Report of the Director of Public Health: A Call to Debate: A Call to Action
A report on the health of the population of NHS Greater Glasgow and Clyde 2007-2008

RECOMMENDATIONS:

The NHS Board is asked to receive the draft report of the Director of Public Health on the health of the population of NHSGGC 2007-2008. The Board is asked to note the key messages of the report and the proposed actions within the report, and support implementation of the report; the official launch of the report will take place on October 31 in the Royal Concert Hall Glasgow.

Background

The report is based on key messages generated by the data in Let Glasgow Flourish, already presented to the Board at a seminar in 2006. At key stages of development of the DPH report, seminars were held to ensure inclusion of key contributors and to engage with wider communities of interest. The draft report was made available on the PHRU website in order to consult with key stakeholders and partners and to ensure that their views and expertise were reflected in the actions recommended in the report.

Key Messages from the DPH Report

- There are lessons to be learned for what is getting better
- Health Inequalities are increasing
- Our least healthy communities are unlike our healthy communities in every way
- Significant changes are taking place in our population
- The obesity epidemic must be taken seriously
- Alcohol is an increasing problem
- Sustainability should become a more explicit consideration for the NHS

Intended Audience

The call for action is primarily aimed at community planning partners as a mechanism through which services can be planned and improved. Our local authority partners in particular have a key role to play in the design of the environment, access to opportunities for physical activity, availability of healthy food and drink and economic growth. All public organisations have an important role as exemplar employers in responding to the health of employees and their families and responding to the challenges of inequality, of sustainability and climate change. In addition many of our significant health challenges will require action by the Scottish Government, including
those relating to income and to the price and availability of healthy and unhealthy food and drink. NHS Greater Glasgow and Clyde with our partners will continue to work with the Scottish Government to influence future policy on these issues.

It is intended that the report be used as a subject of debate on public health issues and that community-planning partnerships use the priorities for action to inform the joint planning that is being undertaken to improve the health of the population with a continued focus in addressing inequalities.

The draft report is attached.
A call to debate:
a call to action

A report of the health of the population of
NHS Greater Glasgow and Clyde 2007–2008
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This Director of Public Health Report is intended for a broad non-specialist audience and it does not assume any detailed knowledge of medicine or public health. Wherever possible, we have given explanations of jargon and specialist terms, and for those who would like to read more about some of the research findings reported here we have given references and web links.
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The Director of Public Health in every NHS Board area produces regular reports on the local population. Traditionally, these reports have focused on describing the health status of the population. However, with improved access to health statistics through regular reports from a number of bodies, for example Information & Statistics Division and the Glasgow Centre for Population Health and the availability of health data on the web, there is less need to produce detailed statistical reports than in the past. This report, my first since my appointment in November 2006, focuses on the key public health challenges within our population and the priority actions to address these challenges.

Health is not the product of a single circumstance or experience. It is shaped by socio-economic, political and societal circumstances as well as by environmental, biological and behavioural factors. If the health of the people living in Greater Glasgow and Clyde is to improve we must address all of these factors and circumstances. The inequalities in health that we experience in our population require policies to reduce poverty and disadvantage as well as to improve delivery of services that ensure access for everyone, taking account of people’s life circumstances.

This is the first report that has encompassed the new organisation of NHS Greater Glasgow and Clyde. The organisation has been through significant change during the past two years with new structures and processes in place that are intended to put the organisation in the best position possible to influence the determinants of health, to contribute to tackling inequalities and to improving health. These changes are discussed in more detail in the report.

In April 2006 the Glasgow Centre for Population Health, of which NHS Greater Glasgow and Clyde is a partner, published a comprehensive report of health and its determinants in Glasgow and West Central Scotland called, Let Glasgow Flourish. This report provided an in-depth analysis of the health and its determinants of the population covered by NHS Greater Glasgow and Clyde. Rather than repeat this analysis, this report will focus on the key messages generated by the data of Let Glasgow Flourish. These are:

- There are lessons to be learned from what is getting better
- Health inequalities are increasing
- Our least healthy communities are unlike our healthy communities in every way
- Significant changes are taking place in our population
- The obesity epidemic must be taken seriously
- Alcohol is an increasing problem
- Sustainability should become a more explicit consideration
Each chapter under these key messages is structured in the same way as:
- A summary of the public health challenge and the scale of the problem
- A description of how NHS Greater Glasgow and Clyde and its partners are currently responding to the issue, with some specific examples
- Key public health messages and priorities for action

The intended audience for this report is anyone in a position to influence health in the NHS Greater Glasgow and Clyde area. However the call for action is primarily aimed at community planning which is the process through which public sector organisations work together with local communities, the business and the voluntary sectors to plan and improve services. Our local authority partners in particular have a vital role in the design of the environment, access to opportunities for physical activity, availability of healthy food and drink, and economic growth. All public organisations have an important role as exemplar employers in responding to the health of employees and their families and responding to the challenges of inequality, of sustainability and of climate change. In addition, many of our significant health challenges will require action from the UK and Scottish Governments, including those relating to incomes and to the price and availability of healthy and unhealthy food and drink. NHS Greater Glasgow and Clyde with our partners will continue to work with the Scottish Government to influence future policy on these issues.

It is intended that the report is used as a subject of debate on public health issues and that community planning partnerships use the priorities for action to inform the joint planning that is being undertaken to improve the health of the population with a continued focus on addressing inequality.

This report is the product of many people's work and the contributors are acknowledged. Many others also commented on the report through written comments or at seminars on the report. I am grateful to everyone who has contributed to making this report as authoritative and outward looking as possible.
NHS Greater Glasgow and Clyde is one of 14 Health Boards in Scotland (Figure 2.1). It was formed in April 2006 by combining NHS Greater Glasgow and the Clyde area of NHS Argyll and Clyde. It covers an area of 452.3 square miles in west central Scotland, with a population of 1,190,856, almost a quarter of the population of Scotland. Its 44,000 staff deliver services across its home area, as well as regionally and nationally.

The aims of NHS Greater Glasgow and Clyde are to deliver effective and high quality health services and, along with its partners, to improve the health of the population and reduce health inequalities.

The organisation covers a diverse geographical area, including Glasgow, the largest city in Scotland, large and small towns, villages and coastal and rural areas. Within its boundaries are the territories of six local authorities, and parts of the territories of two local authorities (as shown on Figure 2.1.) These are:

- East Dunbartonshire
- East Renfrewshire
- Glasgow City
- Inverclyde
- Renfrewshire
- West Dunbartonshire
- Part of North Lanarkshire
- Part of South Lanarkshire

Reorganisation of health service provision

Since NHS Greater Glasgow and Clyde was formed in April 2006, it has gone through an extensive reorganisation that reflects the thinking of both its senior management and the Scottish Government Health Directorate. This has resulted in a coherent strategy and structure that recognises that the organisation’s role is as much to promote and protect health and prevent disease as it is to care for the sick, which has been the traditional focus of the NHS. This reorganisation has coincided with the establishment of Community Health (and Care) Partnerships.
Public Health

NHS Greater Glasgow and Clyde aims to become a public health organisation and, as such, public health responsibility and leadership will be embedded throughout the organisation. The Director of Public Health provides leadership working closely with all sections of the organisation. This post is for the first time a joint post with Glasgow City Council, an acknowledgement of the role of local authorities in improving health. The NHS Greater Glasgow and Clyde Board is developing a comprehensive framework for health improvement and a coordinated approach to planning to address inequalities through its planning and priorities guidance.

Community Health and Care Partnerships

These have an important role in bringing together the partners who design and deliver services that are intended to improve the lives of the communities they serve. They work to improve the health of their local populations and to reduce health inequalities. They do this by providing a focus for the integration of primary health care, specialist health services and social services, to ensure that local population health improvement is at the heart of service planning and delivery.

The partnerships work to develop a more locally sensitive provision of health care and health improvement. Their responsibilities include health visiting, district nursing, speech and language therapy, physiotherapy, podiatry, mental health, addiction and learning disability services. Staff delivering these services work closely with other local health professionals, including GPs, dentists, pharmacists and opticians to plan and develop services across their partnership areas. All partnerships are responsible for consulting actively with local communities to ensure that their services reflect local needs, and demonstrate a more consistent and co-ordinated approach to planning of services through, for example, the community planning process.

Most partnerships have boundaries that match local authority areas. In NHS Greater Glasgow and Clyde, however, the Glasgow City Council boundaries contain five partnerships and there are two areas to the east that are part of two partnerships in two other local authorities (North and South Lanarkshire). Additionally, the Glasgow City and East Renfrewshire Councils have integrated Social Care services to form Community Health and Care Partnerships, CH(C)Ps For clarity, this report refers to both these forms of Community Health Partnerships as CH(C)Ps. As a result of the recent reorganisation, some older datasets in this report reflect the boundaries of the former NHS Greater Glasgow, and some reflect the present NHS Greater Glasgow and Clyde. In general, this report will give data for the 10 CH(C)Ps for which it has full responsibility, and omit the small parts of North and South Lanarkshire that it shares with NHS Lanarkshire.

The map (Figure 2.1) and following two charts give some indication of the areas and populations served, and the levels of deprivation, of each CH(C)Ps. The populations range from approximately 170,000 in Renfrewshire to 82,000 in Inverclyde.
Figure 2.2

NHS Greater Glasgow and Clyde
Population by CH(C)P
(Source: GRO(S) Small Area Population Estimates, 2005)

Figure 2.3

NHS Greater Glasgow and Clyde
% of population residing in most deprived areas by CH(C)P
(Source: GRO(S) Small Area Population Estimates 2005)
There are wide variations in the deprivation levels of the 10 Community Health Partnerships. The percentages refer to the population within each CH(C)P that falls in the 15% most deprived areas in Scotland as a proportion of the total population in the CH(C)P area.

**Other responsibilities**

NHS Greater Glasgow and Clyde is also responsible for corporate services and acute services as well as partnerships for addictions, mental health, learning disability and homelessness.

The acute operating division includes eight directorates covering emergency care and medical services, surgery and anaesthetics, oral health, women and children’s services, regional services, rehabilitation and assessment, diagnostics, facilities and a directorate managing the acute services within the Clyde area.

Although community services for adult mental health, addictions and learning disabilities are provided in CH(C)Ps, all services for these client groups are overseen by specialist partnerships which ensure a uniform approach to their planning and delivery.

To deliver improved health and health care through its services NHS Greater Glasgow and Clyde also provides leadership in clinical governance, health information and technology across the area. A number of planning groups and managed clinical networks ensure that clinical priorities are planned, managed and co-ordinated across prevention, diagnosis, treatment and care. The organisation also provides leadership on community engagement, through its patient focus and public involvement structures. The organisation is committed to engage with all communities on all aspects of its policy planning and service delivery.

NHS Greater Glasgow and Clyde is working to develop ways of increasing health improvement and decreasing inequalities. It is determined to be a more effective public health organisation, with a significant focus on addressing population health challenges and the inequalities that underlie them. The organisation will not just focus on the behaviours that contribute to poor health but will also recognise and address, in its own responsibilities and in partnership working, the wider social determinants of health. In this way, it will change the way it delivers its own services and influence positive change in its many partner organisations.
There are lessons to be learned from what is getting better

We often feel that there is not enough progress in improving health and narrowing inequalities, but it is important to recognise that many aspects of health are improving and that we can learn lessons from them to apply to other areas.

Progress is being made in increased life expectancy, the prevalence of smoking, immunisation rates, and unemployment and in reducing some causes of death such as heart disease, stroke, some cancers and infant mortality. This section discusses what lessons we can learn from improvements in reducing smoking and coronary heart disease and in increasing employment and delivering health protection programmes.

Reducing smoking

Smoking is a significant public health challenge for NHS Greater Glasgow and Clyde, which has the highest smoking rates of any NHS area in Scotland, and where smoking remains the primary cause of preventable death and ill health. However, adult smoking rates have fallen considerably in the past 30 years.³

The NHS Greater Glasgow and Clyde area contains communities where levels of smoking are much lower and much higher than the Scottish average. The areas of lowest prevalence have levels of smoking 9.5 percentage points below the Scottish average of 28%, and the areas of highest prevalence, smoking rates are 9.5 percentage points higher (Figure 3.1).⁴

Figure 3.1

![Smoking Prevalence by CH(C)P 2003/04](chart.png)  
(Sources: An Atlas of Tobacco Smoking in Scotland)
The main determinant is social class. Smoking is becoming concentrated in the poorest households and in socially excluded groups such as prisoners and homeless people. The most recent figures indicate that 8 in 10 (78\%)\(^5\) prisoners smoke and point prevalence rates estimated at 62\%\(^6\) for the homeless population in Glasgow city. Smoking is the greatest single factor in the different life expectancy between social classes.

The cost of smoking also weighs most heavily on the poorest. The Family Expenditure Survey estimates that the average household spends about 1.5\% of its weekly income on tobacco compared to 15\% in the poorest households.\(^7\)

Reducing smoking in pregnancy is a priority activity locally and nationally. The rates are falling but levels are still high, especially in deprived areas, and maternal smoking rates range from 9\% in Eastwood to 43\% in Clydebank and Drumchapel.

