



## **The wider relevance of GoWell to other urban areas in Scotland**



**November 2010**

**Fiona Crawford and David Walsh**

[www.gowellonline.com](http://www.gowellonline.com)

*GoWell is a collaborative partnership between the Glasgow Centre for Population Health, the University of Glasgow and the MRC/CSO Social and Public Health Sciences Unit, sponsored by Glasgow Housing Association, the Scottish Government, NHS Health Scotland and NHS Greater Glasgow and Clyde*

## CONTENTS

	Page
Executive Summary	1
Introduction and purpose of the report	3
Part One <ul style="list-style-type: none"><li>• GoWell – main aims and interventions</li><li>• Location and characteristics of GoWell study areas</li><li>• GoWell’s main areas of interest with illustrative transferable research findings</li></ul>	5
Part Two <ul style="list-style-type: none"><li>• Background and aims</li><li>• Methodology</li><li>• Discussion and conclusion</li></ul>	22
Appendices	49
References	61

## **Executive summary**

This report sets out to discuss how learning from GoWell can be applied elsewhere in Scotland and the sorts of issues that should be considered in applying this learning. The report comprises two sections/parts:

### **Part One:**

1. Describes the GoWell research and learning programme;
2. Provides an overview of the 15 GoWell study areas according to study area type, demographic make up, built form, location, and regeneration plans;
3. Discusses GoWell's main themes of interest and emerging research findings that may be relevant to other urban areas, linking them to national policy concerns and the evidence-base.

**Part Two** assesses the extent to which 'similar' areas can be found in Scotland through provision of an overview of deprivation across Scotland; identification of small areas in Scotland with levels of deprivation comparable to the different GoWell areas; and comparison of a small number of important health and wellbeing related indicators for these areas with those of the GoWell areas.

The main findings from **Part One** are that learning from GoWell is relevant to other areas in Scotland. The diversity of the study areas, the mixed methodology employed, and the richness of the emerging findings highlight many themes of interest and implications for policy and practice in regeneration areas across Scotland and further afield. **Part Two** highlights a number of issues, for example:

- Areas with high levels of deprivation are not confined to Glasgow: there are simply more of them concentrated within that city.
- Areas with deprivation levels matching those of the GoWell study areas can be found across Scotland. Only four of the country's 32 local authority areas do not contain areas with income deprivation levels comparable to those of the study areas.
- Generally speaking, areas with similar levels of deprivation as the GoWell areas tend also to be comparable on a broad range of health and wellbeing related factors.
- Given the above, there are likely to be a large number of communities in Scotland (and, by extension, in the rest of the UK) that share a number of

characteristics with the GoWell communities, and for which, therefore, a number of lessons learned from the GoWell approach may well be relevant.

## **Introduction and purpose of report**

Housing improvement and area-based regeneration programmes are regarded as important in the creation of healthy, sustainable communities across Scotland <sup>1</sup> but more evidence is needed on the impact of national urban regeneration investment on socioeconomic and health outcomes.<sup>2</sup> The GoWell research and learning programme has been established to build the evidence base in relation to the impacts of regeneration on individual and community health and wellbeing and quality of life.<sup>3</sup>

One of the stated goals of the GoWell research and learning programme is to share best practice and knowledge of 'what works' with regeneration practitioners across the country. Several of the outcomes GoWell is measuring are directly relevant to national policy concerns as set out in the Scottish Government's national performance framework.

*For example, GoWell is studying the impact of mixed tenure on health and wellbeing outcomes.<sup>4</sup> Mixed tenure is a key component of UK and Scottish housing and urban policy as policy makers propose that it provides wide-ranging social, environmental and economic benefits to residents.*

As a localised, in depth, longitudinal research programme, GoWell provides a depth of analysis that national surveys cannot aspire to. National surveys provide results that homogenise findings by area type so we learn how deprived areas differ from affluent and the sort of gradient that exists but we know less about why some deprived areas have better outcomes than others. To explore and understand why this might be, we need studies that focus in detail on particular areas and this is one of GoWell's key characteristics.

*For example, results already demonstrate that communities in GoWell study areas differ in terms of demographic characteristics such as age structure (illustrated in Part Two of this report) and levels of community cohesion.<sup>5</sup>*

The types of homes and neighbourhoods studied by GoWell can be found in other large Scottish urban areas and, in many instances, similar social and health problems exist in these areas. This is discussed in more detail in Part Two of this report.

This report sets out to discuss how learning from GoWell can be applied elsewhere in Scotland and the sorts of issues that should be considered in applying this learning. The report comprises two sections/parts:

**Part One:**

1. Describes the GoWell research and learning programme;
2. Provides an overview of the 15 GoWell study areas according to study area type, demographic make up, built form, location, and regeneration plans;
3. Discusses GoWell's main themes of interest and emerging research findings that may be relevant to other urban areas, linking them to national policy concerns and the evidence-base.

