insights from the Seminar Series was provided at the GCPH Symposium in 2013.
1. MORTALITY TRENDS

Prior to the establishment of the GCPH in 2004, analysis by Prof David Leon and colleagues in 2003 established that Scotland had been on a par with a range of European nations in terms of mortality/life expectancy but that over the previous five or six decades Scotland had become relatively the worst-performing nation, with all other nations improving much faster\(^2\). In 2012, the GCPH published analysis of *comparative mortality trends from 1950 to 2010*\(^3\), providing an update ten years on from the Leon *et al.* analysis. Both the 2012 GCPH analysis and the earlier Leon *et al.* analysis identified worrying trends for women in Scotland, since female mortality was found to be getting relatively worse across every age band and was particularly worse for older women. A notable finding from the 2012 GCPH analysis\(^3\) was that among younger working-age adults (aged 15-44 years) there was no improvement in mortality over the previous 25 years for men or women.

The analysis\(^3\) highlighted how the relative contributions of different causes of death within Scotland have shifted over the last 60 years. There has been a decrease in deaths resulting from chronic diseases, like heart disease and cerebrovascular disease, due to the impact of improvements in early detection and treatments. There has been an increase, however, in diseases resulting from external causes and in diseases which vary in incidence by socioeconomic group, such as chronic liver disease, lung cancer and oesophageal cancer. Earlier analysis by Leyland *et al.*\(^4\) revealed the health inequalities in Scotland to be greatest among those of working age and, in particular, younger working ages. These inequalities for younger working ages were found to be attributable to inequalities by deprivation in deaths from alcohol-related causes, drug misuse, suicide and violence. Recent GCPH analysis of alcohol-related harm\(^5\) reported that the number and proportion of deaths caused by chronic liver disease among men and women in Scotland have increased over the last five decades. In 1955 chronic liver disease accounted for 1% of adult deaths (15-74 years) but by 2010 this figure had risen to 9% for men and 7% for women\(^6\).

Looking at mortality rates overall, on average people in Scotland now die younger than anywhere else in Western Europe. Mortality in Scotland is also higher compared with England & Wales and this applies across all social classes, although it is more pronounced among people on low incomes and among people living in poorer neighbourhoods. Socioeconomic factors are fundamentally important determinants of health and health inequalities and can explain the higher rates of mortality in Scotland until as late as 1981. Over the subsequent years, however, the differences in mortality rates between Scotland and England & Wales increased, and the scope for deprivation to account for the difference declined, raising the question of how to explain the ‘excess’ mortality. This unexplained ‘excess’ has been referred to as the ‘Scottish Effect’\(^6\). ‘Excess’ mortality has been shown for all parts of Scotland compared with England & Wales\(^7\).

\(^4\) The GCPH analysis of birth cohorts (those born around the same time) identified a worrying trend of disproportionate increases in alcohol-related deaths in young working-age females in Glasgow and other UK cities.
However, a more ‘concentrated’ version of the excess mortality appears to apply to the post-industrial region of West Central Scotland (WCS) and in particular Glasgow, and this led to discussion of a more specific ‘Glasgow Effect’.

The GCPH comparative analysis of mortality in Glasgow with other UK cities\(^8\) provided strong evidence that there is an ‘excess’ mortality in Glasgow beyond that attributable to deprivation. The comparisons with Liverpool and Manchester, cities with similar levels of poverty and histories of industrialisation and deindustrialisation, demonstrate that overall health in Glasgow began to diverge from these comparable UK cities towards the end of the 20th century. Higher ‘excess’ mortality has been shown across the whole social spectrum (i.e. deprived and non-deprived areas) in Glasgow compared with Liverpool and Manchester. However, the ‘excess’ premature mortality is highest when comparing the most deprived areas of these cities.

A considerable number of potential explanations for this ‘excess’ mortality in Glasgow have been suggested, and are the subject of ongoing research. An initial assessment\(^9\) of 17 such hypotheses, published by the GCPH in 2011, provided a synthesis of the most likely causes, and potential causal pathways. This assessment deemed certain hypotheses plausible (e.g. differences in social capital), and others – such as those relating to genetics, migration and sectarianism – as less plausible. Results of analyses published since 2011 have shown that a number of other proposed explanations appear similarly implausible. For example, results of a three-city survey\(^10\) suggest that differences between the populations in their ‘individual values’ (such as levels of optimism and ‘sense of coherence’\(^b\)) is not an explanation for the excess mortality. Research continues, focusing on topics such as the ‘vulnerability’ of cities, the effects of national and local government policies, the scale of urban change, potential protective factors in comparator cities, differences in social capital and more.

This area of research has captured sustained media interest. However, given the complexity of the subject, and the fact that research is ongoing, it can be difficult to present clear messages regarding the likely causes of the ‘excess’. For example, are cultural differences between populations causal, or the outcome of other aspects of life in the cities being examined? In 2015 the GCPH and NHS Health Scotland will be providing an updated synthesis of all the research undertaken, and its implications for our understanding of the reasons for excess mortality in Scotland and Glasgow. This research, however, also emphasises the importance of seeking explanations alongside, not in place of, efforts to reduce poverty and deprivation, the fundamental drivers of poor health in any society.

\(^b\) Sense of coherence: the extent to which one has a feeling of confidence that one’s environment is predictable and that things will work out as well as can be reasonably expected. It is a reflection of an individual’s capacity to respond to stressful situations.
2. UNDERSTANDING HEALTH IN GLASGOW

How has the work of the GCPH increased our understanding of the health of the people and communities in Glasgow? One of the early outputs from the GCPH was the *Let Glasgow Flourish* report in 2006, which provided the most comprehensive description of the city’s health ever produced. It emphasised a number of key issues in relation to Glasgow’s health status, including: health inequalities were widening; substantial sections of the city’s population were seeing no improvement in (and in some cases were actually experiencing a worsening of) their health; the scale of emerging trends in alcohol harm, drug-related harm and obesity; and associated concerns about the impact of these and other factors on the wellbeing of the city’s children. Subsequent outputs by the GCPH, such as the *Miniature Glasgow film*, the *community health profiles* and the *Understanding Glasgow website* made this sort of information widely available and accessible to a diverse range of audiences. Glasgow is continuing to change and these changes will impact on health outcomes. The population of Glasgow is now increasing, ageing and becoming increasingly ethnically diverse. In the last 15 years life expectancy in Glasgow has been improving but wide inequalities remain, associated with differences in the levels of poverty that exist in the city.

The *Understanding Glasgow website* provides accessible information about the wellbeing of Glasgow’s population across 12 domains (including health, poverty, education and environment) with a basket of indicators which allows progress to be monitored. It was developed by the GCPH, in collaboration with the International Futures Forum (IFF) and a range of partners across Glasgow, to provide an accessible resource for understanding population health in the city and comparing it with other places. The website and associated ‘Glasgow Game’ workshops encourage civic engagement in the dynamic and interlinked issues that face the city. The GCPH also commissioned a series of films, set in and around Glasgow, to reflect residents’ lived experiences and stories. A subsequent film ‘Exploring Understanding Glasgow’ provides an overview of how life and health in the city has changed over the last 200 years, highlighting the influence of inequality and deprivation on population health in Glasgow.

---

2 The ‘Glasgow Game’ was developed in collaboration with the International Futures Forum (IFF) and has been strongly influenced by the IFF’s *World Game*, created by Tony Hodgson. The ‘Glasgow Game’ is an interactive workshop that enables investigation of strategic questions using intelligence from *Understanding Glasgow* and tapping into the experience and knowledge of participants.
A set of community health profiles\(^{13}\) for ten Community Health (and Care) Partnership areas within the NHS Greater Glasgow and Clyde (NHSGGC) area were published by the GCPH in 2008. These community health profiles brought to light stark inequalities between communities across the Greater Glasgow and Clyde (GGC) area. They provided indicators for a range of health outcomes (e.g. life expectancy and hospitalisation) and health determinants (e.g. smoking levels, breastfeeding, income, employment, crime, education). As well as presenting information for each whole community, analysis was provided for smaller neighbourhood areas. The profiles were helpful for planning and policy across the GGC area and were used by people working on specific issues within communities, such as addressing poverty or alcohol. They were also used in practical ways by community organisations, for example to provide evidence in grant applications. The profile data for neighbourhoods in Glasgow were updated in 2014 and were published as part of a new profiles section of the Understanding Glasgow website.