There is a great deal of health promotion activity designed to reduce exposure to second hand tobacco smoke, which increases the risk of coronary heart disease by 25 to 35\% and the risk of lung cancer by 20 to 30\% and causes at least 1,000 deaths a year in the UK, and 100 in Scotland alone.\(^8\) Children, pregnant women and those with heart problems and respiratory diseases are more at risk.

Research shows that, since people smoke for many different reasons, no single intervention can be universally successful. The most successful approach combines prevention, cessation, legislation and protection. Since 2000, NHS Greater Glasgow and Clyde – in line with national guidelines – has focused on developing smoking cessation services in a range of settings including community, pharmacy, secondary care, maternity and mental health services.

There is evidence that this approach is working. For example, information from the NHS Greater Glasgow and Clyde smoking cessation database shows that 45\% of people who attended smoking cessation projects offered by CH(C)Ps in the Greater Glasgow area between January 2006 and March 2007 stopped smoking four weeks post quit date. Figures for people attending projects offered in secondary care and maternity settings were 32\% and 37\% respectively.

As well as a focus on cessation, there are preventative measures being taken. The legal age for buying cigarettes in Scotland is to rise from 16 to 18. The move attracted cross-party support and took place in England and Wales on the 1st October 2007. NHS Greater Glasgow and Clyde deliver prevention programmes in schools for example, ‘Smoke Free Chicks’ in nurseries, Smoke Free Me in primary schools and Smoke Free Class in secondary schools.
Building on the Smoking, Health and Social Care (Scotland) Act 2005, which outlawed smoking in enclosed public places, and which is predicted to bring about a reduction in smoking of between 4 and 10%.9 NHS Greater Glasgow and Clyde is developing a programme of tobacco control initiatives. Among these are written workplace no smoking policies, which have been pioneered at all its hospital sites. The organisation has also piloted a Smoke Free Homes and Zones project in the east of Glasgow, and developed smoking cessation services for children and young people looked after and accommodated by local authorities.

Our pharmacy led smoking cessation service has been working with one of our community based health initiatives called ‘Reach’. Reach provides preventive health services and information to the Black and Ethnic Minority (BME) community. Smoking cessation services are being provided through this initiative and therefore benefit from Reach’s expertise of delivering culturally sensitive and accessible care.

Lessons from working on smoking

- We need a comprehensive strategy to address public health challenges. This should include prevention through education, media campaigns, work in schools and communities, appropriate pricing and availability policies, legislation where appropriate, and treatment and care services. This strategy must include a mixture of local, national and international action. The strategy will require a range of agencies working in partnership and the enforcement of legislation must be adequately resourced.
- We must develop and evaluate strategies and services to take account of inequalities in relation to resources, targeting, engagement and interactions with individuals.
- We must ensure that public organisations take a lead role in developing workplace policies, services and staff support.
Reducing coronary heart disease

Coronary heart disease is the leading cause of death and morbidity in Glasgow. However, as Figure 3.2 shows deaths from heart disease have fallen by more than half in the Greater Glasgow and Clyde area during the past 25 years.

**Figure 3.2**

While this is encouraging, the reduction is less than the Scottish average. Within the NHS Greater Glasgow and Clyde area, there are wide variations, by geographical area and by gender. 10

Primary prevention targets people at risk of developing coronary heart disease, and secondary prevention targets people who already have chronic stable coronary heart disease, for example, angina, that is maintained in a primary care setting. Health coaching provides one-to-one support and guidance to help individuals make positive lifestyle changes, focused on the risk factors of physical inactivity, unhealthy eating and smoking.

Mortality rates decline as a result of primary prevention (reducing the number and severity of the risk factors) and secondary prevention (providing better treatment and working to reduce the risk factors in people with coronary heart disease). The relative contribution from these two efforts is around 60% primary prevention and 40% secondary prevention, which emphasises that we need both primary and secondary prevention if we are to continue to see continued declines in coronary heart disease mortality.
NHS Greater Glasgow and Clyde has developed a number of initiatives to achieve further reductions of deaths from coronary heart disease. These include the Heart Disease Managed Clinical Network, the secondary prevention of coronary heart disease; Have a Heart Paisley and Keep Well.

The Heart Disease Managed Clinical Network works to ensure consistent services and standards across the NHS Greater Glasgow and Clyde area. Its health improvement sub-group works across stroke, diabetes and heart disease, since so many of the pre-disposing risk factors are common to them. One particular success has been the incorporation of health improvement as a substantial part of the local enhanced service for each of these. The sub-group is also standardising services across the NHS Greater Glasgow and Clyde area. This includes cardiac rehabilitation services, and ensuring that there are close links between that and all community health improvement services.

The Managed Clinical Network has set up a patient forum, and is also developing a web site that will offer one-stop access for the public, patients and health professionals to local services, standards and health related information on heart disease, stroke and diabetes.

NHS Greater Glasgow and Clyde is also active in the secondary prevention of coronary heart disease. Secondary prevention can substantially reduce the risk of myocardial infarction and progression of the disease once it is diagnosed. The organisation has introduced a system of enhanced coronary heart disease care in general practices in Greater Glasgow and will soon implement this in the Clyde area. The locally enhanced services in Greater Glasgow ensure a systematic approach to secondary prevention not only using the medical model but also by paying attention to other risk factors that can contribute to risk reduction, including effective management of depression.

The national Have a Heart Paisley demonstration project, operates in the Renfrewshire Community Health Partnership. This primary and secondary prevention project, which is now in its second phase, targets 45 to 60 year old people most at risk of developing heart disease and those with established heart disease, and is designed to demonstrate the degree to which primary and secondary preventative measures can improve heart health by tackling behavioural risk factors and unmet needs for treatment. The project is piloting health coaching as an approach to the primary and secondary prevention of coronary heart disease.
The Keep Well programme is designed to improve the health of people living in areas with high levels of deprivation. Keep Well, which covers around 20 general practices in the north and east of Glasgow, will help us find out what different approaches are effective in engaging people who do not usually come forward for preventive care. Practices are offering an annual detailed health screening for everyone aged between 45 and 64 years of age, whether they are well or have any health problems. People who are registered at these surgeries and who have risks identified will be offered fast access to health improvement services, such as those for smoking, eating, weight, alcohol, anxiety and depression, and physical activity. Keep Well builds on the existing relationship of trust that exists between patients and GPs and their teams. It has also developed local directories of services that help people in the health service and other services to find out easily what support is available locally for health related behaviour change.

Both Have a Heart Paisley and Keep Well are being thoroughly evaluated and the results will be used to inform the planning of preventive services across the NHS Greater Glasgow and Clyde area and beyond.

**Lessons from working to reduce coronary heart disease**

- We must recognise the crucial role of primary care in prevention initiatives.
- Prevention programmes must take account of social determinants of health.
- Relevant clinical research should be both translated into guidelines and adapted for local use.
- We need to use a range of strategies and methods of engagement to ensure our preventive activities are accessible to all.
- Engaging with local authority partners and voluntary organisations, and involving patients in the design of services, are essential if we are to have services that are accessible and successful.
- Using the latest developments in computers and software supports and encourages primary care staff to follow a systematic approach and to monitor and evaluate outcomes.
- Training staff in communication and engagement with people is crucial to success.
Working on increasing employment

While official measures show great reductions in the numbers of people claiming unemployment benefit during the past 10 years in the West of Scotland, the unemployment rate is not an adequate measure of worklessness. The “employment deprived” figures in the Scottish Index of Multiple Deprivation show the number of people not in work because of unemployment, illness or disability. According to the index, 235,000 adults were employment deprived in 2002 in the West of Scotland council areas, a third of whom (85,000) lived in the Glasgow City Council area. Glasgow City Council also had the highest percentage of the working age population who were employment deprived at 23%, while the lowest percentages were in East Renfrewshire and East Dunbartonshire, both at 9%.

Data from the 2001 census shows that there is a massive variation in the proportion of working age adults who are employment deprived across the West of Scotland. In the 10 data zones with the lowest rates, between 1.4% and 2.4% of adults were employment deprived, and in the 10 areas with the highest rates, the figures were all more than 50%. In one part of Calton, in the east end of Glasgow, the percentage was more than 60%.

Responsibility for increasing employability lies with a number of agencies and local policies, including Workforce Plus and the ‘More Choices, More Chances’ Strategy. It also links health and social care provision with employers and the Community Planning process. For NHS Greater Glasgow and Clyde, the process of increasing employability in a community can help deal with the social and economic causes of ill-health and with the inequality gap through attracting sustainable employment that lifts people above the poverty line. The process of increasing employability also encourages supportive and encouraging environments that enable working age people to sustain and improve their health and well-being.

Health and social services link directly with employability in a number of areas such as primary care, addictions, learning and physical disability, mental health, services for offenders, children’s services including parents and young people and community work. In particular the services that employability relates most closely with include: children’s services in relation to barriers to work particularly childcare and early intervention, services to young people, learning communities and community education, money, debt advice and financial inclusion and housing.

Through these relationships the public sector has many roles in employability as employer, investor, partner, provider of services, health improvement organisations and through engaging with communities. All of these roles can be carried out in ways that increase employability. Examples of these roles are summarised for NHS Greater Glasgow and Clyde in Figure 3.3, but the principles of the relationships can be applied to any other public sector organisation.
Lessons from working on increasing employment

- We should recognise that much can be achieved through effective partnerships involving the NHS, local authorities, the Scottish Government, Scottish Enterprise and others on projects that address social determinants of health.
- We should assess how initiatives to increase employment affect inequalities, since generating more jobs in a given area does not necessarily mean that locally deprived or unemployed people will benefit.
- We must consider the opportunities for the NHS to reduce worklessness as an employer and as an investor as well as in its more traditional roles as a partner and a provider of services.
Delivering health protection programmes

The Public Health Protection Unit is responsible for public health aspects of communicable disease and infection control, waterborne incidents, environmental hazards and the co-ordination of immunisation within NHS Greater Glasgow and Clyde.

As a public health measure, immunisations have been hugely effective in reducing the levels of disease and premature death. Vaccination programmes are designed to both protect the individual and prevent the population from contracting specific infectious diseases.

Low immunisation uptake rates are a public health concern, because they increase the possibility of disease transmission, and complications arising from outbreaks of infectious diseases. To this end, the Scottish Government has set a national target rate of 95% uptake among children aged 24 months for completed courses of the pre-school immunisations such as diphtheria, tetanus, polio, pertussis, Hib, Men C and pneumococcal vaccine. It has also set a target rate of 95% uptake in children by age 5 years for MMR vaccine.

Encouragingly, uptake is consistently high across all the CH(C)P areas, despite differences in deprivation levels. In the year ending December 2006, across the NHS Greater Glasgow and Clyde area, 97.9% of infants aged 24 months had completed their primary immunisations and 94.1% of five year olds had had a first dose of MMR.\textsuperscript{13}

NHS Greater Glasgow and Clyde is encouraging all health professionals who are involved in immunisation in any way to complete a new e-learning educational resource. This will help staff to meet the training needs following the changes to the national immunisation schedule in 2006 and to address parental concerns more effectively.

Screening is a public health service in which members of a defined population are offered a test to determine whether they are at risk of contracting, or have already contracted a specific disease. Screening for certain conditions is a highly effective public health measure. For example, the rate of cervical cancer in the UK has almost halved in women younger than 65 years since 1988, when national call-recall systems began.
One fifth of the population in NHS Greater Glasgow and Clyde, approximately 240,000 people, are invited to take part in national screening programmes each year. Screening is offered in pregnancy, new born, vision, breast and cervical cancer programmes. A diabetic retinopathy screening programme has recently been introduced and a bowel cancer screening programme will be implemented in 2009.

These programmes, based on sound evidence, are coordinated monitored and evaluated by NHS Greater Glasgow and Clyde’s Public Health Screening Unit and are assessed by rigorous standards set by NHS Quality Improvement Scotland.15

Lessons from delivering health protection programmes

■ Health protection programmes must be evidence based, quality assured and take a systematic population approach.

■ We should positively target services, since unequal uptake of health protection services may increase health inequalities.

■ The primary care setting is crucial in delivering health protection services and ensuring uptake is high in immunisation and screening programmes

■ A well-trained, well resourced workforce is essential to maintain and improve programmes.

■ New technology provides many opportunities for providing programmes, for example in information handling, and in training.

■ Clear pathways and protocols are required to make sure that consistent integrated and appropriate care is provided for everyone in health protection programmes.
health inequalities are increasing

Differences in income, gender, race and faith, disability, sexual orientation and social class are all associated with inequalities in health. The interactions between and among them are also powerful determinants of health. Socio-economic status, however, is central to inequality.

Life expectancy is a useful indicator for highlighting inequalities in health outcome. We know, for example that the number of years a new-born child might expect to live varies significantly across the NHS board area by sex and geography.