**Part Two** assesses the extent to which 'similar' areas can be found in Scotland through provision of an overview of deprivation across Scotland; identification of small areas in Scotland with levels of deprivation comparable to the different GoWell areas; and comparison of a small number of important health and wellbeing related indicators for these areas with those of the GoWell areas.

**PART ONE**

## **1. GoWell**

GoWell is a research and learning programme that aims to investigate the impact of investment in housing, regeneration and neighbourhood renewal on the health and wellbeing of individuals, families and communities over a ten-year period. The programme is exploring the nature and extent of these impacts and the processes that have brought them about, to learn about the relative effectiveness of different approaches, and to inform policy and practice. GoWell commenced in 2006 and is now in its fourth year.

### **Main aims**

- To investigate the health and wellbeing impacts of regeneration activity associated with the Glasgow investment programme
- To understand the processes of change and implementation which contribute to positive and negative health impacts
- To contribute to community awareness and understanding of health issues and enable community members to take part in the programme
- To share best practice and knowledge of 'what works' with regeneration practitioners across Scotland on an ongoing basis

### **Interventions under scrutiny**

The programme is studying a number of key elements of the regeneration programme underway in Glasgow being implemented by Glasgow Housing Association, other Registered Social Landlords and other partners. These include:

- Housing improvement, particularly in socially rented homes.
- New builds: including socially rented and private sector homes in green and brown field sites. Plans include more owner occupied homes in areas dominated in the past by socially rented property, especially in regeneration areas.
- Transformational regeneration: a neighbourhood-wide approach to regeneration planning (rather than improvements planned on a home-by-home basis) involving several or all of the following: relocation of residents, demolitions, new builds, housing improvement, tenure diversification, improvements to the physical neighbourhood environment, new/improved amenities and services, and community interventions.
- Local regeneration: similar to transformational regeneration but targeting smaller pockets of disadvantage situated in larger neighbourhoods.

- Community interventions (sometimes called 'wider actions'): including employment and training initiatives, activities for young people, improved play areas, support for vulnerable people, addiction support, parent and child groups, financial advice and debt management, services for elderly residents, community buildings and resources, and other investments intended to strengthen and support communities in specific localities or across the city.
- Community engagement and empowerment: improving the way tenants are informed and consulted regarding decisions affecting their homes, neighbourhoods, communities and public services. Includes provision of information, surveys, consultation exercises and changes in housing management processes (including devolvement of decision-making and service provision by GHA to local area teams and local housing providers who are have become independent Registered Social Landlords).
- Wider effects: it is hoped that transforming highly disadvantaged neighbourhoods and reducing social problems in those areas will benefit adjoining neighbourhoods.

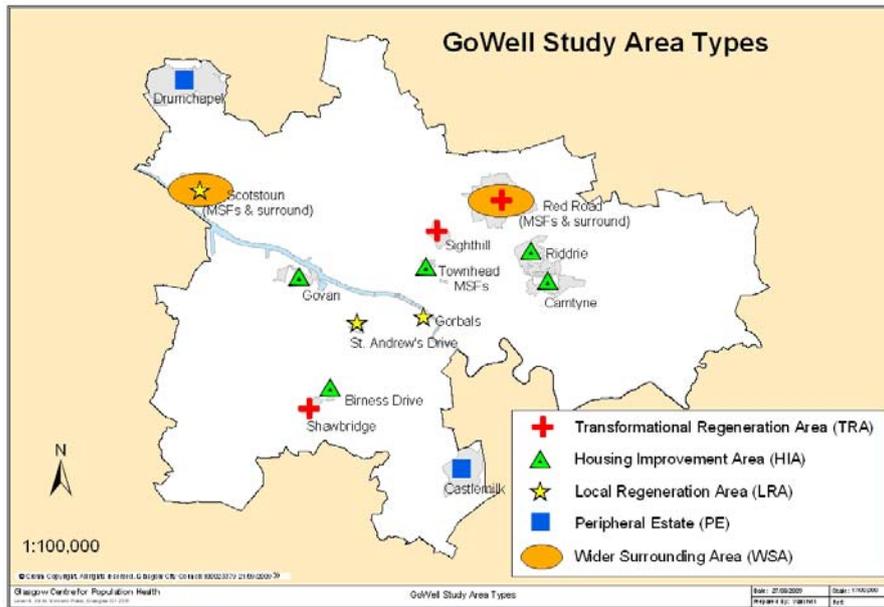
## **2. Location and characteristics of GoWell study areas**

There are 15 GoWell study areas, grouped into five 'intervention area types' according to the type and scale of regeneration taking place. The five 'intervention area types' comprise:

1. Transformational regeneration areas (TRAs) - major investment and change taking place involving a substantial amount of demolition and rebuild with accompanying relocation of residents.
2. Local regeneration areas (LRAs) - investment and change on a smaller scale than in the TRAs targeting smaller pockets of disadvantage in larger neighbourhoods.
3. Housing improvement areas (HIAs) - places which are considered to be popular and functioning successfully, but where significant improvements are required to the housing, both internally and externally.
4. Peripheral estates (PEs) - large-scale housing estates on the city boundary where incremental changes are taking place, particularly in terms of housing.
5. Wider surrounding areas (WSAs) - neighbourhoods immediately surrounding multi-storey flats (MSFs) that are undergoing significant regeneration and

may be affected by the process and associated environmental and population change.