The 2011 GCPH Mental Health in Focus publication\(^{16}\) detailed indicators of mental health for local authority areas and small area neighbourhoods across GGC. The findings highlighted stark inequalities in mental health and wellbeing by deprivation, sex and age. Across almost all of the indicators examined, GGC performed less well than Scotland as a whole and large differences were seen across GGC local authorities, largely reflecting the variation in deprivation. The largest inequalities by area deprivation were seen for mental health-related drug and alcohol deaths and suicides. The report pointed to the pervasive effects of poverty and deprivation and the particular challenges relating to drug and alcohol misuse, particularly in relation to young men. Subsequent GCPH analysis of alcohol-related harm\(^{5}\) provided evidence of enduring inequalities in alcohol harm between the most and least deprived areas within Glasgow. The alcohol-related death rate was found to be five times higher in the most deprived quintile compared with the least deprived quintile.
The **pSoBid study**\(^{17}\) initiated in the early years of the GCPH examined the **psychological, social, behavioural and biological determinants (pSoBid)** of ill health for people in Glasgow, looking at differences by socioeconomic status and in their propensity to develop chronic disease. It was a methodologically innovative approach that integrated biological, medical and social science disciplines. Clear differences were found between those living in the most affluent and those in the poorest circumstances – and these differences were observed in almost all of the characteristics measured in the study including health behaviours, mental wellbeing, psychological traits, early years’ experiences, cognitive performance, coronary heart disease risk, brain morphology, rate of ageing and other physiological processes. The study also added weight to evidence that people from poorer backgrounds have accelerated processes of ageing. Furthermore, as well as showing that deprivation has an impact on individuals’ own health, the study showed that through epigenetic processes\(^4\), the effects of the socioeconomic environment become embedded at a biological level (within the genotype - the internally-coded, inheritable information) and these changes are transmissible from one generation to the next. Therefore the drivers of today’s health inequalities can be seen to influence health inequality in subsequent generations.

The 2014 briefing paper reflecting on the **implications of the pSoBid findings**\(^{18}\) concluded that the study added further weight to evidence that socioeconomic circumstances drive population health outcomes. It stated that addressing poverty, deprivation and their direct consequences must therefore be a policy priority. Similarly, the 2013 GCPH **report on the rise of in-work poverty**\(^{19}\) confirmed that the strength of association between poverty and poor health is long-established and uncontested. The report stated that, since poverty is the most ubiquitous and persistent risk factor for ill health, a commitment to improving population health and to reducing health inequalities inherently means a commitment to reducing or eradicating poverty. The relationship between income inequalities and health inequalities was clearly articulated in the 2007 Seminar Series **lecture by Prof. Bruce Link**\(^{20}\). He outlined that people in different socioeconomic groups not only have differential access to money, but also to social resources (knowledge, power, education and beneficial social connections) and to the health-supporting contexts of better neighbourhoods and better occupational conditions. Hence, he argued a more equal distribution of these ‘fundamental’ resources within society is required, alongside policies that support health regardless of resource availability.

---

\(^4\) Epigenetics is the study of heritable changes in gene expression or cellular phenotype caused by mechanisms other than changes in the underlying DNA sequence.
3. ECONOMY, EMPLOYMENT AND POVERTY

3.1 Economy

As outlined in the GCPH film ‘Views of Health in Glasgow’21, Glasgow had once been a renowned centre of engineering and shipbuilding and one of Europe’s main hubs of transatlantic trade with the Americas. From the 1920s/1930s onwards, however, Glasgow entered a long period of relative economic decline, although temporarily masked by its role in weapons production during World War II. The overall decline was characterised by high unemployment, urban decay, population decline and poor health. In the last 30 years Glasgow has undergone significant and rapid change. In the 1970s Glasgow was still an industrial and manufacturing city. However, the economic depression of that period led to a sharp decline in these jobs and since then the social, economic, and employment profile of the city’s population has changed significantly. Glasgow now has a strong emphasis on service-based industries but, as outlined in the previous section, many social and health inequalities persist.

The GCPH analysis of mortality and post-industrial decline22 across Europe confirmed that the impact of deindustrialisation has been significant and has had a negative impact on every region within Europe that has experienced this process. It identified, however, that post-industrial regions elsewhere in Europe are improving (in terms of mortality rates) faster than is the case Scotland, and in particular West Central Scotland (WCS). Further investigation23 revealed that this relatively poorer health status cannot be explained in terms of differences in poverty and deprivation. All the UK post-industrial areas were found to be distinguished from other, similarly deindustrialised, mainland European regions by the economic policies adopted within the UK which widened income inequalities and led to, proportionally, higher numbers of vulnerable groups in the UK in areas such as WCS and Merseyside.
Analyses of historical, political and economic influences\textsuperscript{24} compared deindustrialisation in regions of eastern and western mainland Europe with WCS. There was no single common factor which explained the relatively poor health trends in WCS, as the other regions all took different paths. Rather, there appear to have been a range of national and regional factors at work which have made the ‘aftershock’ of deindustrialisation particularly severe in WCS. In particular:

• A lack of co-ordination and stable sources of investment in WCS meant work practices and technologies were often inferior and inhibited diversification into new and related technologies and industries. The other regions appear to have been more successful in maintaining efficient subcomponents of manufacturing and developing alternative, skilled economic activities.

• Compared with WCS, the other regional authorities were given greater autonomy and resources to develop effective regional policies to soften the effects of deindustrialisation.

• Economic models operating in the other regions placed more emphasis on vocational training and co-operation within and between organisations; and as a consequence local institutions and aspects of civil society played more positive roles in the other regions.

• Economic policy in the UK placed WCS (and other UK regions) at a disadvantage in economic and health terms compared with the other regions; and levels of social protection were, and remain, more generous in the other regions.

The retrenchment of social protection, as seen in the current UK welfare reforms, will further compound population health risks and lead to increased poverty rates and the exacerbation of health inequalities, according to evidence reviewed for the GCPH in-work poverty report\textsuperscript{19}. In contrast to the UK, Iceland is highlighted in the report as an example where forward-thinking investment in social protection and public health has boosted the economy and enhanced population health amid its worst economic recession. Similarly, Dr Aaron Reeves\textsuperscript{25}, in the 2014 GCPH Seminar Series lecture on austerity and health, stated that the evidence is clear that recessions harm health and governments have a choice about how they respond. Austerity is found to exacerbate the negative health impacts, hurting the most vulnerable in society.

3.2 Employment

The GCPH in-work poverty report\textsuperscript{19} emphasised the importance of employment as a social determinant of health, recognising that the health benefits are dependent on the psychosocial quality of the job, work security, health and safety standards and income. The report highlights that the nature of poverty is changing in Scotland, with an increase in short-term and often unfulfilling jobs which do not lift households out of poverty. In 2011, as part of the GCPH Seminar Series, Prof Guy Standing\textsuperscript{26} described the emergence of a new and growing global class of people – the precariat – who have precarious living standards characterised by low income in insecure employment. It was identified as a trend which is potentially leading to greater exclusion of larger numbers of people.
Research on the Full Employment Areas (FEA) initiative\textsuperscript{27} by the GCPH in 2008, found that people understand work not purely in material terms, but also require work which supports a sense of personal meaning for their current situation and long-term future. The evidence points to the need to make all types of jobs, including the lowest paid, meaningful and for employers to ‘engage’ their staff, thereby increasing employees’ satisfaction with work and decreasing the likelihood of employers having high-turnover. The GCPH review of resilience literature\textsuperscript{28} in 2014 also highlighted the relationship between work and wellbeing. It stressed the importance of the qualities of a ‘good’ job which promote physical security, opportunities for skills use, variety, a degree of control and opportunities for interpersonal contact; which go beyond the sole ability to meet financial and material needs. The review argued that questions about ‘how to make our economy more resilient’ should be reframed to ‘how can our economy support the resilience of individuals and communities?’ Similarly Prof Max Boisot\textsuperscript{29}, in his 2010 GCPH Seminar Series lecture, posed the question – if we shift towards valuing wellbeing, what qualities of the labour market are important (rather than just the number of jobs)? The GCPH hosted a Glasgow Game workshop on a ‘connected city’\textsuperscript{30} in 2013, where a range of proposals were suggested about how to create greater equity within the city, such as setting an income ratio (between highest and lowest paid employees) within employer organisations and introducing a 30-hour working week.