Figures 4.1 and 4.2 show trends in life expectancy for males and females from 1991-93 to 2004-06 for the 6 councils which lie wholly within NHS Greater Glasgow and Clyde and for Scotland.

Figure 4.1
There is no doubt that, overall, people in NHS Greater Glasgow and Clyde are living longer. However, as Figures 4.1 and 4.2 illustrate wide variations exist between council areas: East Renfrewshire and East Dunbartonshire residents have a longer life expectancy than Scotland as a whole but the other council areas in NHS Greater Glasgow and Clyde still lag well behind.

Other examples of life expectancy clearly illustrate this polarity:

- There is a nine-year gap in male life expectancy between East Dunbartonshire CHP (77.7 years) and North Glasgow CHCP (68.6 years).\(^\text{16}\)
- Female life expectancy is higher than male life expectancy by six years across the NHS Greater Glasgow and Clyde area as a whole, but also varies by around 5.5 years across the CH(C)Ps;
- The gap in life expectancy between the most affluent and deprived population communities has widened significantly in the last 20 years, particularly among males.\(^\text{17}\)
- Estimates of healthy life expectancy - years of life without a limiting long-term illness - show that across the West of Scotland there is a 12 year gap in male healthy life expectancy between Glasgow City Council (46.7 years) and East Renfrewshire (58.5 years). There is an equally pronounced gap for women.\(^\text{18}\)
Patterns and trends in mortality are measured by standardised mortality ratios (SMRs) which mean that variations in ratios are not explained by differences in the age or sex profile of the population.

As shown in Figure 4.3, the NHS Greater Glasgow and Clyde area has a mortality rate that is almost a quarter higher than would be expected based on the Scottish rate. Across CH(C)Ps, this variation ranges from 65% above the Scottish rate in East Glasgow to approximately 27% below in East Dunbartonshire. The three CH(C)Ps with the highest standardised mortality ratios also have the highest concentrations of most deprived data zones in their areas (60% of the population in East Glasgow lives in the 15% most deprived data zones in Scotland, 63% in North Glasgow; and, 49% in the South West Glasgow - see Chapter 2 Figure 2.3).

Figure 4.3
Recent research has highlighted a rise in death rates in younger age groups, especially among men, between 1981 and 2001. The main drivers behind this rise are deaths due to chronic liver disease, suicide, assault and drug and alcohol related deaths and the main concentration of these “self-destructive” deaths is in the West of Scotland, particularly in Glasgow City.

At the heart of many of these differences in health outcome are issues of socio-economic deprivation and inequality. Recent reports provide a snapshot of poverty, nationally and locally:

- It is estimated that there are 240,000 children in Scotland who are part of households living in poverty\(^20\)
- In 2001, more than 100,000 children in the West of Scotland\(^21\) were living in households where neither parent was in employment;
- Recent analysis by NHS Health Scotland\(^22\) show that from 1980 to the latest analysis point, 2000, the West of Scotland had the highest levels of ‘core poverty’ and ‘breadline poverty’ among UK regions\(^23\);
- Between 1980 and 2000 the proportion of the West of Scotland population estimated to be ‘breadline poor’ rose from 24.5% to 36%\(^21\).

Living on a low income affects different sectors of the population in different ways. For children, it means that their diet and health suffers, they are more likely to die in an accident, they have higher rates of long-standing illness and have poorer attainment and school attendance records. As adults, they are more likely to have poor health, be unemployed or be homeless. They are also more likely to become involved in offending drug and alcohol use.

Inequalities in health-related behaviours are often associated with socio-economic differences, although gender, age, race and faith can also be important. The following two examples, breastfeeding and children’s dental health, illustrate inequalities in health behaviours.

Breast feeding is known to give health benefits to both mother and child. There have been modest rises in breastfeeding numbers in recent years though only just over a third of children are still being breastfeed at 6 weeks of life. There are still large variations in breastfeeding rates across Greater Glasgow and Clyde ranging from 20% in West Dunbartonshire to 47.5% in East Renfrewshire (Figure 4.4).
The dental health of children is slowly improving. However, throughout the NHS Greater Glasgow and Clyde area, between 40% and 70% of children aged five have decayed teeth. Dental caries is the most frequently recorded cause of admission to acute hospitals in the area for children aged 0 to 15. Children from the 15% most deprived parts of the area had 67% more admissions than expected, based on all NHS Greater Glasgow and Clyde area rates; children from the other areas had 33% less admissions than expected.

Socio-economic inequalities form part of the picture but there are other forms of inequalities that have a differential and compounding effect on health. These inequalities affect people throughout their lives. The following examples include the effect of gender, sexual orientation, race and faith and having learning disabilities.

The links between gender and health are becoming more widely recognised. An example of this can be illustrated by looking at mental illness. Although there do not appear to be sex differences in the overall prevalence of mental and behavioural disorders there are significant differences in the pattern and symptoms of the disorders. These differences vary across age groups. In childhood a higher prevalence of conduct disorders is noted for boys than in girls. During adolescence girls have a much higher prevalence of depression and eating disorders and engage more in suicidal thoughts and suicide attempts than boys.
Boys experience more problems with anger, engage in high risk behaviours and commit suicide more frequently than girls. In adulthood the prevalence of depression and anxiety is much higher in women, while substance use disorders and antisocial behaviours are higher in men. In the case of severe mental disorders such as schizophrenia and bipolar depression men typically have an earlier onset of schizophrenia while women are more likely to exhibit serious forms of bipolar depression. In older age groups the incidence rates for Alzheimer's disease is reported to be the same for women and men, women’s longer life expectancy means that there are more women than men living with the condition.

Gender based violence is recognised as a significant public health problem. Its physical and mental health consequences are profound. In addition, childhood physical, emotional and sexual abuse, domestic abuse and sexual violence contribute to physical and mental ill health of children, adolescents and adults, affecting a significant proportion of the population throughout their lives.

Where lesbian, gay, bisexual and transgender people are concerned there is an added dimension of discrimination which can make the difference between good and bad health. Problems associated with homophobia in early life such as bullying and low self-esteem can continue into adulthood and have serious long-term negative effects on health. This has been evidenced in that attempted suicide rates amongst gay men are higher than in the heterosexual population and anxiety, depression, self-harm and attempted suicide have been linked with experiences of prejudice and discrimination. A needs assessment of young lesbian, gay and bisexual people in Glasgow recorded that 80% of them had experienced discrimination. Those surveyed had up to three times as many suicidal thoughts as the general population.

Differences in health are also experienced by different ethnic groups due to a complex mix of factors including genetic and behavioural. For example, people of Pakistani and Indian origin living in Scotland have an increased incidence of 60% to 70% of having a heart attack – but a large part of the inequity is due to social determinants of health, such as poverty, poor education, lack of employment opportunities as well as poor access to health care. The experience of racism is a significant factor in the health of black and ethnic minority communities, and the consequences are similar to those faced by people abused on the basis of their sexual orientation. There are two major barriers to NHS Greater Glasgow and Clyde improving the health of people in the black and ethnic minority communities. One is the lack of routine capture of data by ethnic grouping for use in the planning or design of services; the other is the low level of staff awareness of how to provide appropriate services to diverse communities.
An area of particular concern for NHS Greater Glasgow and Clyde is meeting the health needs of asylum seekers. Because asylum populations change frequently, it is difficult for NHS Greater Glasgow and Clyde to identify and address their health needs. This will continue to be a challenge as the new asylum model is implemented and the turnover of asylum seekers increases. It is difficult to acquire robust health information or immigration status and good ethnic recording is fundamental to the analysis of unmet need. The health induction process is central to ensuring needs are met. Since many asylum seekers come from countries where they have experienced rape and torture, or seen rape, torture or death, there is a high incidence of mental health issues. Qualitative research indicates that asylum seekers experience racism regularly, which can have an impact on their mental and physical health.

People with learning disabilities also experience significant health inequalities and there is evidence that they also experience institutional discrimination. They have a significantly lower life expectancy, and higher standardised mortality ratio compared to people without learning disabilities. The most common causes of death also differ for people with learning disabilities compared to the general population and the health needs of people with learning disabilities are often complex with co-morbid physical and mental health issues. Studies have shown that people with learning disabilities experience inequalities due to their greater levels of health needs when compared with the general population, and also experience significant barriers to these needs being met by services.

Research in Glasgow has provided more evidence that adults with learning disabilities have increased needs, that there is a high level of unmet health need, and that health monitoring and health promotion needs are poorly addressed. For example, an adult with learning disabilities is 10 times more likely to have an episode of psychosis and almost twice as likely to have a common mental disorder, though less likely to have health problems associated with alcohol misuse and smoking. Problems with accessing services are illustrated by the finding that 13.5% of the 400 women with learning disabilities who took part in the health check programme had an up to date cervical smear, compared to the 74% uptake for all women in the NHS Greater Glasgow and Clyde area. These differences in the patterns of mortality and morbidity, and increased health needs, show the need for specific public health measures to reduce the inequalities experienced by people with learning disabilities.
How NHS Greater Glasgow and Clyde and its partners are responding

In recognition of the growing need to address the inequalities issues mentioned, a significant reorganisation has been carried out in NHS Greater Glasgow and Clyde. This was done in response to both national and local initiatives designed to maximise existing resources and to provide a coherent structure for meeting more effectively the health needs of our population. In addition, we have co-ordinated the NHS contribution to improving employability, as part of a wider programme to address the causes and consequences of poverty, carried out in conjunction with community planning partners. As part of this drive to address inequalities, NHS Greater Glasgow and Clyde have also put in place the following:

Corporate Inequalities Team

This team is leading the organisation to maximize its potential for addressing the causes and health consequences of inequality and discrimination. The work of the team also includes managing the legal requirements in relation to inequalities.

Equality and Diversity Team

This team is within the Organisational Development department, this team helps the organisation to integrate equality and diversity awareness into the planning and delivery of services. The team also helps departments in all parts of the organisation to develop links with diverse communities.10

Public Health Resource Unit and Public Health Networks

These help the organisation to build the capacity of the public health work force.11

Performance Management Systems

NHS Greater Glasgow and Clyde has developed effective performance management systems to support its pursuit of its objectives, including the reduction of health inequalities. Many of the organisation’s targets and key measures specifically concern reducing inequalities and we are working to make these more effective in all parts of the organisation.
Glasgow Centre for Population Health

This research and development team focuses on reducing health inequalities and improving health and quality of life. The centre has four aims:

- to build a deeper understanding of Glasgow’s health and its determinants;
- to evaluate the health impacts of local strategies, and to generate evidence to strengthen the processes of health improvement;
- to invest in engagement and participation, by providing a focus for independent thinking, analysis and debate about population health and inequalities; and
- to develop greater capacity to deliver innovation and change.

Along with the above NHS Greater Glasgow and Clyde have introduced other new ways of working and the following are a few of the many new initiatives:

Inequalities Sensitive Practice Initiatives (ISPI)

This Scottish Executive funded initiative supports the organisation and its partners in the delivery of integrated services to identify actions that will improve the effectiveness and efficiency of frontline practice.

Community Planning

NHS Greater Glasgow and Clyde have contributed to Community Planning Partnerships across all council areas as well as pathfinder initiatives in Glasgow to develop actions on the social determinants of health along with other partners such as local authorities, local economic development companies, police, housing, voluntary sector, private sector and others.

Homelessness Partnership

The Glasgow Homelessness Partnership recognises the significant health and social consequences of homelessness, and is developing gender sensitive responses that meet the differential needs of men and women and that also take account of the impact of other social inequalities such as race, disability and age.
Infant Feeding Strategy

NHS Greater Glasgow and Clyde is launching an infant feeding strategy that is designed to improve health and reduce inequalities through supporting improved nutrition for all children aged from 0 to 2 years. An area-wide Infant Feeding Co-ordinator has been appointed to provide its partners with the expertise to implement the strategy. The strategy is based on the principles of the Baby Friendly Initiative. All maternity units in NHS Greater Glasgow and Clyde are accredited ‘Baby Friendly’ and CH(C)Ps will be urged to attain community accreditation. The University of Paisley is the first university in the world to receive a Baby Friendly Award.33

Financial Inclusion

CH(C)Ps across NHS Greater Glasgow and Clyde are contributing to reducing poverty through a variety of interventions. An example of such work is in West Dunbartonshire CHP where an evidence-based model of money advice has been established with general practice and the Local Council’s Welfare Rights Unit.

Keep Well

This programme, described in the previous chapter, is another example of how the organisation is designing projects to overcome inequalities in health care access. The first phase operated in North Glasgow CHCP and East Glasgow CHCP areas, and phase two is being introduced in South West Glasgow CHCP, Inverclyde CHP and West Dunbartonshire CHP areas, again targeted at the most deprived communities. The evaluation of the initiative will show whether these more intensive ways of engaging with people in deprived communities is effective.

Unmet need project

The Have a Heart Paisley project offered health checks to all 45 to 60 year old people in Paisley, but there was a lower uptake of the offer in the more deprived communities. A new community development approach to reach those who did not respond in the Ferguslie Park area is currently underway.
Key public health messages and priorities for action

As factors that cause inequalities in health are multiple and complex, a joint partnership approach to reduce health inequalities is essential. Examples of this approach are:

- Local and national economic strategies, employment plans, taxation, benefits and education policies must be influenced in order to attain a more equitable distribution of wealth in our population, to reduce poverty and its effects, and to enhance equality of opportunity. Success in these areas will help reduce the inequalities gap.

- Because health service provision can, paradoxically, increase health inequalities - since those with most need are least likely to take up services, especially preventative services, offered - specific targeting of health resources is required to reach those with unmet need.

- A focus on addressing social determinants of health with our community planning partnerships and the developing ‘pathfinder’ partnerships must be maintained to reduce worklessness, improve educational attainment and enhance the local environment.

- There must be a programme of health impact assessment of all strategies and plans that can influence health and inequalities.

Good trend and profiling information and evidence of effective interventions to address and monitor health inequalities and determinants of health must be made available at national, NHS Greater Glasgow and Clyde and CH(C)P level to inform service planning and allow targeted resource allocation. Examples of this approach are:

- The lessons learned from evaluations of new programmes such as Have a Heart Paisley and Keep Well must be incorporated into local practice

- Capacity must be built in order to facilitate all staff to understand the complexities of inequalities in health and how they may help in reducing these inequalities.
Different communities in Greater Glasgow and Clyde have very different social circumstances and health outcomes. The best health outcomes are in the communities that show economic success and good physical and social environments, while poor health outcomes are consistently linked to adverse social circumstances.

The Greater Glasgow and Clyde area includes communities that are opposite ends of the spectrum of good and poor health and supportive and adverse social circumstances as described in ScotPHO community profiles.\textsuperscript{34}

Figures 5.1 and 5.2 show how two communities in the NHS Greater Glasgow and Clyde area can have vastly different experiences.

**Figure 5.1**

**Healthy, Successful Glasgow and Clyde**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
<th>BETTER</th>
<th>Comparison with Scotland</th>
<th>WORSE</th>
</tr>
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<td>Male life expectancy yrs</td>
<td>76.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking prevalence %</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Teenage alcohol attrib. hospitalisation cr</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unable to work through disability/illness %</td>
<td>6.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voter turnout %</td>
<td>58.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School leavers into higher education %</td>
<td>52.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer mortality or</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Road accident casualties cr\textsuperscript{2}</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average household income £</td>
<td>32,882</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed claimants %</td>
<td>1.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key and definitions for "two communities"

**Key**
- Yrs: years
- %: percentage
- cr: crude rate per 100 population
- £: pound sterling
- sr: age-standardised rate per 100,000 population
- cr2: crude rate per 10,000

**Definitions**
- **Male life expectancy**: male life expectancy in years
- **Teenage alcohol attributable hospitalisation**: average annual acute hospital inpatient stays for 13-19 year-olds for directly alcohol related and alcohol attributable conditions
- **Unable to work through disability/illness**: percentage of working age population (women 16-59; men 16-64) claiming Incapacity Benefit or Severe Disablement Allowance
- **Voter turnout**: percentage of electorate voting at Scottish Parliamentary elections
- **Cancer mortality**: age-standardised rate per 100,000 population for average annual deaths due to all malignant neoplasms
- **Road accident casualties**: rate per 10,000 population (all adults and children aged 0-15) of casualties injured in road accidents
- **Average household income**: average annual gross household income (income from every source including income support and welfare)
- **Unemployed claimants**: percentage of claimants based on monthly snapshots of claimants

This section focuses on a small number of selected topics to illustrate the relationship between health and difficult social circumstances in our worst affected communities. The topics we have chosen to highlight are pregnancy and parenting, crime and violence and mental health.
Pregnancy and Parenting

There are strong associations between socio-economic factors such as lone parent households and children in workless households, and maternity-related indicators. A range of maternity and child-related indicators at postcode sector level across Scotland show notable correlations between maternal age, smoking during pregnancy, breastfeeding, being a lone parent and children in workless households. For example, in areas where the proportion of women smoking during pregnancy is high, maternal age is lower, and areas with a high level of teenage pregnancy have high levels of smoking in pregnancy. Areas where there are high levels of smoking during pregnancy are also associated with higher levels of lone parents and lower levels of breastfeeding. Areas with a higher average age of first-time mothers tend to have lower proportions of lone parents and higher levels of breastfeeding.35

While none of these associations necessarily indicates a causal relationship they underline the importance of understanding the interactions among social, cultural and economic factors and health behaviours particularly at a local level.

How NHS Greater and Clyde and its partners are responding

Mainstream services, innovation within services and local projects provide support for improving health outcomes related to pregnancy and parenting. CH(C)Ps bring together integrated or joint children’s social work and health services. Examples of other initiatives are Parents and Children Together, the Breathe project and breastfeeding support.

Parents and Children Together (PACT) teams have been set up to improve the physical, social and mental well-being of children and families among vulnerable and disadvantaged groups. The initiative, which emphasises early interventions, has links to a variety of other programmes including child health development, workforce development in public health nursing and other disciplines, integration of children’s services, and life-long learning through supporting mothers to access education and training. Multi-disciplinary and multi-agency working is at the heart of the teams, which provide a combination of intensive home-based and centre-based support to vulnerable and disadvantaged families. The project promotes better access to services, health promotion and social care initiatives, parenting education and childcare provision. This model has informed the review of health visiting.

The Special Needs in Pregnancy Service (SNIPS), provided by specially trained midwives in the Clyde area, is an example of an effective service to support vulnerable women and women with disabilities during pregnancy.
The Breathe project offers help for stopping smoking during pregnancy in maternity units. The project measures pregnant women’s carbon monoxide levels at their first visit to a clinic. Women who smoke are then referred to a specialist smoking cessation midwife who supports the women to devise their own action plans for quitting.

Renfrewshire CHP promotes breastfeeding in some of its most deprived areas through breastfeeding networks and support groups and through engaging and training breastfeeding lay supporters. They also facilitate creative cascading of breastfeeding awareness by working with local “champions”, grandparents, local community groups and businesses. These initiatives are recognized by and have informed the development of the NHS Greater Glasgow and Clyde infant feeding strategy.

Crime and violence

Detailed analysis of violent crime patterns in Glasgow city shows that male offenders outnumber females by more than three to one, and that the peak ages for offending and being a victim are from the mid-teenage years to mid-twenties. The area of residence of offenders and victims is highly correlated with deprivation, and in some smaller, deprived communities in Glasgow more than one in ten people have been victims of a violent crime in the past three years (see Figure 5.3). Unsurprisingly, incidents of violent crime are highly concentrated in the centre of the city.

Other related measures serve to further highlight the problem of violence. West Dunbartonshire and Glasgow City have the highest recorded rates of domestic abuse, both over 50% above the Scottish average, with the lowest rate being in East Renfrewshire at 58% below the Scottish average\(^{36}\), while rates of hospital admission for assault are also much higher in Glasgow than the Scottish average across all ages. The most common specific diagnosis of assault in Glasgow is “assault by sharp object” - a reflection of the high rates of knife crime in the city. People from more deprived areas suffer far higher levels of assault that result in hospitalisation.

There are significant differences between the areas with the most and fewest victims of violent crime.
Importantly, the same communities have the most and the fewest violent offenders.

**How NHS Greater Glasgow and Clyde and its partners are responding**

The Violence Reduction Unit in Strathclyde Police has developed an innovative public health response to crime and violence. The unit was set up to identify good practice in reducing violence and is designed to contribute to building a society where children and young people can live without fear of assault. The unit’s approach involves prevention of violence and extending better care and safety to affected population groups in partnership with health, education, transport and justice organisations, and operates alongside both law enforcement and reducing tolerance of violence in communities.

The unit operates on three levels of prevention. Primary prevention maintains an injury surveillance database which can be shared with the NHS and other agencies to give accurate information on which to base preventive action. Prevention at this level also facilitates parenting and early years support, based on evidence for the importance of early years development in preventing violence in older age groups. Secondary prevention targets those most at risk of developing violent behaviour or of becoming a victim and tertiary prevention includes working with the prison service to have violence prevention and parenting programmes as mandatory requirements for prisoners.37
Mental Health

This short description of mental health focuses on two specific areas: suicide and addictions. Suicide rates in Glasgow City between 1989 and 2004 for men and women aged over 15 were significantly higher than the Scottish rates each year. The same study showed that suicide rates were significantly higher in deprived areas and that there was a widening suicide gap across Scotland. Another recent analysis has highlighted a persistent clustering of suicide deaths in Glasgow during a 20-year period.

Another aspect of mental health, problem drug use, affects an estimated 51,500 adults between the ages of 15 and 54 in Scotland more than a third of whom live in the NHS Greater Glasgow and Clyde area. More than 11,200 of these live in Glasgow, representing more than 3% of 15 to 54 year olds while, by contrast, the equivalent figure for East Dunbartonshire is 0.7%. Another study estimated in 2003 that 3.1% of all children aged 0-15 in Glasgow lived with a parent with problem drug use.

Between 1996 and 2005 there have been more than 1,200 drug-related deaths in the NHS Greater Glasgow and Clyde area and across the 10 Community Health Partnerships fully within NHS Greater Glasgow and Clyde, there is a six-fold variation in death rates.

There are wide differences in the proportion of drug-related deaths in the 10 CH(C)Ps in the NHS Greater Glasgow and Clyde area (Figure 5.4).

Figure 5.4
are responding

The then Scottish Executive launched the Choose Life strategy in 2002 in response to rising rates of suicide in Scotland.\textsuperscript{41} The strategy has drawn together multiple community planning partners across the country. In the NHS Greater Glasgow and Clyde area, actions to reduce suicide have involved many agencies and groups. Activities have included the Esteem service, which provides early intervention for people at the first onset of psychosis when they may be at a higher risk of suicide and the Asist (Applied Suicide Intervention Skills) training course for professionals, carers and volunteers, which prepares people to intervene competently with a person at risk of suicide.

Other actions to prevent suicide across the NHS Greater Glasgow and Clyde area include raising public awareness through such means as seminars, media work and joint work with football clubs. There has also been policy work, such as the development of a protocol to assist school staff to respond to young people who appear suicidal or are self harming, and service developments, such as the Life Coaching Project run by the Wise Group and the Scottish Prison Service.

Projects to reduce suicide are just some of the local actions designed to improve overall levels of mental health and to prevent mental health problems. These include mental health improvement work in community health projects and Healthy Living Initiatives, and work on equality aspects of mental health such as the Mosaics of Meaning programme in black and ethnic minority communities.

Addiction Teams\textsuperscript{42} are accessed through CH(C)Ps and the Addiction Services Partnership between NHS Greater Glasgow and Clyde. Glasgow City Council co-ordinates all directly-provided NHS and local authority addiction services including in-patient, hospital and outpatient services. The Council also contract manages the Drug Crisis Centre, community rehabilitation, community support and carers services. This model of integrated services recognises that drug misuse happens in a context of significant social, economic and individual problems, and they support people to address these issues as part of helping them to overcome their drug misuse. Their main aim is to help people sustain drug-free lifestyles, but recognise that individual and social transformation is needed for a person who misuses to become drug-free. These services provide a good example of the value of integrated service delivery between health, social care and voluntary services.

The addiction services are part of the public health response to drug misuse through working to improve access to services, to identify people most at risk, to protect the health of the whole population and to contribute to reducing health inequality. Examples of these aspects of their work include new developments such as talking therapies and new prescription drugs for detoxification and substitute prescribing and by increasing the engagement of drug users not already in the service.

As well as services for individuals, the public health response to drug misuse includes population
based prevention, such as the pharmacy-based needle exchanges that were established to prevent the spread of blood-borne viruses which succeeded in 2006-07 in having 73% of injecting equipment returned which was well above the Scottish average. They also aim to introduce people who misuse drugs to education, training and employment by working with Local Economic Development Companies, training providers, colleges and employers to support service users to take and up and maintain employment. Other initiatives aimed at reducing inequalities are guided by the Addictions Equalities Plan and include an addiction service for people from black and minority ethnic communities within the mainstream service, and the continued development of gender-sensitive services.

Key public health messages and priorities for action

In order to improve the experience of our most unhealthy communities the following things need to happen:

There must be a focus on interventions while people are young as these will be the most cost-effective in building empathy, attachment and self-esteem, as well as contributing to reducing health inequalities in the population.

Examples of this approach include:
- Resources need to be moved to early years, including early education, childcare and support for vulnerable families and young people.
- A higher priority must be given to parenting support, early childhood education and childcare.
- Staff working with young children must be highly trained and supported and services must be integrated and evidence-based.

Working in partnership with communities is essential. All public sector services should contribute to reducing poverty and disadvantage in the least healthy communities. Examples of this approach include:
- Weighting of services to improve access in order to ensure enhanced health and social benefits for those at risk of poorest health
- Violence is such a pressing public health issue, that all public sector organisations must work with the Violence Reduction Unit
Analysis of demographic trends is essential to plan health and services for the future, in order to provide facilities and services that meet the needs of a changing population, to improve the overall health of the community, and to provide value for money.