Glasgow has the highest proportion of lone parent households of any local authority across Scotland – around 40\% of households with dependent children. The GCPH, working with One Parent Families Scotland and Glasgow City Council (GCC) education officials, recognised specific concerns about supporting lone parents into work and gaps in welfare provision as a consequence of the UK government’s welfare reforms. It was evident at the ‘From Welfare to Work’ event\textsuperscript{31}, hosted by the GCPH in 2013, that the benefits system was not meeting the particular needs of lone parents. Hence, the GCPH commissioned a review of evidence\textsuperscript{32} about the impacts of welfare reform changes on lone parents moving into work, alongside research to explore the experiences of lone parents\textsuperscript{33} in Glasgow. The research highlighted the need for affordable childcare when a lone parent is seeking work, and the need to address childcare gaps (e.g. when free nursery provision stops and the school summer holidays start). To address the links between financial difficulties and poor health experienced disproportionately by lone parents, it was argued that there is a need for co-ordination between health, social care, early years and employability services. The lone parents tended to report that jobcentres did not take account of their specific needs, describing the process as being generally punitive and suspicious. Similarly, the previous FEA research\textsuperscript{27} by the GCPH found that many clients reported unsatisfactory experiences of employment services, including a lack of sensitivity to clients’ circumstances and a lack of ‘human recognition’. The benefit of the FEA community animators’ mentoring of clients was found to lie in their ability to build up trust over time by listening, engaging and respecting.
3.3 Income maximisation

The issues of macroeconomic policies, social protection, labour markets and pay, and accessing and sustaining employment are all fundamental to addressing poverty. Interventions, however, are also required to respond to the immediate needs of people experiencing poverty. The Healthier Wealthier Children (HWC) project, conceived by the GCPH together with NHS Greater Glasgow and Clyde (NHSGGC) and GCC colleagues, has demonstrated the achievements of implementing a system-wide approach (without a need for major service re-design) to support financial inclusion and income maximisation. HWC involved establishing information and referral pathways between the NHSGGC early years’ workforce and money/welfare advice services and created an early intervention approach to address the needs of pregnant women and families experiencing poverty.

The GCPH evaluations of HWC\textsuperscript{34,35} provide evidence of the effectiveness of such a partnership approach in maximising the income of pregnant women and families with children, at risk of or experiencing poverty. The evaluation observed initial partnership challenges, including cultural differences, alignment of different organisational processes, and data-sharing systems. These were overcome early on in the project, however, and the shared goal of addressing child poverty motivated partners to work together. Health visitors and midwives reported that having the referral pathway in place enabled them to raise the subject of financial worries with their clients. A key finding was that pregnant women and families with young children were previously unknown to money advice services, demonstrating significant unmet need among a large population group and challenging media narratives about benefit recipients. Between the service launch in October 2010 and September 2014, a total of 7,992 referrals to HWC money advice services were made, with a total financial gain for clients in excess of £8 million. The evaluation also identified important non-financial gains, in terms of improved mental health and wellbeing, and quality of life.

As a result of HWC, permanent changes have been made to money advice services across the NHSGGC area to better meet the needs of mothers and children, with new contact protocols and a greater diversity of contact modes established (e.g. telephone triage, outreach clinics, house visits). Money advice and health staff proved keen to continue to work together following the HWC project. HWC is now mainstreamed within Glasgow and embedded within Glasgow City’s Poverty Action Plan. Plans are now underway to take forward the principles of HWC at a national level, with the Early Years team at NHS Health Scotland leading on activity to mainstream HWC within the NHS. The HWC has also achieved some international recognition, as the model is being replicated in Melbourne, Australia. Approaches to maximise the income of families and address child poverty are clearly significant given the wealth of evidence on the impact of poverty on children’s health, wellbeing and life chances.
There is a current emphasis in Scotland on the importance of supporting all children to have a good start in life. The *pSoBid* study\(^{17}\) demonstrated the significance of child poverty for later health in adulthood. The data revealed that the early life environment influences the propensity to develop chronic diseases in later life and suggested that the duration of childhood spent in poverty or in a household of low socioeconomic status has an effect that accumulates over time to adversely affect morbidity and mortality in later adulthood. Furthermore, the study highlighted that chronic stress has a negative impact on wellbeing and cognition throughout the life-course. By reducing early life adversity it may be possible to support the development of more resilient phenotypes\(^{a}\) – individuals who will be less susceptible to stress-associated cognitive disturbances and disorders in later life.

The GCPH-commissioned review of the *role and impact of social capital on the health and wellbeing of children and adolescents*\(^{36}\) outlined how the concept of risk and protective factors is helpful in understanding how to enable children and young people to achieve their full health potential. The discussion below outlines, firstly, the influence of parents/family, and secondly, educational settings and neighbourhood environments, on risk and protective factors for children and young people.

---

\(^{a}\) Phenotype: the observable characteristics or traits of an individual which result from interactions between an individual’s genes and the environment.
4.1 Parental and family influences

The health and socioeconomic situation of parents are crucial factors in enabling children to have a good start in life and reducing children’s risk of ill health in adulthood. Therefore, actions are required to address poverty and difficult life circumstances, to improve the health of young adults before embarking on parenthood.

A substantial body of evidence underlines the importance of parental health in relation to protective and risk factors for child health and wellbeing. For example, smoking during pregnancy is known to be harmful to women and unborn children, yet a significant proportion of pregnant women in Scotland are smokers. There is a strong relationship between smoking in pregnancy and deprivation. Existing interventions are effective but uptake is lower than necessary to achieve an impact on inequalities in tobacco exposure prenatally and in the early years. A recent study co-funded by the GCPH found that financial incentives (in the form of shopping vouchers) can at least double the quit rate when added to existing smoking cessation services. Given the strong association between smoking and socioeconomic disadvantage, this type of approach has the potential to impact significantly on inequalities in tobacco-associated harm in the early years.

Evidence has shown that where children are breastfed this results in a protective influence on their early health. Further confirmation of such benefits in a Scottish context was provided by the GCPH analysis of infant feeding (2013), involving new analysis linking a range of administrative datasets. Infants breastfed for at least six to eight weeks (compared with bottle-fed infants) were found to have a lower risk of hospital admission and GP consultations and a reduced risk of excessive weight gain in early childhood. Analysis of Glasgow maternity units showed that the hospital does have an influence on breastfeeding, since Baby Friendly Initiative hospitals were associated with a greater likelihood of breastfeeding. Nevertheless, the analysis overall confirmed that a wide range of cultural, family, infant and maternal health characteristics also influence the likelihood to breastfeed in Scotland. Previous research on infant feeding choices by the GCPH in 2012, with participants from different ethnic backgrounds, found that cultural factors and experiences within family and social networks shaped decision-making. It was suggested that enhancing understanding of the role of cultural factors within Glasgow’s increasingly diverse population, could help support attempts to increase breastfeeding.