Demographic changes in the population of Greater Glasgow and Clyde are having a significant and increasing impact on public sector service provision. These changes include ageing populations, changing household structures, changing social class and the introduction of new populations of asylum seekers and economic migrants.43

Together with data on other life circumstances – such as the levels of income within a population, and housing changes – this information can improve our understanding of our changing population and help to identify opportunities for making the best use of local resources for the benefit of the population as a whole.44

Among the most important changes are:

■ In the next 20 years, the population of Glasgow City will fall, and the population of East Renfrewshire will rise.

■ In Glasgow City, the trend towards an ageing population will be less marked than in other local authority areas, and the city will retain a relatively stable, low dependency ratio. This ratio shows the number of young and old people as a proportion of the number of working adults in a population. Other local authorities in the NHS Greater Glasgow and Clyde area will see dependency ratios rise (Figure 6.1).

Figure 6.1

![Dependency Ratio Projections](image)
In the coming years, the Scottish population will reduce in size, but the number of households will increase, as single parent and single adult households increase. This is most marked in Glasgow City. By 2016, single adult households will account for 49% of all households in Glasgow City, compared to 31% and 32% in East Renfrewshire and East Dunbartonshire respectively, and single parent households will make up almost 50% of households with children (Figure 6.2).

**Figure 6.2**

![Projected change in single parent households](image)

Glasgow will continue to become a more middle-class city. The proportion of Glasgow’s population in Social Class I or II has more than doubled since 1981 and in the 2001 census four out of 10 adults in Glasgow City were classified as being in one of the top two social classes. There will continue to be wide variations in the distribution of income across the city.

Glasgow’s population will continue to change through migration in and out of the city. While its indigenous population has been falling, Glasgow has been the leading council in Scotland providing accommodation for asylum seekers and refugees since 2001. Using GP registrations, it is possible to estimate that there are more than 11,000 current or recent asylum seekers living in Glasgow (Figure 6.3).
Economic migrants from central and eastern Europe are now a significant feature of the population of the West of Scotland. A recent report estimated that in June 2007 there were more than 5,000 migrants from new EU member countries living in Glasgow, and that by June 2008 this could rise to 6,700.45

**How NHS Greater Glasgow and Clyde and its partners are responding**

Some changes in populations happen over a period of years, such as the decline in the number of people living in Glasgow City, and others happen quickly, requiring the public sector to respond at short notice to unfamiliar issues. For example, an influx of asylum seekers can bring people suffering from trauma resulting from torture, or a sudden increase in the number of cases of tuberculosis. As well as having to respond appropriately to new situations or crises, public sector organisations need to develop structures for ongoing planning that is responsive to population changes.

As an example of current practice, this section describes the structures for ongoing planning for the City of Glasgow and gives a summary of the health and social services’ response to asylum seekers and recent European Union migrants in the city.
The public sector has two planning processes that are designed to ensure that appropriate and cost-effective services are available to the people of the city. The first is Glasgow City Council’s statutory planning of the development and use of land to meet the population’s needs for homes, jobs, leisure and mobility. This process also encourages positive change in villages, towns and cities; and protects historic buildings and the countryside. The second is planning for people, which usually involves a wide range of partners.

The 2006 Planning etc (Scotland) Act stipulated that councils, when they are planning for the built environment, have to consider public involvement and sustainable development in their development plans. Development plans are sometimes made up of two plans, a structural plan (for large conurbations around Scotland’s largest cities) and a local plan.

The Glasgow and Clyde Valley Joint Structure Plan is prepared by eight councils: East Dunbartonshire, East Renfrewshire, Glasgow, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire and West Dunbartonshire. The plan aims to enhance wellbeing and a high quality of life through sustainable development, focusing on economic competitiveness, greater social inclusion and integration, sustaining and enhancing the natural and built environment, and integrating land use and transportation.

A linked Health Action Programme is designed to improve the quality of the built environment and the quality of life of individuals and communities by linking planning and good health, building on the relatively new concept of healthy urban planning. The programme acknowledges that improved health depends on factors such as employment, housing, transport, safety, education, poverty and access to services, and aims to support a better understanding of the links between land use planning and health.

Some councils’ local plans – which have to conform to the structure plan – are beginning to incorporate a health dimension. For example, the Glasgow City Plan includes health along with social renewal and sustainable development as the council’s vision for making Glasgow more attractive to existing and prospective residents and investors. This plan is designed to help improve residents’ health by providing access to green space, cultural and sporting activities; helping to curb traffic-related pollution; and providing facilities for increased walking and cycling.

A second type of planning process is also designed to improve quality of life, but through focusing on people, and this is usually carried out by partnerships across the public sector with input from the public. Each council has a slightly different configuration for its community planning partnership.
The Go Well study led by the Glasgow Centre for Population Health brings together planning for the built environment and planning for people by investigating the health effects of neighbourhood change on individuals, families and communities. Go Well includes an ecological study to monitor health status, housing market changes and changes to the social and physical environments across all communities in Glasgow City during the next 10 years; a longitudinal study of people moving from the study areas; and community engagement in partnerships for neighbourhood change.48

A practical example of a recent response to population changes has been Greater Glasgow and Clyde’s response to asylum seekers. Asylum seekers, who are legal residents of the UK, usually apply for asylum to escape countries where they faced human rights abuses and repression. They are often vulnerable as a result of being persecuted and possibly tortured and raped. A BMA report on asylum seekers’ health in 200249 showed that a significant number of asylum seekers are prone to particular health problems, including a range of communicable diseases such as tuberculosis, Hepatitis and HIV/ Aids, the physical effects of war and torture such as rape or sexual assault, landmine injuries, beatings and malnutrition, and social and psychological problems such as depression, stress and anxiety, and racial harassment.

In addition, the health of asylum seekers may get worse after they enter the United Kingdom. Failed asylum seekers do not have the same rights of access to services as those whose case has not been settled, and there are concerns that emergency life-threatening conditions and transmissible diseases might go untreated.

In Greater Glasgow and Clyde, the particular health issues of asylum seekers have included mental and physical conditions resulting from persecution, and a need for support for families with children. A range of direct service and partnership developments has been designed to meet the housing, health and social care needs of asylum seekers in the Glasgow area.

However, the UK Government has introduced a New Asylum Model, which will have implications for the current system, including growing numbers of cases entering the system, decisions being made about legacy cases where long-term asylum seekers have assimilated into Glasgow citizenship without the required legal status, and new imperatives to provide information that might prevent some people seeking essential medical and social help.
Another example of how population changes are influencing the planning process is the recent influx of substantial number of economic migrants from the eight new European Union countries. For example, the Slovak Roma community has an unprecedented range of complex support needs. To ensure that the public sector planning process knows enough about the Roma community to meet its needs, the South East Glasgow CHCP is gathering information about the community. The results of this work will provide an accurate assessment of the size of the Roma population and ensure that the community knows about and can access appropriate services, such as health protection and immunisation, child protection, education, translation and interpretation services, employment registration procedures, benefits entitlement, social services and housing.

Key public health messages and priorities for action

Populations are in a constant state of change which can be slow and developmental or rapid in response to changes in other parts of the world. There are sources of information that can map current and past situations and to some extent predict further changes for the future but there are also gaps in our data gathering and use of intelligence.

In order to take into account our changing population the following needs to happen:

- Planning processes must recognise the importance of links between structures, environments and well-being in order to address the changing needs of current and future populations. These links are increasingly being made in partnerships between agencies and with local residents. Examples within this approach are:
  - Appropriate information is available to improve health and well being. Those responsible for public sector planning across the region must collaborate, share access to and maximise their use of relevant health, demographic, socio-economic, ethnicity and housing information to support their work.
  - Each CH(C)P and Community Planning Partnership must have access to detailed up-to-date health-relevant information and must have the capacity to interpret and make best use of this information. Where appropriate, new data should be gathered to fill gaps in knowledge.
  - Our population and its health needs are continually changing. Those responsible for public sector planning must ensure that their knowledge of the current population and forecasted trends is up to date, and that this informs current service provision and future service planning.
Working in partnership with communities is essential. All public sector services should contribute to reducing poverty and disadvantage in the least healthy communities. Examples of this approach include:

- Weighting of services to improve access in order to ensure enhanced health and social benefits for those at risk of poorest health.
- Violence is such a pressing public health issue, that all public sector organisations must work with the Violence Reduction Unit.
the obesity epidemic needs to be taken seriously

Obesity is increasing. This is a national and international problem which affects people across all ages, genders and deprivation categories, although there are higher rates amongst older populations, those with learning difficulties, women and in areas of multiple deprivation. One fifth of pre-school children and 60% of adults are either overweight or obese.50

The proportion of the NHS Greater Glasgow and Clyde population either overweight or obese has increased rapidly by 12% in 8 years, with over 60% of adults and 20% of pre-school children now affected (Figure 7.1).

Figure 7.1

The changing proportion of adults in NHS Greater Glasgow and Clyde who are overweight or obese between 1995 and 2003
(Source: Scottish Health Surveys)

This rising prevalence of being overweight and obese is a phenomenon that can be ascribed to a general increase in the average weight of the entire population rather than a problem reserved to specific subgroups of the population. Figure 7.2 shows that this is a problem affecting the whole population demonstrated by a ‘shift to the right’ of the population weight distribution over 8 years.
Obesity can be thought of as part of a continuum which stretches from underweight, through normal weight to overweight and obesity.

Obesity is defined for adults as any individual body mass index value over 30 (with overweight defined as a BMI between 25 and 30). This measure is less useful in children since there is a normal and wide variation in the BMI measure as children grow. Obesity trends in children are therefore monitored by comparing the BMI distribution of today with a reference distribution of childhood BMI from 1990.

**Causes and effects of obesity**

In simple terms the obesity epidemic results from an imbalance between the amount of energy we collectively consume in our diet and the amount of energy we expend. Complex interactions occur at an individual level, amongst families, in communities and in society as a whole which combine to deliver this energy imbalance. This phenomenon is best explained as the presence of an ‘obesogenic environment’ where the circumstances in which we live contrive to bring about a continuous rise in the prevalence of obesity. This includes the commercial marketing of food, the urban environment, the transport system and popular culture. Taken together these interlinked systems combine to create a ‘runaway weight gain train’ upon which the population is riding.
Obesity is associated with numerous health problems such as diabetes, heart disease, arthritis, high blood pressure, some cancers and mental health problems. Vulnerability to these illnesses varies, for example, with age, gender, co-morbidity and ethnic origin. Its rising prevalence therefore represents a threat to the current trends in continuous health improvement for most conditions in Scotland.

**Preventing and managing obesity**

A number of organisations have conducted studies of the evidence base for the prevention and management of obesity. They include the Faculty of Public Health,53 the Cochrane collaboration,54 Health Scotland,55-56 Scottish Intercollegiate Guidelines Network57, the World Health Organisation58, the House of Commons Health Committee59 and National Institute for Health and Clinical Excellence60. The broad conclusion of this huge volume of work is that the evidence base for effective measures to successfully prevent or manage obesity is limited. However there have been few studies on the more ‘upstream’ societal determinants of health that cannot easily be studied using the traditional framework of randomised trials.

Figure 7.3 shows a broader approach to ways in which we take action on obesity.

**Figure 7.3**

**Opportunities for action on obesity**

- **Upstream Actions** (focus on the obesogenic environment):
  - Obesogenic environment focus:
    - Urban planning
    - Food policy
    - Transport policy

- **Community focus:**
  - Walking buses
  - Community based food and health programme
  - Physical activity opportunities

- **Individual focus:**
  - Diets
  - Obesity surgery
  - Exercise referral schemes
NICE has developed model patient flow diagrams based on the evidence for the management of obesity. These include evidence for using appetite suppressant drugs and surgery for those morbidly obese. There is now widespread recognition that there is very little evidence to support the traditional approach of telling people to “pull yourself together, eat less and exercise more”. The recommendations for preventing obesity in national guidelines are summarised in the figure 7.4.

**Figure 7.4**

**Recommended actions for the prevention of obesity in NICE guidelines 2006**

<table>
<thead>
<tr>
<th>Early Years</th>
<th>School</th>
<th>Community</th>
<th>NHS</th>
<th>Societal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimisation of sedentary activities at nursery school during playtimes</td>
<td>Reduce or eliminate access to unhealthy foods</td>
<td>Promotion of cycling and walking through better urban design and transport policy</td>
<td>Provision of advice on diet and physical activity</td>
<td>Reduction of commercial pressure to consume high energy products</td>
</tr>
<tr>
<td>Nursery schools should implement Dept. for Education and Skills, Food standards agency, and Caroline Walker Trust guidance on catering</td>
<td>Improve school food quality, its availability and affordability</td>
<td>Enabling easier and cheaper access to healthy food</td>
<td>Provision of health services for the identification and management of obesity</td>
<td>Reduce fat, sugar and salt in manufactured produce</td>
</tr>
<tr>
<td>Measures to increase physical activity in schools including school travel plans</td>
<td>Ensuring building design is conducive to physical activity</td>
<td>Develop care pathways for the management of the most obese individuals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How NHS Greater Glasgow and Clyde and its partners are responding**

NHS Greater Glasgow and Clyde and its partners are working to tackle the obesity epidemic in a number of ways. For example they are:

- Setting nutritional standards for school meals
- Running projects in communities to increase physical activity and improve diets
- Developing NHS services for adults who are overweight or obese
- Encouraging the food industry to label products with their nutritional content
Despite these activities the proportion of the population who are overweight or obese continues to increase. The activities that are designed reduce obesity are being overpowered by the ever-accelerating drivers of obesity. Unless we reverse the development of the obesogenic environment, which combines with our genes to make overweight or obesity more normal, we will need to treat an almost exponential rise in the medical consequences of obesity, and deal with obesity in a soaring number of people to prevent these consequences.

This will involve action by many agencies at many levels, but NHS Greater Glasgow and Clyde should lead the development of an environment for weight reduction. This can be done through the partnerships it has with local authorities through CHPs. NHS Greater Glasgow and Clyde should encourage all relevant agencies to make the prevention of obesity a priority, and support them to make the necessary changes.

The Glasgow City Physical Activity Strategy Let’s Make Glasgow More Active is an example of good practice. The Strategy takes a broad approach and complements the current Commonwealth Games Bid by providing a balance between recognition, celebration and support for the role of sport.

The Strategy’s main objectives are to:
- Develop healthy policies
- Create a healthy environment
- Increase the level of people’s skills
- Redesign services
- Work in partnership with communities
- Increase regeneration and social inclusion

Other community planning partnerships are also developing physical activity strategies, for example Renfrewshire launched their strategy in June 2007.

In addition, the NHS should further develop its clinical pathways for identifying and managing the people who would benefit from treatment to reduce weight. This is particularly the case for children in NHS Greater Glasgow and Clyde.
Key public health messages and priorities for action

In order to reverse the obesity epidemic two things need to happen:

The population as a whole has to consume less food energy. This is only likely to happen when food policy is based on the interests of health. Examples of this approach might include:

- Implementing the infant feeding strategy
- Providing free or subsidised school meals
- Removing unhealthy snack provision in public buildings, including hospitals and leisure centres
- Supporting the development of food co-operatives
- Lobbying for higher taxes on unhealthy foods and subsidies for the promotion of healthy, nutritious foods.

The population as a whole needs to expend more food energy. This is only likely to happen when the barriers to active transport (such as walking, cycling and the use of public transport) are removed and when limits are applied to sedentary forms of transport (such as cars). Examples of this approach include:

- Providing free public transport
- Rationing societies use of fossil fuels
- Redesigning the urban environment to prioritise cycling and walking as has been done in the Netherlands
- Introducing pick-up and drop bicycle schemes as has been done in Paris and Barcelona
- Developing and protecting open urban spaces, providing safer pavements, parks, playgrounds and pedestrian zones, and creating more good quality and well-maintained cycling paths
- Ensuring that all schoolchildren exercise for at least 30 minutes per day
- Encouraging employee schemes to increase physical activity such as lunchtime walking
- Encouraging employers to develop Green Travel plans that demonstrate a coherent approach towards active and sustainable modes of active commuting.

In addition, the NHS should further develop its clinical pathways for identifying and managing the people who would benefit from treatment to reduce weight. This is particularly the case for children in the NHS Greater Glasgow and Clyde area.
alcohol is an increasing problem

Alcohol consumption and its damaging effects have increased sharply in the Health Board area since the early 1990s. Alcohol problems are worse in Greater Glasgow and Clyde than in the rest of Scotland, the UK, or Western Europe. The area has the worst four Local Authority areas in the UK for male deaths from alcohol and two of the four worst areas for women.

The main reasons for the worsening trend in alcohol problems are a mixture of increased affordability and social acceptability of drinking to excess. The alcohol problem is therefore – like obesity - partly a result of greater affluence and choice. At the same time, people in more deprived circumstances suffer the worst damage from alcohol for reasons that are not fully understood – but it is not just that they consume more alcohol.

Improving the alcohol problems of NHS Greater Glasgow and Clyde area will require large scale measures to reduce the availability of alcohol and the acceptability of excessive drinking, improve detection and treatment of alcohol problems, and gain a better understanding of why deprivation makes alcohol so much more damaging.

The public health challenge and the scale of the problem

Benefits and harms of alcohol to health and society

Moderate consumption of alcohol can be an enjoyable part of a healthy life. But in Greater Glasgow and Clyde the problem is one of increasing excessive consumption that leads to mental and physical illness and premature death. There is also a strong association between excessive alcohol intake and violent crime, lost working days, and socio-economic deprivation. Reducing excessive consumption of alcohol is therefore a public health priority.

Excessive consumption of alcohol increases the risk of a range of diseases including coronary heart disease, stroke, some cancers, as well as liver cirrhosis and psychiatric disorders. The analyses reported in this chapter are restricted to illnesses that are directly caused by alcohol because it is not possible to accurately estimate the contribution of alcohol to other conditions using routinely-available data. The full impacts of alcohol on health are therefore much greater than reported here.
Consumption patterns

Alcohol consumption has increased in the United Kingdom over at least 25 years as it has become more affordable. At the same time, the strengths of the two most popular alcoholic drinks - table wine and beer - have increased.

True alcohol consumption is generally underreported. Current recommendations are that men and women should not consistently drink more than 3-4 and 2-3 Units (8 grams/10 mls alcohol) daily respectively. Binge drinking is defined as consumption in a single day of 8 Units or more in men and 6 Units or more in women. A maximum weekly total consumption of 21 Units is advised for men and 14 Units for women.

72% of men and 58% of women in Scotland drink regularly. Among them, 63% of men and 57% of women exceeded the recommended maximum daily amount at some point in the week, although a smaller number exceeded the maximum weekly recommended total consumption. Men's consumption of alcohol has fallen slightly over time, while women's continues to rise. Three quarters of men and women drink at home rather than in pubs, clubs, or restaurants.

16-24 year olds drink most heavily compared with other adults. In Scotland, amongst 13 year olds 56% of boys and 59% of girls have ever drunk alcohol. 7% of 13 year olds and 18% of 15 year olds reported having been drunk more than 10 times.

Socio-economic deprivation is associated with increasing alcohol consumption but the harm it causes people in more deprived circumstances cannot be attributed solely to the quantity of alcohol consumed. There is little evidence to explain why alcohol and deprivation make such a damaging combination but it is likely to be due to a mixture of individual risks (such as poor diet or drug use) and environmental risks (such as drinking on the street).

Deaths from alcohol

Alcohol-related liver cirrhosis is the largest directly-attributable cause of death from alcohol. It is a useful measure of how alcohol problems in Glasgow have changed over time and compare to other areas. Figure 8.1 shows that cirrhosis deaths have been higher in the Greater Glasgow and Clyde area compared to Scotland since at least 1981. Death rates began to increase sharply in the early 1990s, with Greater Glasgow and Clyde death rates increasing twice as fast as the rest of the country. There has been little further increase since 2004. Scotland currently has the highest cirrhosis death rates in Western Europe and Greater Glasgow and Clyde cirrhosis deaths are over twice as high again.
One explanation for Greater Glasgow and Clyde's high cirrhosis death rates is the association between socio-economic deprivation and cirrhosis. Figure 8.2 shows that people who live in the most deprived 15% of the population have 4 times greater risks of cirrhosis death than the rest of the Health Board area.
Further insights into alcohol-related deaths were gained from a study of patients who died as a direct result of alcohol in 2003. The study found that only a minority of patients had any record of being advised to stop drinking. Less than half of patients attended specialist services for alcohol problems. However, contact with statutory services was high. For example, 37% of patients had been in police custody. While it might be argued that failure to record details of advice given to people with alcohol problems does not prove that no advice was given, and that re-organisation of addictions services since 2003 should have improved the quality of care, the alcohol deaths study provides unique insights into the problems of people who suffer from the most severe alcohol problems in Glasgow city.

Alcohol-related hospitalisations

A&E survey of attendances by people who had drunk alcohol in the past 8 hours

This survey was carried out at the 5 Greater Glasgow Accident and Emergency departments. It found that:

- 36% of all attendees for all three snapshots were ‘intoxicated’ (that is, they had consumed an alcoholic drink less than eight hours before interview in the A&E department). 85% of men were injured in fights/attacks. A third of women self harmed and over a quarter had accidents.
- Around 70% of injured attendees who had drunk alcohol in the past 8 hours were from the most deprived areas of Glasgow.
- Of 172 interviewees who had been attacked, 65% thought that their assailant had been drinking alcohol.
- Over a quarter of interviewees said they thought they had an alcohol problem and of them about half said they had received help, usually from the NHS.

Acute hospitalisations for alcohol-related conditions

Analyses of patterns of hospital admissions for alcohol related conditions tend to show similar patterns to deaths, with rising rates over time and about a fourfold increased risk associated with living in the most deprived areas compared to the most affluent. Figure 8.3 compares emergency admissions to general hospitals by residents in each of the 10 CH(C)P areas wholly within NHS Greater Glasgow and Clyde. Results have been corrected to remove the effects of different sized populations, or differences in the age and sex make-up of each area.
Figure 8.3 shows how each CH(C)P area compares to the overall Health Board figure of 100. The East Glasgow CHCP has the highest admission rate for alcohol-related emergencies, 63% above average, while East Dunbartonshire CHP has only a third of the Health Board average. These differences may be due to variations in the prevalence of alcohol problems, or in the way that services – particularly preventive services – are provided. It should be possible to implement best practice from the most effective preventive services across the CH(C)Ps and replicate this across the Health Board area. This might lead to substantial reductions in hospital admissions.

Figure 8.3

Effects on children and families

In 2005, it was estimated that there were 13 650 problem alcohol users in Glasgow City alone, about 20% of whom were women and 80% men. A minimum of 10 000 children have at least one parent who has an alcohol problem and about 3 800 (over 3% of all children) live with a parent who has an alcohol problem. For NHS Greater Glasgow and Clyde as a whole, the number of children who have a parent with an alcohol problem may be approximately twice as great. The impacts of having a parent with alcohol problems are difficult to quantify precisely, and many children do not live with the parent who has an alcohol problem. However, alcohol will affect an adult’s ability to function as a parent, affect their employability, contribute to neglect of their children, and is associated with emotional and physical abuse of partners.
Alcohol and fire risks

One in five fatalities, casualties or rescues from domestic fires in Glasgow City had “being drunk or drugged” as the main contributory circumstance. It is one of the commonest reasons for being a victim of fire. Forty-three percent of all drink or drug-related fires also involved an unattended chip-pan while one in ten involved someone falling asleep or being unconscious.

How NHS Greater Glasgow and Clyde and its partners are currently responding

Current initiatives in Greater Glasgow and Clyde

A co-ordinated multi-agency effort is required to tackle alcohol problems. The Health Board supports a strategic partnership within Glasgow City through its Alcohol Action Team, Strathclyde Police and Glasgow City Council described in the forthcoming Glasgow City Joint Alcohol Policy Statement.

Some current initiatives include:

Glasgow City Centre Initiatives - Includes the Community Prevention Trial, Glasgow Matters community television, and Nite Zone.

Enforcement of existing laws - Includes fixed penalties for anti-social offences (introduced in September 2007), Custody Card initiative, and the Glasgow City Centre off sales campaign. The Licensing (Scotland) Act 2005 gave greater responsibilities to local Licensing Boards to control overprovision of licensed premises.

Advertising and promotion - Includes the Best Bar None Award scheme, and Safer Licensed Premises scheme.

Education - Includes the Alcohol and Drug Education Service for Secondary Schools, and Play Safe Campaign.
Acute alcohol liaison service in Inverclyde and Renfrewshire

SSPC - School, social work, police & community pilot to reduce offending and behavioural problems in young people in East Renfrewshire.

Sensing change - pilot project for people with sensory impairment and alcohol problems in Renfrewshire.

Acute action plan implementation - The overall aim of the 3 year Plan is to develop good practice guidelines and establish consistent approaches across all general hospitals in relation to screening and assessment for individuals with alcohol and drug problems, prescribing and withdrawal management, interventions, harm reduction, and education and training. The Greater Glasgow plan is likely to be extended to cover the entire NHS Greater Glasgow and Clyde area soon.

Community setting action plan implementation - This work is progressing in a similar format to the acute action plan with a focus on training and education, screening and assessment, interventions, health and safety, harm reduction and managing withdrawals.