The review of social capital identified positive parent-child relationships as being critical for children’s health outcomes. A positive relationship was described as being where there is warm, affectionate parenting where the child feels supported and nurtured. The social capital review also highlighted the benefits of an overall positive family environment, where joint activity and good communication are present, and where there are strong cohesive bonds between family members. It was suggested that supporting parents to adopt more positive approaches to managing young people’s behaviour may facilitate

---

1 Recorded smoking at the first antenatal appointment ranging from 31.3% in the most deprived areas to 6.6% in the least deprived areas (2011/12 data) from ISD Scotland (2013) ‘Births in Scottish Hospitals Year Ending 31st March 2012’.
better outcomes, but there is a tendency for interventions to focus on pre-school years, with limited interventions to support families with school-aged children and adolescents. The GCPH case studies of community-based projects featured a primary school project, Opportunities for All, which provides a range of activities for parents and children to participate in together. Parents are supported to be aware of the impact of their behaviour on their children and provided with resources to inform choices. Importantly, with the help of a family worker, the project provides a clear link between home and school life with a focus on early intervention across a range of issues affecting families (e.g. housing, unemployment, debt, relationships, addictions) and provides a crucial role in referring parents to other agencies and services to provide a holistic network of support.

4.2 Educational settings and neighbourhood environments

The review of social capital stated that the concept of risk and protective factors for understanding child health, should not only apply to parenting and family environments, but also to children’s school and neighbourhood environments. The review found that in schools and neighbourhoods where cohesion, trust and safety were high, where young people felt they had the support of others around them and where hazards (e.g. graffiti and crime) were low, young people were more likely to thrive. Importantly, the review reported that enhancing protective factors in school and neighbourhood environments can contribute to reducing risk for vulnerable children, thereby improving their chances of going on to lead healthy and successful lives. Vulnerable children are those growing up in situations where there are considerable risks to their welfare, for example, where there is parental drug or alcohol abuse, parental imprisonment or regular physical or emotional violence between household members.

In 2011 Glasgow City Council (GCC) introduced ‘nurture’ approaches in early years settings to support children who find it “difficult to play and learn with others” and to ensure that they can remain in and benefit from mainstream early years education. Key features of this ‘nurture’ approach include: a separate room or corner for the nurture group; small group size; one or two trained adults; and integration of time spent in the nurture corner and the main playroom or classroom. The GCPH is currently supporting GCC to evaluate the impact of the approach. Initial qualitative research undertaken in 2014 has found that the nurturing approach is helping the pre-school children to develop their language and emotions and, in turn, improve their ability to recognise, express, and regulate their feelings. Staff reported that the approach appeared to increase children’s confidence to an extent that was regarded by some practitioners as transformational. Parents were also found to be generally very positive about nurture approaches and considered that their contact with nurture practitioners had helped them to see and interact with their child in a more positive way. The researchers suggest, that further opportunities to engage with parents should be explored, however, to minimise any risks that may be constraining the positive impact of this ‘nurture' approach on the children concerned.
The GCPH is currently taking forward work with the Child Poverty Action Group to pilot a Cost of the School Day project\(^4\), as part of its support to the Glasgow Poverty Leadership Panel. This is looking at the ways in which schools do things impact on children and young people from low income households. The GCPH has already had significant impact on school food policy and practice in Glasgow\(^9\) following an extensive portfolio of research\(^43-53\) exploring the impact of school food policy since 2005. The work has also been utilised by the Scottish Government in producing local authority guidance on lunchtime ‘stay-on-site’ policies and the promotion of healthier food environments near schools. The research and the learning visits to Gothenburg, Sweden in 2012\(^54\) and 2013\(^55\), have demonstrated that it is not just the management of food within schools which is important, but also how the school manages its social and physical environment. A direct consequence of learning from Gothenburg was the establishment of a Swedish approach to school lunchtime in a primary school in the east of Glasgow. This lunchtime initiative is perceived by staff to have valuable benefits (e.g. opportunities for pupils to chat with fellow pupils and staff over lunch, apparent transfer of listening and talking skills to the classroom, less food waste).

This portfolio of work on school food ties into wider research on the urban environment regarding how to create healthy neighbourhoods for young people and reduce neighbourhood incivilities. For example, the GCPH research on out of school foods\(^56\) established that young people in Glasgow are consuming unhealthy foods off-site and emphasised the importance of the nutritional quality of the food available in neighbourhoods on young people’s health. In terms of leisure time, the GCPH-commissioned research on the quality and accessibility of greenspaces and community resources\(^57\) (2008), found that young people commonly cited a “lack of things to do” in their neighbourhood as a reason for joining gangs. It was suggested young people could be encouraged to use local parks by providing activities or spaces (such as youth centres) that allow mixing of young people. It was thought that this would increase feelings of safety for young people themselves but also, by reducing gang conflict, increase feelings of safety for the wider community. The following section discusses the impact of the urban environment on facilitating health for people of all ages.

\(^9\) The impact of this work has now extended to wider food policy, since the GCPH has helped to broker multi-agency agreement to develop a sustainable food policy for Glasgow and has been influential in the establishment of a Glasgow Food Policy Partnership to support this aspiration.
The GCPH review of evidence on the built environment and health (2013) summarised the ways in which built environment features and neighbourhood characteristics impact on health and wellbeing. It outlined the strong evidence base about both the direct impacts (air quality, climate, flooding, noise and traffic) and the indirect impacts (housing/buildings, neighbourhoods, social environments, connectivity, accessibility and greenspace). The following two sections discuss integrating health into urban planning (5.1) and engaging community members (5.2). Evidence is then outlined relating to physical activity and active travel in the urban environment (5.3). Finally, the connection between population health and climate change is highlighted (5.4). The role of housing is not discussed in this overview of GCPH evidence, but wider evidence sources have established that the affordability and quality of housing are critically related to health and poverty, and need to be integrated within any approaches to improve outcomes and reduce inequalities.
5.1 Integrating health into urban planning

The GCPH and other significant research contributions have all played a role in increasing the integration of health into urban planning. The GCPH pilot of Health Impact Assessment (HIA) in 2007 concluded that HIA is an effective way of integrating aspects of health into the early stages of local development strategies; since it brings people together from a variety of backgrounds, engages stakeholders and provides a common language for communication. The GCPH was also involved in the Equally Well Glasgow City Test Site, which trialled an approach of incorporating health into the city’s planning policy and practice as part of the Scottish Government’s ‘Equally Well’ policy to explore innovative ways of reducing health inequalities. The GCPH has helped learning about the health impacts of the urban environment to be incorporated across a range of local strategies and policies. In addition in 2014 a Glasgow Game workshop was undertaken to enable health considerations to be incorporated into the development of the Glasgow Clyde Valley Structure plan.

5.2 Community engagement in planning and regeneration

The built environment and health evidence review identified the need for harnessing local knowledge and skills (as well as data, survey and mapping techniques) to contribute to decision-making about places, since this increases the likelihood of creating environments which retain local identity and support existing businesses. The review suggested that a good starting point is a conversation about what aspirations people have for a neighbourhood, how they use their public spaces, and how these spaces could become more widely used.

The experience of the Glasgow City Equally Well Test Site demonstrated that the gap between service providers and communities can be bridged successfully by local ‘connectors’ (people within communities with strong local networks). Identifying ‘connectors’ and building relationships with them takes time, commitment and, potentially, a move away from traditional professional roles and responsibilities. Based on established working relationships and ongoing planning work, the test site was involved in community-led approaches to improve the quality of the built environment in Calton – a neighbourhood in the east end of Glasgow. The GCPH facilitated a street audit to identity small-scale priorities within the neighbourhood and a subsequent evaluation, which found that although some changes happened quickly and there was general support for the approach, other priorities were not delivered and some have not been adequately maintained. The research emphasised that engaging local people over a prolonged period is dependent on there being clear signs of progression.