Key public health messages and priorities for action

Alcohol is a major preventable cause of ill-health and premature death in the NHS Greater Glasgow and Clyde area. Despite a range of local initiatives, alcohol problems are worsening at a faster rate than the rest of Scotland. A mixture of approaches is needed to both target services at individuals with existing alcohol problems and at a population-level, to reduce consumption of alcohol. If NHS Glasgow and Clyde is to reverse the worsening problem of alcohol several things will need to happen.
Greater commitment to tackling alcohol problems will be needed from all public sector organisations in the NHS Greater Glasgow and Clyde area. We need consistent and congruent approaches so that health education messages are not conflicting with other policies. Examples of this approach include:

- Having supportive workplace alcohol policies in public sector organisations and their major suppliers to reinforce cultural change away from harmful drinking
- Stopping sponsorship and advertising by alcohol manufacturers in public sector premises
- Reviewing our policies for consumption of alcohol in public sector premises.

People with alcohol problems will need to be better identified and managed. There are many unexploited opportunities for identifying alcohol problems when individuals use statutory services such as primary care, social work and police custody. Brief intervention approaches are effective in helping people who drink hazardously but are not physically addicted to alcohol. Examples of this approach include:

- Implementation of standardised alcohol screening across primary care and community health and social care settings using clear guidelines on diagnosis and referral and providing properly resourced follow-up services that use evidence-based interventions.
- The Quality and Outcomes Framework, which remunerates GPs for targeted work, could include screening for alcohol problems.
- Increased education, training and support of staff in a variety of non-NHS services is needed to more effectively identify and manage individuals with alcohol problems.
- Arrest Referral for alcohol problems both increases alcohol problem service uptake and reduces reoffending. There is potential to extend its use.

National legislation on alcohol pricing, advertising and availability will be required. There is good evidence that these have been effective in reducing alcohol related harm in Western Europe. As society experiences the effects of worsening alcohol problems, there will be greater public support for national legislation. Examples of contributing to this approach include:

- The provision of high quality information on how alcohol is harming our population and the benefits that might be achieved through legislation.
- Development of a comprehensive approach to influence national policies to reduce alcohol related harm. These include pricing, labelling, advertising and relationships with the alcohol industry.
Persistent and widespread measures will be needed to make excessive alcohol consumption socially abnormal. Examples of this approach include:

- Continuing to enforce new and existing laws on public drunkenness, including enforcing current drink driving laws and reducing the Scottish national legal blood alcohol limit from 80 to 50 mg/dl in line with most western European and north American countries
- Looking for alternative approaches to changing attitudes to drunkenness in general in society, acknowledging that most alcohol is consumed at home
- Support effective implementation of the Licensing (Scotland) Act 2005, particularly those measures which have been shown to reduce alcohol related harm, including addressing overprovision and mandatory server training.
- Development of actions to ensure the enforcement of the restrictions in the Bill aimed at days and hours of sale and underage sales using evidence of good practice from other parts of the UK (such as the Bottlewatch scheme).

The multiplicative effects of socio-economic deprivation on alcohol need to be better understood. Reducing alcohol consumption alone will not reduce the large inequalities that exist in alcohol related harm between affluent and deprived area. Examples of further work required in this area include:

- Knowledge of additional approaches in nutrition, psycho-social interventions, road safety and other fields.

Initiatives to reduce alcohol harms will need to be evaluated. Ineffective interventions should be discontinued and good practice extended throughout the Health Board area. NHS Greater Glasgow and Clyde should contribute to, and learn from, the Scottish Alcohol Research Framework.
Important sustainability issues are specifically peak oil, the physical environment, and air and land pollution. The public health sustainability agenda cannot be separated from climate change and the detrimental effect this will have on population health. These effects include: changes in disease patterns, such as food poisoning, insect-borne disease, cancers and cataracts, water and sanitation issues; drought and extreme weather events such as more frequent and severe heat waves that could result in heat related deaths, accidents and trauma; environmental inequalities, which could widen the health inequalities gap; and the reduction of carbon emissions, which is a legitimate priority for public health and the NHS.

The policy drivers of the sustainability movement in the NHS include the document Choosing our Future, the strategy for sustainable development for Scotland issued by the then Scottish Executive. This framework sets out a common goal for sustainability, which is defined as: enabling all people throughout the world to satisfy their basic needs and enjoy better quality of life without compromising the quality of life of future generations. Figure 9.1 shows the context for this framework, and challenges public health to make the well being of Scotland’s people a key priority, following a set of principles that include a commitment to a strong, healthy and just society and a sustainable economy.

**How NHS Greater Glasgow and Clyde and its partners are responding**

Glasgow City Council has made a commitment to sustainability and health through Agenda 21 and Local Agenda 21, which were developed through the Healthy City movement. NHS Greater Glasgow and Clyde is the biggest NHS employer in Scotland, employing more than 44,000 staff, and it has the potential to strengthen the NHS commitment to sustainability through collaborative and partnership working with local authorities within the policy context of Choosing our Future.
The Sustainable Development Commission’s report Sustainable Food Procurement in the NHS gives recommendations for food procurement in the NHS. Because they are equally relevant to other public bodies, they may support collaborative approaches to sustainable food procurement. The commission has identified four other areas in which the NHS can promote sustainability: facilities management, community engagement, new buildings, and travel.

NHS Greater Glasgow and Clyde’s policy on procuring food has the potential to deliver sustainable development because large-scale procurement can send powerful messages up the food chain to wholesale producers. In addition, it can support the local economy and the food it serves has a direct and indirect impact on population health.

On a smaller scale, Have a Heart Paisley funded a pilot commercial fruit shop in the Royal Alexandra Hospital in Paisley in 2002. The shop was a response to the growing rates of cardiovascular disease in an area with high levels of deprivation. The shop, which is in the hospital foyer, gives patients, staff and visitors access to good quality, fresh fruit and vegetables at reasonable prices.
These policies and examples demonstrate that NHS procurement activities can make a considerable impact on health and the sustainable environment. The size of the NHS food shopping list shows the potential for influencing food production and distribution methods across the health system. Current procurement arrangements for the NHS address sustainability and carbon footprints through a national weighting score and using Commodity Advisory Panels to award contracts.

NHS Greater Glasgow and Clyde is currently updating its food, fluid and nutrition policy to include a wider range of issues related to food and nutritional care. The revised policy will also emphasise the Community Planning Partnership role of the organisation in influencing the awareness, affordability, availability and accessibility of healthy foods in other agencies and for communities. The policy will identify and address the nutritional needs of the most nutritionally vulnerable groups. It will also take a comprehensive approach to nutritional assessment, monitoring and care for all in-patients. The policy will address the provision of nutritional support for patients in hospital and community services, as well as considering on-site catering for hospital and residential patients, members of staff and visitors. The policy will also consider vending and provision for clients and staff in all outlets, as well as catering provided by either internal or external contractors.

In terms of food partnerships, the current review of Glasgow City Council’s food and health policy offers an opportunity for NHS Greater Glasgow and Clyde to work with and influence its partners on the affordability, availability, and accessibility of healthy foods. The organisation also has the opportunity to influence the new Food and Health Frameworks, which are being devised by local authorities. This gives us a chance to promote healthy eating and to ensure that sustainability is on the agenda. This integrated approach was advocated by the report, the Footprint of Scotland’s Diet.71

An environmental public health framework would consider land use, supported growing initiatives, recycling, waste management, distribution and transport, reduction of carbon emissions, reduction of water consumption and the reduction of the ecological footprint.

Hungry for Success – the first UK national nutrient based standard for school meals – was published by the then Scottish Executive in 2002.72 The NHS could develop further opportunities such as this, to adopt integrated policy approaches developed by local authorities on food procurement and sustainability.
In addition, the National Institute for Health and Clinical Excellence produced guidance in 2006 that demonstrated the importance of involving workplaces in the prevention of obesity.\(^2\) NHS Greater Glasgow and Clyde agrees that workplaces are an important site for promoting health, and its workplace health promotion team, Health at Work, provides prevention programmes to work places. These are designed to challenge obesity, which is a priority in the Scottish Government’s policy on workplace health, Healthy Working Lives.\(^4\) The workplace team’s programme includes: the Get Fit Nutrition IT pilot, the Food and Health Action Plan, the Healthy Eating Strategy, the Healthy Living Award promotion, Cycling and the NHS, Physical Activity Strategy work, environmental criteria, and an environmental audit and action plan.

The NHS can use its facilities management function to practice sustainable working, and to encourage others to do the same. For example, NHS Scotland’s annual expenditure on waste disposal is more than £8 million, equal to the cost of 400 full time equivalent staff nurses. NHS Scotland disposes of 45,000 tonnes of waste each year, 15,000 tonnes of it clinical 30,000 tonnes domestic. The award winning approach to waste management adopted by the acute sector in NHS Greater Glasgow and Clyde is a shining example of sustainable development in action.

For example, NHS Greater Glasgow and Clyde recently conducted an options appraisal on plans to centralise six existing decontamination units in the acute sector in a single industrial unit in north-east Glasgow. This is a new development for the NHS, since the size and scale of throughput (12 million instruments a year) would make it the largest of its kind in the UK. The organisation involved the Carbon Trust at all stages of the development; its recommendations included reducing energy, carbon emissions and waste. This would not only reduce costs but limit the carbon tax payable. An important part of the appraisal was to identify appropriate machinery that can do the job, be environmentally and ecologically friendly and use the minimum energy. The project team applied the principles laid down in the Green Code to all aspects of the design and commission of the new plant.

The NHS can also show leadership in applying sustainability criteria to its employment policies. Chapter two of this report highlighted how the NHS can help overcome the social and economic causes of ill health through increasing employability. This agenda aligns with sustainability, and the NHS responsibility for integrating employability into all new-build projects can be replicated in current approaches across the health system. This agenda can contribute to social and economic regeneration when hospitals are being built or redesigned, by actively engaging with national initiatives to improve access by small businesses, including the social economy sector.
For example, the Acute Community Engagement Team in NHS Greater Glasgow and Clyde has commissioned a socio-economic impact study of the new South Glasgow Hospitals, and will engage with regeneration agencies to develop the potential of redevelopment locally, regionally and nationally. The organisation is also developing a Recruitment and Rehabilitation Policy that supports and complements current work to increase access to NHS jobs by the long-term unemployed.

This work links to the Scottish Government’s policy A Smart Successful Scotland, and demonstrates NHS Greater Glasgow and Clyde’s commitment to closing the opportunity gap by tackling poverty and disadvantage and by increasing opportunities for sustainable employment at a local level.

The NHS can also increase its sustainability through progressive policies on transport and travel. NHS Greater Glasgow and Clyde is introducing Green Travel Plans at its largest sites and has developed a green travel policy that encourages all staff to reduce their car use by choosing other forms of transport, including walking and cycling. The organisation is working in partnership with Scottish Passenger Transport, local authorities and the Scottish Government to improve public transport services in the area.

Another area in which the NHS faces a challenge is how it deals with climate change and air quality. Public health in Scotland faces two environmental challenges: temperatures are becoming steadily warmer, and levels of air pollution are still unacceptably high. According to figures from the then Scottish Executive and the Met Office, temperatures in Scotland in the years 2003, 2004, 2005 and 2006 were the highest since records began in 1914. By the end of the century, they are predicted to increase by up to 3.5°C in summer months and 2.5°C in winter. The implications of climate change for Scotland include increased flood risk, and impacts on water resources, agriculture, transport, tourism and disease.
NHS Greater Glasgow and Clyde needs to become more familiar with the issue of air quality, which is defined by the levels of pollutants, particularly particulate matter, ozone, sulphur dioxide, and nitrogen oxides.

- Particulates are emitted into the atmosphere by combustion, industrial processes or quarrying. They can penetrate deeply into the lungs, causing serious medical problems.
- Ozone in the stratosphere protects us from the effects of ultra-violet radiation, but at surface level it is a pollutant. In high concentration, ozone has an irritant effect on the surface tissues of the body.
- Sulphur dioxide (S02) is emitted into the atmosphere by burning coal, fuel oil, gas, oil and diesel fuel.
- Nitrogen oxides are emitted mainly by cars and trucks.

The Committee on the Medical Effects of Air Pollution has concluded that long-term exposure to air pollutants decreases life expectancy. The committee suggests that particulate air pollution, in particular, has a greater effect on mortality than previously thought, with a small increase in fine particles being associated with a 6% increase in risk of death from all causes. The committee’s report on air pollution and cardiovascular disease (2006) concluded that there is a clear causal link between both daily and long-term average concentrations of air pollutants and effects on the cardiovascular system, including risk of sudden death and hospital admission for acute cardiac events.

All local authorities in Scotland are required by law to monitor air quality in their areas, and to prepare an annual report on this for the Scottish Government. All local authorities in the NHS Greater Glasgow and Clyde area are actively monitoring air quality, and taking action in locations where the level of pollutants is particularly high.

For example, a number of councils have introduced random vehicle emission testing, campaigns to persuade drivers to switch off their engines when stationary, and schemes to reduce high concentrations of traffic at particular pollution “hot spots”.
Key public health messages and priorities for action

In order to address sustainability issues the following need to happen:

Partnership work through community planning should focus on improving public health, the local economy, social cohesion and the environment. Examples of this approach include the following:

■ Joined-up planning on significant issues such as housing, roads, leisure facilities and public transport.
■ The planning, design and building of facilities should incorporate innovative sustainable solutions.
■ Challenging local targets should be set, anchored in policy and building on good practice for important areas of sustainability, centres of expertise should be used to assess environmental impact, monitor and identify improvements.