---

As part of its evaluation of the processes and impacts of the regeneration of communities across Glasgow, the GoWell programme\(^1\) is examining various aspects of community empowerment, from the more passive to proactive, including: satisfaction with services; being kept informed by services; being consulted; being involved in decision-making; and being able to take action individually or with others. GoWell has found\(^6\) all these forms of empowerment to be associated with mental wellbeing, with the associations apparently strongest in relation to satisfaction with landlord housing services, and feeling able to influence decisions affecting the local area. The GoWell evidence indicates a need for communities to be given:

- more information about how and by whom decisions are made and about who provides what services
- capacity-building support to enable greater engagement with service providers and decision-makers
- increased democracy and representativeness of organisations that are given an ‘official voice’ on behalf of communities
- strengthened and monitored standards for community engagement within regeneration processes.

5.3 Physical activity and active travel

The GCPH built environment and health evidence review\(^5\) reported that physical activity levels are influenced by the quality and design of the built environment. It noted that as with other facets of the built environment, the use and enjoyment of greenspace is dependent on it being safe and attractive. The GCPH undertook a study in 2008 to explore the quality and accessibility of greenspaces and community resources\(^5\) (e.g. halls and leisure centres) across two socially contrasting areas of the city. There was considerable variation in the quality of facilities in both areas. Respondents in the more deprived locality perceived their neighbourhood as more unattractive and lacking amenities for physical activity. The presence and physical quality of amenities influence use of community resources, but the research also found that other factors are important too, including: an individual’s lifestyle and values; their life-stage; level of integration in a community; and perceptions of accessibility and safety.

Analysis of who participates in Glasgow’s annual running events\(^5\) established that people living in the least deprived parts of Glasgow were four-to-six times more likely to enter than people from the most deprived areas. This analysis led to the commissioning of research on running and cultural participation\(^5\) with people from more deprived neighbourhoods in Glasgow. The research found that of those who run, the motivations include over-arching health benefits, socialising, supporting mental wellbeing, setting achievable goals, and increasing fitness to support other sports participation. For those who do not run, the reported barriers included: lack of self belief; lack of time/energy; weather conditions and lack of social norms of running (compounded by perceived lack of running routes or an accessible environment in which to run); and concerns about

\(^1\) GoWell is a collaborative partnership between the GCPH, the University of Glasgow and the MRC/CSO Social and Public Health Sciences Unit.
personal safety. The GCPH study\(^4\) assessing the health impacts of neighbourhood improvements in Calton, similarly identified safety as a significant issue in relation to being physically active in the neighbourhood. Community members highlighted the benefits of new streetlights, resurfaced pavements and cycle tracks, but some also expressed concern about safety and access as some streets did not have a pavement, and some walking routes and cycle tracks were fenced off.

Since 2008 the GCPH has undertaken a significant programme of research to increase understanding of active travel and to influence decision making. As highlighted in the 2011 briefing paper on adult active travel\(^6\), adult commuting patterns have changed significantly over the last 40 years in Scotland. Commuting by car has increased dramatically, while bus use and pedestrian commuting have dropped. Only a small proportion of commuters (approximately 1%) cycle to work. However, economic analysis of cycling\(^9\) by the GCPH estimated that the annual health economic benefit\(^1\) of cycling in Glasgow city was over £4 million in 2012. This analysis received wide media coverage and contributed to the evidence base on the public health benefits of cycling, adding further weight to the arguments that promoting cycling represents good value for money for both individual and public health.

The GCPH-commissioned research exploring the motivations and barriers for different travel modes (2009)\(^7\) found that convenience and time efficiency were significant influences in shaping travel mode choices, as well as the perceived ‘fit’ of a mode of transport with the user’s identity (e.g. cars can be a source of esteem). It was also found that fears about danger from other road traffic can compound reasons not to make the shift from car-based travel to walking or cycling. The research suggested that when interventions are put in place to make car travel less convenient or more expensive, active travel modes start to have more appeal. The introduction of mandatory 20mph zones in residential areas was one of a range of recommendations made by Glasgow’s Health Commission\(^8\) in 2009. The GCPH was involved in the work to produce the recommendations and the evidence reviewed showed that 20mph zones would have immediate, life-saving benefits in terms of reducing road causalities\(^9\) and also help to improve health and wellbeing by facilitating greater active travel use.

---

\(^1\) Since the model only estimated the benefit of cycle journeys into and out of Glasgow’s city centre – about one fifth of all commuting journeys – and did not include the economic benefits of reduced morbidity, the overall health economic benefits of everyday cycling in Glasgow are likely to be much higher.

\(^9\) Analysis by the GCPH has highlighted that although casualty rates have been reducing across the Glasgow and the Clyde Valley region, significant inequalities in casualty rates persist between affluent and deprived areas.
Overall, the programme of research undertaken by the GCPH on active travel has added weight to the argument that significant change is needed to the way national and local transport budgets are spent, to shift away from road building and towards infrastructure and services that effectively support active, sustainable travel. Although there is a policy aspiration for active travel at a national level in Scotland, a 2010 review of transport policy undertaken by the GCPH concluded that if levels of active, sustainable travel are to increase, clearer political leadership and commitment is needed in terms of strategic resource allocation and fiscal measures that positively discriminate in favour of walking, cycling and public transport over the car.

5.4 Climate change

The relationship between human society and the environment was highlighted, at the GCPH Symposium in 2013, as a significant theme from the whole of the GCPH Seminar Series. The GCPH review of built environment evidence outlined the likely negative impacts of climate change on health in Scotland and states the need for much greater mitigating action (e.g. shifting to active travel, improving fuel efficiency) and the need to prepare for the anticipated changes (e.g. in terms of vulnerability of buildings, neighbourhood support systems).

The GCPH review of resilience literature emphasised that climate change is not only associated with immediate impact events such as flooding which, after a period of disruption, can see a return to pre-crisis conditions, but more long-term challenges that gradually undermine the taken-for-granted conditions underpinning an economy, society and culture. It noted that the process of change will differ greatly from place to place, with those investing in sustainable infrastructure at an early stage being better able to respond to the future challenges. The review stated that it is necessary to reconsider how places are developed in the future to prevent ecological degradation, and consider what measures are needed to mitigate against resource depletion, climate change and to foster a sense of common cause.
6. SOCIAL CONTEXTS

As can be seen throughout the evidence discussed in this paper so far, social factors critically interplay with all the issues outlined, for example, in terms of finding employment, infant feeding choices, and participating in physical activity and active travel.
6.1 Social capital and community cohesion

The report on the three-city survey\textsuperscript{10} exploring potential reasons for Glasgow’s excess mortality, included an assessment of levels of social capital across Glasgow, Liverpool and Manchester. The report outlined the concept of ‘social capital’ and reported that there is considerable evidence of the beneficial impact of social capital on health and wellbeing. The report noted that ‘social capital’ has been defined in many ways, but that most definitions are based on four key notions:

1. social trust/reciprocity
2. collective efficacy
3. participation in voluntary organisations
4. social integration for mutual benefit.

The survey assessment\textsuperscript{10} of levels of social capital across the three cities, found that there were no differences between Glasgow and the other two cities in terms of the social capital issues of: views of the neighbourhood; civic participation; and social networks and support. Glasgow, however, did appear to have significantly lower levels of social participation and trust than both the other cities, and lower levels of reciprocity compared with Liverpool. The issue of social capital continues to be investigated as part of the ‘excess mortality’ programme of work at the GCPH.