All public sector organisations in the Greater Glasgow and Clyde area should adopt a leadership role in promoting sustainability. Examples of this approach include:

■ Development of plans for recycling, energy efficiency and green travel throughout the organization.
■ Procurement policies must consider environmental health and social impact and benefits.
■ Employment strategies must focus on improving opportunities for local disadvantaged and long-term unemployed people.
## Glossary of Terms Used in This Report

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Acute Services</strong></td>
<td>Health care and treatment provided mainly in hospital.</td>
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<tr>
<td><strong>Age Standardised Rates</strong></td>
<td>Age-standardisation adjusts rates to take into account how many old or young people are in the population being looked at. When rates are age-standardised, the differences in the rates over time or between geographical areas do not simply reflect variations in the age structure of the populations.</td>
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<tr>
<td><strong>BMA</strong></td>
<td>British Medical Association is a voluntary professional association for doctors.</td>
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<td><strong>BMJ</strong></td>
<td>British Medical Journal</td>
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<tr>
<td><strong>Body Mass Index</strong></td>
<td>A number obtained by dividing a person’s weight in kilograms by the square of their height in meters.</td>
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<td><strong>Breadline Poverty</strong></td>
<td>Breadline poverty refers to households living below a relative poverty line</td>
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<tr>
<td><strong>Clinical governance</strong></td>
<td>A systematic approach to maintaining and improving the quality of patient care.</td>
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<tr>
<td><strong>Clinical Pathways</strong></td>
<td>Systematic approach to achieving particular outcomes for patient care, which identifies the resources required in amount and sequence for that type of case.</td>
</tr>
<tr>
<td><strong>Community Health Partnership and Community Health and Care Partnerships</strong></td>
<td>CHPs are organisations which have been developed across Scotland to manage a wide range of community based health services. In some parts of NHS Greater Glasgow and Clyde health board (Glasgow City and East Renfrewshire) these new Partnerships will also be responsible for many local social care services and will therefore be called Community Health and Care Partnerships (CHCPs).</td>
</tr>
<tr>
<td><strong>Community Planning</strong></td>
<td>A range of partners in the public and voluntary sectors working together to better plan, resource and deliver quality services that meet the needs of local people.</td>
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<tr>
<td><strong>Co-morbidity</strong></td>
<td>Occurs when an individual is affected by several diseases simultaneously.</td>
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<tr>
<td><strong>Core Poverty</strong></td>
<td>Core Poverty is defined as households that satisfy three dimensions of poverty, they are income poor, materially deprived and subjectively poor</td>
</tr>
<tr>
<td><strong>Determinants of health</strong></td>
<td>The factors that affect health including genetic factors, lifestyle, social and community networks, cultural and environmental conditions.</td>
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<tr>
<td><strong>Director of Public Health</strong></td>
<td>The Director of Public Health leads and supports activities in NHS Greater Glasgow and Clyde to improve health and addressing health inequalities. This is a joint role between the health board and Glasgow City Council.</td>
</tr>
<tr>
<td><strong>E-learning</strong></td>
<td>Learning activities based on any electronic format.</td>
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<tr>
<td><strong>Health Inequalities</strong></td>
<td>The gap between the health of different population groups such as the well-off compared to poorer communities or people with different ethnic backgrounds.</td>
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<tr>
<td><strong>Incidence</strong></td>
<td>The number of new cases of a disease or condition.</td>
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<tr>
<td><strong>Institutional discrimination</strong></td>
<td>Unfair prejudice against individuals as a result of the way an organization works or delivers services.</td>
</tr>
<tr>
<td><strong>Managed Clinical Network</strong></td>
<td>Linked groups of health professionals and organisations from primary, secondary and tertiary care, working in a co-ordinated manner, unconstrained by existing professional and Health Board boundaries, to ensure equitable provision of high quality clinically effective services throughout Scotland.</td>
</tr>
<tr>
<td><strong>MMR vaccine</strong></td>
<td>The MMR vaccine is a combined vaccine for immunisation against measles, mumps and rubella. It is generally administered to children around the age of 1 year, with a booster dose before starting school (i.e. age 4/5).</td>
</tr>
<tr>
<td><strong>Morbidity / mortality rate</strong></td>
<td>Information relating to numbers of people affected by disease (morbidity), or numbers of deaths (mortality) expressed as a rate (for example, the number of cases per 10,000 population).</td>
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<tr>
<td><strong>Multidisciplinary Team</strong></td>
<td>A group of people who are from different professional backgrounds concerned with the treatment and care of patients, who meet regularly to discuss patient treatment and care.</td>
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<tr>
<td><strong>Needs Assessment</strong></td>
<td>A formal process undertaken to assess the health and social care needs of a given population.</td>
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<tr>
<td><strong>NHS Greater Glasgow and Clyde</strong></td>
<td>The health board plans and provides health and healthcare services for the people of the region.</td>
</tr>
<tr>
<td><strong>NHS Quality Improvement Scotland</strong></td>
<td>The role of NHS Quality Improvement Scotland (NHS QIS) is to lead on improving quality of care and treatment delivered by the health service. NHS QIS is a special health board. As such, it does not have responsibility for a particular geographical area, but is responsible for improving patient care across NHSScotland.</td>
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<tr>
<td><strong>Obesogenic environment</strong></td>
<td>A set of circumstances that encourages people to eat and drink more calories than they expend, and to become obese.</td>
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<tr>
<td><strong>NICE</strong></td>
<td>National Institute for Health and Clinical Excellence</td>
</tr>
<tr>
<td><strong>Peak oil</strong></td>
<td>Peak Oil is the point or timeframe at which the maximum global petroleum production rate is reached. After this timeframe, the rate of production will enter terminal decline. This does not mean oil will suddenly “run out”, but the supply of cheap conventional oil will drop and prices will rise, perhaps dramatically.</td>
</tr>
<tr>
<td><strong>Prevalence</strong></td>
<td>Measures the number of cases of a disease or condition in a population at a particular point in time or over a specified time period.</td>
</tr>
<tr>
<td><strong>Quintile</strong></td>
<td>One of five segments of a distribution that has been divided into fifths. For example, the second-from-the-bottom quintile of an income distribution is those whose income exceeds the incomes of from 20% to 40% of the population.</td>
</tr>
<tr>
<td><strong>Standardised Mortality Ratio</strong></td>
<td>SMR is the ratio of observed to expected deaths in an area. This gives the number of deaths which would be expected if the area had the age, sex and cause specific death rates of Scotland as a whole. A SMR of 100 is the standard mortality ratio. A number greater than 100 implies a higher risk and a number lower than 100 implies a lower risk.</td>
</tr>
<tr>
<td><strong>Unmet need</strong></td>
<td>An estimate of how many people with particular types of needs for particular services there might be in a given area.</td>
</tr>
<tr>
<td><strong>Walking Bus</strong></td>
<td>The walking bus is described as a safe, fun and healthy way to walk to school. Each ‘bus’ has an adult ‘driver’ at the front and an adult ‘conductor’ bringing up the rear. The children walk to school in a group along a set route picking up additional ‘passengers’ at specific ‘bus-stops’ along the way.</td>
</tr>
</tbody>
</table>
Workforce Plus sets out the agenda for the Scottish Government to achieve its targets in Closing the Opportunity Gap.

**Worklessness**

Defined by the Department of Work and Pensions as “people of working age who are not in formal employment but who are looking for a job (the unemployed), together with people of working aged who are neither formal employed nor looking for formal employment (the economically inactive).”
references


2 General Register Office for Scotland. Small Area Population Estimates (SAPE), 2005


7 The Family Expenditure Survey, Department of Health, 2000


12 Corporate Inequalities Team, NHS Greater Glasgow & Clyde

13 ISD Scotland http://www.isdscotland.org/isd/4728.html

14 Peto J, Gilham C, Fletcher O & Matthews FE. The cervical screening epidemic that screening has prevented in the UK. Lancet 2004; 364 (9430):249-56

15 http://www.nhsggc.org.uk/phsu

17 Hanlon P, Walsh D and Whyte B. Let Glasgow Flourish, Chapter 3 Figure 3.41, Glasgow Centre for Population Health, 2006
http://www.gcph.co.uk/background/programmes/strength/strength1.htm

18 Hanlon P, Walsh D and Whyte B. Let Glasgow Flourish, Chapter 3 Figure 3.43, Glasgow Centre for Population Health, 2006
http://www.gcph.co.uk/background/programmes/strength/strength1.htm

http://www.inequalitiesinhealth.com/

http://www.cpag.org.uk/scotland/

21 ‘personal communication on work in progress’ NHS Health Scotland

22 West of Scotland is defined as Greater Glasgow and Clyde, Lanarkshire and Ayrshire


30 http://www.nhsbgcequality.co.uk/equality/mainmenu/home/

31 http://www.phru.net

32 http://www.gcph.co.uk/
33 http://www.babyfriendly.org.uk/.

34 Extracted from Community Profiles, ScotPHO. 
http://www.scotpho.org.uk/web/site/home/comparativehealth/profiles/communityprofiles/communityprofiles.asp

http://www.gcph.co.uk/background/programmes/strength/strength1.htm

http://www.gcph.co.uk/background/programmes/strength/strength1.htm

37 Violence Reduction Unit web site: www.actiononviolence.co.uk

http://www.chooselife.net/Articles/Article_epidemiology_of_suicide_report.asp


http://www.gcph.co.uk/background/programmes/strength/strength1.htm

41 www.chooselife.net


http://www.gcph.co.uk/background/programmes/strength/strength1.htm

http://www.gcph.co.uk/background/programmes/strength/strength1.htm


46 Planning etc. (Scotland) Act 2006
47 The Glasgow and Clyde Valley Joint Structure Plan available at: 

48 http://www.gowellonline.com/

49 Asylum seekers: meeting their healthcare needs. London, British Medical Association, 2002


52 Swinburn B, Egger G. The runaway weight gain train: too many accelerators, not enough 
brakes. BMJ. (2004); 329 (7468): 736–739.

53 Lightening the load: tackling overweight and obesity. A toolkit for developing local strategies 
to tackle overweight and obesity in children and adults. London, National Heart Forum and 
Faculty of Public Health, 2006.

54 Summerbell CD, Waters E, Edmunds LD, Kelly S, Brown T et al. Interventions for preventing 


56 Crombie IK, Irvine L, Elliot L, Wallace H. Public health policy to tackle obesity: an international 
perspective. NHSHS and University of Dundee, 2005.


58 The challenge of obesity in the SHO European region. WHO Europe, 2005.


60 Obesity: the prevention, identification, assessment and management of overweight and obesity 
in adults and children. London, National Institute for Health and Clinical Excellence and the 
National Collaborating Centre for Primary Care, 2006.

61 The challenge of obesity in the SHO European region. WHO Europe, 2005

62 Obesity: the prevention, identification, assessment and management of overweight and obesity 
in adults and children. London, National Institute for Health and Clinical Excellence and the 
National Collaborating Centre for Primary Care, 2006.


64 Alcohol Deaths Group. Deaths from Alcohol in Glasgow. NHS Greater Glasgow and Clyde, 
October 2006
65 Millard, A. D., Boyd, A., Hasler, J., Kerr, S., Lydon, S., McNaughton, H., Morrison, M., Reid, G.,
Duffy, J., Duddy, M., & Smith, G., A&E Attendances in Greater Glasgow by People who had
Alcohol within Eight hours of Attendance: First Year Report, NHS Greater Glasgow and Clyde,
Glasgow 2007

66 Hanlon P, Walsh D and Whyte B. Let Glasgow Flourish, Chapter 7, Glasgow Centre for
Population Health, 2006
http://www.gcph.co.uk/background/programmes/strength/strength1.htm

67 Scottish Executive, Choosing Our Future Scotland Sustainable Development Strategy 2005
(Diagram reproduced with permission from Scottish Executive).

68 Agenda 21 UN Conference on Environment and Development. June 14 1992

69 Dooris M, Healthy Cities and Local Agenda 21: The UK experience – Challenges for the new
millennium Health Promotion International (1999); Vol.14, No4, 365-375.

70 Sustainable Development Commission, Sustainable food procurement in the NHS 2002

71 Frey S, Barret J. The Footprint of Scotland’s Diet The environmental burden of what we eat. A
report for Scotland’s global footprint project. 2006.

72 Scottish Executive, Hungry for Success; A whole school approach to school meals in
Scotland. 2002

73 NICE guidelines: Obesity 2006, CG43 Section 4, Management of Obesity in non-clinical settings:
evidence statements and reviews.
http://www.nice.org.uk

74 Scottish Executive, Healthy working Lives: A Plan for Action, 2005

75 Scottish Executive, A Smart, Successful Scotland, 2001

76 Transport Scotland Act, 2005

77 Ayres JG, Cardiovascular Disease and Air Pollution: A Report by the Committee on the Medical
Effects of Air Pollution, Department of Health, 2006.