The GCPH review of resilience literature\textsuperscript{28} highlighted the inter-dependency between individual and community. The review states that resilient individuals promote and require reliable networks of trust and support; while resilient communities include individuals who are trusting and supportive. The key features of resilient places highlighted in the review were community cohesion, neighbourhood social capital and integration. Learning from the GoWell research programme suggested these are features which need nurturing and facilitating, particularly in communities facing greater challenges or undergoing regeneration. Findings from GoWell\textsuperscript{73} revealed that across the study communities there are overall high proportions of respondents saying they have someone they can rely on for support, and also that they have regular contact with friends and neighbours. The findings were less positive, however, in relation to indicators of wider community cohesion, such as feelings of safety, perceptions of honesty, informal control exercised by co-residents and feelings of being part of a community. Such aspects of community cohesion have been found to be associated with levels of mental wellbeing\textsuperscript{74} and feelings of loneliness\textsuperscript{75}. Wider linkages, beyond immediate circles of family and friends, are also known to be important for helping people make changes in their lives. These GoWell findings have led to calls\textsuperscript{76} for clearer responsibilities and resources for social regeneration to better support these social dimensions of community life which have a major impact on people’s lives.
The important social role of communities for children and young people was highlighted in the GCPH-commissioned review of social capital on the health and wellbeing of children and adolescents. The report outlined evidence that children and adolescents, who are able to acquire social capital in and through their local communities, have the potential for much better health and wellbeing. The review concluded that young people with access to a high quantity and quality of social support networks have better outcomes in most domains; they are more likely to have better mental health outcomes, fewer behavioural problems and to participate in more health-promoting behaviours. As children grow older they have access to their own social support networks, but the networks in which parents and families are embedded are also very important. The review highlighted the importance of linking families to their local communities, as evidence suggests that creating opportunities for parents to develop and exploit their social networks ultimately benefits their children. Includem project research undertaken by the GCPH demonstrated the role of social networks for young adults in finding pathways out of gang-related activity and criminality. The identification of and transition to more positive social networks was a key strategy of the project. The research also highlighted the importance of a trusting relationship which can be provided by service workers in compensation for damaging peer relationships.

6.2 Understanding alcohol in a social context

Research about alcohol by the GCPH has demonstrated the critical importance of understanding the social contexts in terms of the normative behaviours and practices within different social settings and different life stages. Qualitative research exploring young adults’ alcohol use found that excessive alcohol consumption is as much shaped by the social construction of young adulthood as by the availability of alcohol. The young people did not tend to worry about the health risks; there was a view that drinking is part of a normal temporary experience of being young. The research reinforced the existing evidence base that people drink more to excess in youth, then when people reach their late 20s and start to ‘settle down’ when they get jobs, partners and so on, they move to a pattern of more habitual drinking of smaller amounts rather than drunkenness (although they may still be consuming high levels of alcohol units). For some people, however, it was apparent that those markers of ‘adulthood’ are delayed, so their excessive alcohol use phase continued over a prolonged period.

The research found that drinking alcohol with friends is socially constructed as one of the few occasions in young people’s lives for fun, making and maintaining friendships and group bonding. It was found that excessive consumption is given considerable encouragement and there tends to be an attitude that “if you’re not getting drunk then what is the point in drinking?” There are many opportunities to drink excessively in youth-orientated bars and clubs where young people feel comfortable drinking, but it was also found that some young people want to relate to alcohol differently. When it is cheaply available and there is a limited choice of activities, however, it can be difficult for young people to have alternatives to drinking. Subsequent GCPH research highlighted that drinking styles are not only enactments of cultural norms around alcohol and social participation; they are also enactments of gender norms. This research involving focus groups with young adults drawing and creating visual materials provided insights about
gender differences in relation to alcohol use and risk. Young women were generally found to be more likely to stay together in their friendship groups and look out for each other, taking safety advice on board. Young men, however, were less likely to employ group solidarity as a safety strategy.

Thinking about social norms enables a shift away from solely focusing on individuals and how to get people to drink less, to looking at how to make alcohol less prevalent within people’s social and neighbourhood environments. Regulation and legislation are recognised as key levers for this, but other policy and practice approaches are also important. The focus group research indicated that it is the price of alcohol which is more likely to curtail consumption, rather than concerns about health or personal risk associated with drunkenness. Some young people, however, speculated that if they were priced out of alcohol then they might pursue other highs (e.g. legal and illegal drugs or black market alcohol). Overall, the evidence has highlighted the need to understand how different population sub-groups relate to alcohol. The GCPH research with young adults has had an impact on Glasgow’s approach to young people and excessive drinking, since there was a realisation that the ‘Play Safe’ approach, of accepting deliberate and excessive consumption by young adults and providing information to reduce harm was potentially normalising excessive alcohol consumption. As a consequence there is work underway to rethink the Glasgow City Action Plan to look at providing alternatives to excessive drinking.

Less is known about habitual drinking as people get older, as the focus has tended to be on young people, binge drinking and the night-time economy. Hence, the GCPH is now investigating alcohol use across retirement and has commissioned the University of the West of Scotland to look at how the process of retiring and ageing shapes alcohol use and how current policy and service provision can best respond to increasing consumption by middle-aged and older people. Furthermore, recognising the potential of addressing the broader environmental factors that support a high alcohol consumption culture, current research by the GCPH is investigating how to “strengthen the community voice” in the alcohol licensing process. In addition in response to the growing alcohol harm observed in women, there is also current research looking at the gender effects of alcohol interventions.
An understanding of the importance of social contexts is critical, since it highlights that it matters not just what actions are taken, but also how things are done. Outcomes will vary according to the approach taken. The importance of social contexts applies to all interventions to improve health and wellbeing, whether delivered by public services or community-based projects, for example. Approaches that focus on the how, as well as the what, are discussed in the following sections on asset-based working, inequalities sensitive practice, a local partnership approach and arts-based approaches.
7.1 Asset-based approaches

The GCPH is building-up an evidence base on asset-based approaches and plays a role in providing advice to range of organisations on such approaches. Many people have been working in an asset-based way for a long time, especially in community development, but it is now being recognised in terms of this new language of ‘assets’. The GCPH has undertaken reviews of existing literature on asset-based approaches for health improvement and putting asset-based approaches into practice; as well as compiling the case studies of asset-based community projects. From this work to date the value of such approaches has been found to lie in the participatory nature, involving citizens as co-producers of health and wellbeing, which can achieve something different to mainstream services. This is not to state that such approaches are an alternative to addressing poverty to reduce health inequalities or to replace existing services that are intended to reduce inequalities; rather to recognise the value of promoting networks and relationships that can provide caring, mutual help and empowerment.

The GCPH community assets research concluded that the projects studied were doing important and invaluable work that fits well with the integrative framework for public health for supporting a healthy and sustainable future, proposed by Hanlon et al. (2012). They were all found to seek to move from the model of participant as ‘customer’ to participant as citizen and were all located within an ethical framework that values inclusion, respect and mutuality. Several also had an environmental focus concerned with recycling or better use of land. The research did highlight, however, a significant challenge for these community-based projects of ongoing financial uncertainty and time-consuming processes involved in securing funding streams. The projects also discussed the challenges of proving to funders that what they do is beneficial and worthy of funding. Measurement of success is a critical issue in relation to asset-based approaches, but can be difficult since traditional views of monitoring and evaluation cannot be applied and a ‘softer’ assessment of outcomes is required.

The GCPH is also currently undertaking an action research project (with the Scottish Community Development Centre) to test the relationship between community-based asset projects and mainstream services. Understanding the role of asset-based approaches in mainstream services and learning from these is crucial in the current context of public service reform. The GCPH produced a discussion paper on what asset-based approaches may add to health and care services, which provided the foundation for other current research by the GCPH exploring examples of asset-based approaches within health and social care services.

7.2 Inequalities Sensitive Practice

The importance of relationships within health services and between services and clients was emphasised in the findings from the joint NHS and the GCPH-commissioned case study of Inequalities Sensitive Practice (ISP). ISP describes a person-centred approach and a relationship between practitioners and clients that responds to the life
circumstances that affect people’s health. Action research was undertaken across three service settings: homelessness; early years; and mental health. The study concluded that ISP is about more than whether services are providing ‘equality of care’ to clients; it is also about professional practice, the daily business of how staff interact with the people they work with – their clients and with each other. The action research process revealed that many staff are already operating in an inequalities sensitive way, which is not always evident either to staff themselves or their wider colleagues. However, it was also identified that many staff are struggling to cope with the everyday pressures of their work and it was stressed that ISP is also about how staff are treated at work, since staff can feel ‘done to’ and not heard, and, just as for clients, this can be disempowering. Since reflection was part of the action research process, the service professionals involved were able to learn in conjunction with the researchers and a useful resulting framework for action is being put into practice.

7.3 Local partnership approaches

‘Equally Well’65 is a key Scottish Government policy to reduce health inequalities. In 2008, Govanhill became one of eight Equally Well test sites operating across Scotland to capture pragmatic learning from the ‘frontline’ of service delivery. Govanhill is an area on Glasgow’s Southside facing stark social, economic, health and environmental inequalities. The Govanhill test site was a localised partnership approach (involving public and third sectors and community members) which aimed to improve all aspects of life and conditions in the area by promoting early intervention and seeking to address the root conditions detrimental to health and wellbeing.

The GCPH evaluation of the Govanhill Equally Well partnership66 found that it was an effective approach for addressing people’s individual needs, and an exemplar of the types of partnership working endorsed by Equally Well. The partnership worked alongside residents and valued their expertise. It had an open door policy so that local residents could raise issues directly with a range of service providers. However, concerns over community representation were raised; for example, community members who became involved were rarely younger people and rarely men. Where people became involved, it could be challenging to maintain momentum given the complexity of the situations being addressed. The nature of this type of partnership working was slower and the services were in contact with fewer people, but qualitative differences were observed. It can be difficult to evidence such new ways of working in a robust way as traditional forms of measurement are not necessarily conducive to such bespoke approaches. There can also be a tendency for the prevailing target culture to promote efficiency in service delivery ahead of partnership working seeking to address root causes. Inter-agency information sharing is critical to making such partnership approaches work, but there were found to be valid legal, ethical and cultural barriers and it was argued this needs local and national government attention.

The GCPH evaluator worked within Govanhill much of the time, which meant that the evaluation findings influenced the work of the partnership and helped to promote awareness of population health as a valuable measure of how people and communities
are faring. The evaluation\textsuperscript{86} concluded that a partnership-based approach to service delivery is more likely to impact on the complex local issues and conditions, which are detrimental to health and wellbeing and which perpetuate health inequalities within disadvantaged Scottish communities.

As part of the Govanhill test site a Participatory Budgeting pilot\textsuperscript{87} was undertaken and also evaluated by the GCPH. Participatory Budgeting (PB) involves residents deciding how to spend a proportion of a public service budget, with the aim of local people enabling services to more effectively meet local priorities. In 2010 the Govanhill Community Action Group, consisting of representatives from local community groups in Govanhill, was allocated £200,000 in PB funds and tasked with deciding and being held accountable for its spend locally. The group took a strategic approach to using the funds to focus on a small number of local issues that they believed would impact on people’s lives. They funded three projects: a community lawyer; a respite caravan (to be used by families and carers affected by a family member with a drug addiction); and the Govanhill Baths Trust (for regeneration of the Baths building and the Trust’s health and wellbeing programmes). The PB process has enabled purposeful and reciprocal dialogue between community members and the public and third sectors. Community representation within the PB process, however, was compromised by the time pressure to complete the process by the end of the financial year (e.g. there were difficulties publicising the process and non-English speaking people were not included). Although this and other areas for improvement were identified, overall, it was concluded that this PB pilot was a positive and valued experience, providing a good foundation for continued community participation and empowerment in Govanhill.

7.4 Arts-based approaches

Sistema Scotland, through its Big Noise programme, aims to transform the lives of children from disadvantaged backgrounds through music, by teaching the children how to play musical instruments and bringing children together in a symphony orchestra. The GCPH is currently working with Sistema Scotland to evaluate the Big Noise programme\textsuperscript{88} in Raploch, Stirling and in Govanhill, Glasgow.

The GCPH is also currently undertaking a case study in Dennistoun in Glasgow’s east end as part of an exploration of how community representations produced through creative arts practices can be used as forms of evidence to inform health-related policy and service development. This is underpinned by the idea that narratives of place can build (or undermine) social cohesion and are resources for helping individuals respond to uncertainties. Dennistoun is an interesting case study since it is an area with high rates of poverty, worklessness and poor health, but it has also experienced the growth of a number of community assets in the area, in particular community-facing arts and voluntary projects.
8. SUMMARY AND IMPLICATIONS

On average people in Scotland die younger than anywhere else in Western Europe. These high levels of mortality are driven by the West Central Scotland region and, in particular, high rates in Glasgow. For the last ten years the Glasgow Centre for Population Health has been investigating these health trends, undertaking research on improving health, and engaging with international experts and local partners to facilitate change. Following this review of the Centre’s work to date, what can we conclude about the health trends in Scotland and Glasgow? And what are the insights for addressing health inequalities and improving the health and wellbeing of people in Glasgow?

8.1 Health trends in Scotland and Glasgow

• Scotland has not experienced the same reductions in mortality as other Western European countries.
• In the last 25 years in Scotland there has been no improvement in the mortality rates of younger working age adults (15-44 years) and health inequalities have been found to be greatest among this age group (attributable, in a large part, to inequalities by deprivation in deaths from alcohol related causes, drug misuse, suicide and violence).
• Socioeconomic factors are fundamentally important determinants of health and health inequalities, but in recent decades have not been able to fully account for the higher rates of mortality in Scotland and in particular, Glasgow. Investigations into Glasgow’s ‘excess’ mortality are being undertaken.
• Community profiling and research by the GCPH has highlighted the disparities in outcomes between Glasgow’s communities and pinpointed inequalities between the most and least deprived communities across a wide range of issues (e.g. physical and mental health, alcohol-related harm, road casualties, participation in running events).

8.2 Implications for addressing health inequalities and improving health and wellbeing

As noted in the introduction, there is a significant body of evidence focusing on the determinants of health, and some recent reports, for example NHS Health Scotland’s Health Inequalities Policy Review, have reviewed policies to address health inequalities. Over the last ten years the GCPH has investigated economic, social and environmental determinants of health within the context of Glasgow and a range of implications for reducing health inequalities and promoting health and wellbeing have been identified. A set of interlinked issues – poverty, early life experience, urban environments and social contexts – have been outlined in this report and are depicted in the diagram below. Services, interventions and approaches to improve outcomes (represented by the red line in the diagram) are woven through these issues and have their own effect.
The evidence implications for each of these aspects is summarised below relating to:

- the economy, employment and poverty
- early years, children and young people
- the urban environment
- social contexts
- approaches to improve outcomes.

Although the evidence implications are summarised by these different headings, this is not to suggest that actions should be pursued in one area isolated from another. Integrated approaches that work across the many determinants of health are required, with an emphasis on early intervention and prevention.
Economy, employment and poverty

- Improving population health and reducing health inequalities essentially requires **reducing poverty**; since poverty has been found to be the most ubiquitous and persistent risk factor for ill health.

- Inequalities result in differential access to money, knowledge, power, education and beneficial social connections. A **more equal distribution of these resources** is required within society, alongside **policies that support health regardless of resource availability**.

- **Protective government economic policies** and investment in **social protection** have helped other areas in Europe improve health following deindustrialisation and following the recent economic recession.

- Employment is important for health, but the income derived, the quality and safety of the work, and the security of employment contracts are crucial. Actions to **address low-wages and make work meaningful for employees** are required (**suggestions have included embedding a focus on wellbeing within economic planning and working practices, paying the living wage, setting a maximum income ratio between highest and lowest paid employees within organisations, introducing a 30-hour week, and family friendly employment opportunities**).

- **Tailored support from employment services, attuned to individual circumstances**, is required to most effectively help people seeking work. A particular **focus on supporting lone parents is required** in Glasgow, since it has the highest proportion of any Scottish local authority and lone parents disproportionately experience financial difficulties and poor health.

- **Awareness of the impacts of income inequalities within service delivery and implementing systems for shared and responsive service delivery** (**e.g. partnership of health and money advice services**) can better help support people experiencing poverty.
Early years, children and young people

- **Reducing poverty** (and thereby child poverty) is essential to help *all* children have a good start in life and lead to improved health outcomes later in life.

- Since children’s health cannot be addressed in isolation from the health and wellbeing of parents, it is essential to **seek to improve the health and living conditions of young adults**, who are potential parents, and for **services and interventions to adopt an inter-generational approach** affecting parents as well as children (*e.g.* service partnership of Healthier Wealthier Children and community approaches supporting both children and their parents).

- A wide range of actions are required to **support protective factors** and **minimise risk factors** for children’s health, across:
  - **parent/family** settings (*e.g.* supporting breastfeeding, incentives for stopping smoking in pregnancy and holistic support for families)
  - **educational** settings (*e.g.* nurture approaches that support emotional development and engagement in learning)
  - **neighbourhood** environments (*e.g.* food outlets around schools and facilities for young people’s activities).

Urban environment

- It is well established that the urban environment impacts on health and wellbeing in direct and indirect ways, hence it is **essential that health considerations are integrated into urban planning** (*e.g.* Health Impact Assessments have been found to be an effective way of achieving this).

- **Local knowledge needs to be harnessed for planning and development**, including residents’ use of spaces and their aspirations for their neighbourhoods. Community-led approaches to neighbourhood improvements can be adopted, but clear signs of progression help maintain community involvement.

- The quality of greenspaces and the infrastructure (*e.g.* parks, paths and leisure centres) within an **urban environment plays a critical role in encouraging physical activity**, interacting with the influences of the social norms within an area and individuals’ lifestyles and life-stages.

- Benefits of active travel for health, the environment and economy have been established; greater **action is required to facilitate the shift from car-based to active travel modes** (*e.g.* redirecting national and local budgets from road building to active travel infrastructure and services, and the introduction of 20mph zones in residential areas).

- Climate change is a significant threat to population health. **Actions to mitigate climate change should be a priority** and should involve preparing economically, physically and socially to respond to the anticipated and unknown consequences of climate change.
Social contexts

• Contact with and support from immediate circles of friends and family is important, but so too is the integration of individuals into the wider community and networks across communities. Such community cohesion needs to be fostered for the resilience of individuals and communities (e.g. regeneration activities should include dedicated focus on the social dimensions of community life).

• Enabling young people to access social networks in their communities leads to better health outcomes, this can be facilitated by linking families to local communities and creating opportunities for parents to develop and exploit their social networks.

• In addition to the important role of regulation and legislation, an awareness of cultural and social factors is needed when interventions are made to improve health, such as increasing breastfeeding rates and reducing excessive alcohol consumption.

• Research on alcohol has highlighted the need to take account of the influence of different life-stages and of gender on social norms and health-related behaviours (e.g. actions to prevent normalising excessive alcohol consumption by young adults and facilitate alternatives).

Approaches to improve outcomes

• Assets-based approaches aid improved outcomes by involving citizens as co-producers of health and wellbeing, and promoting networks and relationships for mutual help and empowerment.

• Person-centred approaches that respond to life circumstances are crucial to improve service outcomes (e.g. Inequalities Sensitive Practice) and for effective working with communities (e.g. awareness of and inclusion of non-English speaking residents).

• Local services working in partnership and alongside residents can be effective in responding to complex needs (challenges to overcome include inter-agency information sharing, community representation, and maintaining ongoing community engagement).

• There is a need to involve people in decisions that affect them and facilitate community empowerment to improve local outcomes (e.g. greater information sharing, community development and capacity building, increased representativeness of community organisations and utilising Participatory Budgeting approaches).

• Further work is required to help support community projects and local partnerships to measure progress to demonstrate success and secure funding.
9. CONCLUSION

The GCPH looks forward to continued engagement with its partners regarding actions across the range of influences discussed in this paper. The Centre will also continue to investigate the causes of excess mortality, monitor health trends, and changes in the wider contexts for health in Glasgow. This will help with both our understanding of the impact of actions taken and provide further insights about the evolving influences on health.

Improving health and addressing health inequalities is complex, but the evidence to date points to clear areas for action across the key determinants of – poverty, early life experience, environments and social contexts. There are consistent messages emphasised throughout this evidence review that interventions across the range of determinants are required and that outcomes vary according to the approach taken. It matters both what actions are taken and how things are done. The need to work in partnership to develop locally appropriate responses has been highlighted. The evidence also consistently points to the importance of human interaction and the quality of relationships fostered, requiring recognition of individuals’ circumstances.
REFERENCES

1 Tannahill C. Presentation at the Glasgow Centre for Population Health Symposium From early understandings to new perspectives. 28th February 2013. Available at: http://www.gcph.co.uk/events/132


16 Shipton D, Whyte B. Mental Health in Focus: A profile of mental health and wellbeing in Greater Glasgow & Clyde. Glasgow: GCPH; 2011. Available at: http://www.gcph.co.uk/publications/284_mental_health_in_focus
17 McLean J. *Psychological, social and biological determinants of ill health (pSoBid)*. Glasgow: GCPH; 2013. Available at: http://www.gcph.co.uk/publications/421_psychological_social_and_biological_determinants_of_ill_health_psobid


20 Link B. *Health patterns and trends in New York: exploring the idea of fundamental social causes of health status*. Glasgow Centre for Population Health Seminar Series 4, Lecture 1. 11 December 2007. Available at: http://www.gcph.co.uk/events/37


25 Reeves A. *Does austerity harm health?* Glasgow Centre for Population Health Seminar Series 10, Lecture 4. 18 February 2014. Available at: http://www.gcph.co.uk/events/143


29 Boisot M. *The City as a Complex Adaptive System: Lessons from the ATLAS Experiment at the LHC*. Glasgow Centre for Population Health Seminar Series 7, Lecture 1. 18 November 2011. Available at: http://www.gcph.co.uk/events/93


31 Glasgow Centre for Population Health event. *From welfare to work*. 18 October 2013. Presentation slides available at: http://www.gcph.co.uk/events/137

32 Graham H, McQuaid R. *Exploring the impacts of the UK government’s welfare reforms on lone parents moving into work: Literature review*. Glasgow: GCPH; 2014. Available at: http://www.gcph.co.uk/publications/496_the_impacts_of_welfare_reforms_on_lone_parents_moving_into_work


43 Crawford F. Healthy food provision and promotion in schools: A literature review. Glasgow: GCPH; 2006. Available at: http://www.gcph.co.uk/publications/178_healthy_food_provision_and_promotion_in_schools_a_literature_review

44 Crawford F. Healthy food promotion and provision in Elmvale primary school. What is the impact on food choices? Glasgow: GCPH; 2007. Available at: http://www.gcph.co.uk/publications/150_healthy_food_promotion_and_promotion_in_elmvale_primary_school


69 Glasgow Centre for Population Health. Briefing Paper Findings Series 37: Cycling is good for health and the economy. Glasgow: GCPH; 2013. Available at: [http://www.gcph.co.uk/publications/431_findings_series_37-cycling_is_good_for_health_and_the_economy](http://www.gcph.co.uk/publications/431_findings_series_37-cycling_is_good_for_health_and_the_economy)

70 JMP. Qualitative research into active travel in Glasgow. Glasgow: GCPH; 2009. Available at: [http://www.gcph.co.uk/publications/144_qualitative_research_into_active_travel_in_glasgow](http://www.gcph.co.uk/publications/144_qualitative_research_into_active_travel_in_glasgow)


75 Kearns A, Whitley E, Tannahill C, Ellaway A. Lonesome town: Is loneliness associated with the residential environment, including housing, neighbourhood and community factors? *Journal of Community Psychology* 2014 (accepted for publication).


86 Harkins C, Egan J. Partnership approaches to address local health inequalities: Final evaluation report from the Govanhill Equally Well Test Site. Glasgow: GCPH; 2012. Available at: http://www.gcph.co.uk/publications/342_final_evaluation_report_from_govanhill_equally_well_test_site