The map below shows the location and relative size of these 15 study areas in Glasgow. Table 1.1 on page 6 provides further detail.



### The GoWell study areas

The Table below provides an overview of the 15 GoWell study areas according to study area type, demographic make up, built form, location, and regeneration plans (levels of deprivation are described fully in Part Two of the report).

**Table 1.1: GoWell Study Areas**

Study area type and description	Area name	Built form, location and regeneration plans (from documents and data available in 2006)	Demographic make up (from 2006 baseline data)
<p><u>Transformational regeneration areas</u></p> <p>Dominated by multi-storey flats. Large scale demolition and rebuild taking place in attempt to re-connect neighbourhoods with surrounding</p>	<p>Red Road MSFs</p> 	<p>Post war housing estate comprising eight 30 storey multi-storey flats (MSFs), approximately three kilometres to the north east of city centre. Almost all socially rented. All eight tower blocks are scheduled for demolition.</p>	<p>Population of approximately 3,400 of which 4% aged 65 or over. Ethnically diverse - half of respondents described themselves as an asylum seeker or refugees.</p>
	<p>Shawbridge</p> 	<p>High density, post war housing estate, approximately five kilometres south west of city centre. Mainly socially rented, and comprising MSFs, tenements, deck-access housing and terraced houses. Nine MSF blocks in the area are ear-marked for demolition.</p>	<p>Population of approximately 2,400 of which 11% aged 65 or over. Most respondents described themselves as 'white Scottish' although over a third described themselves as asylum seekers and one in six as refugees.</p>

<p>areas</p>	<p>Sighthill</p> 	<p>Post war housing estate containing ten double MSF blocks, deck-access flats and tenements, almost all socially rented, just over one kilometre north of city centre. Eight MSF blocks are ear-marked for demolition.</p>	<p>Population of approx 5,500 of which 6% aged 65 or over. Ethnically diverse - half of respondents described themselves as an asylum seeker or refugee.</p>
<p><u>Local regeneration areas</u></p> <p>Smaller pockets of post-war housing where a range of regeneration activity is planned on a smaller scale than in transformational regeneration areas</p>	<p>Gorbals Riverside</p> 	<p>Relatively small housing estate on the south bank of the River Clyde at the edge of the Gorbals, less than one kilometre from city centre, comprising four MSF blocks and a number of low-rise deck access flats, all socially rented. Regeneration plans include renovation, refurbishment and environmental improvements.</p>	<p>Population of approximately 700 of which 14% aged 65 or over. Approximately 90% of respondents described themselves as 'white', approximately 10% described themselves as asylum seeker/refugee or from a black and minority ethnic group.</p>
	<p>Scotstoun MSFs</p> 	<p>Post-war housing estate comprising eight MSFs: two in Plean Street, Yoker; and six in Kingsway Court, Scotstoun, approximately seven kilometres north-west of city centre, exclusively socially rented. Regeneration plans comprise demolition of two MSF blocks in Plean Street and refurbishment of remaining MSFs in Kingsway Court</p>	<p>Population of almost 2,000 of which 3% are aged 65 and over. Over 50% of respondents described themselves as asylum seeker or refugee.</p>

	<p>St Andrew's Drive</p> 	<p>Housing estate of deck access flats, seven mini-multi blocks, tenements and terraced housing situated adjacent to an affluent south side suburb about two kilometres from city centre. 77% of housing is social rented, 17% owner-occupied and 6% private rented. Regeneration plans include extensive refurbishment and renovation.</p>	<p>Population of approx 1,000 of which 13% are aged 65 or over. Two-thirds of respondents described themselves as 'white Scottish' with the remaining third including people belonging to British ethnic minority groups (16%), non-Scottish 'white' UK nationals (9%) and asylum seekers and refugees (9%).</p>
<p><u>Housing improvement areas</u></p> <p>A mixture of housing types in areas that are popular with residents and</p>	<p>Carntyne</p> 	<p>Situated approximately four kilometres east of city centre, comprising four-in-a-block flats, tenements and semi-detached villas (housing dates back to the 1920s/30s). 46% of housing is social rented, 52% is owner-occupied (52%); and 2% private rented. Earmarked for internal and external improvements as part of GHA's city-wide 'core stock investment' strategy</p>	<p>Population of approx 2,700 of which almost 30% are aged 65 or over. 99% of respondents described themselves as 'white Scottish.'</p>

functioning successfully but where significant internal and external improvements are needed	<p>Govan</p> 	<p>One of Glasgow's oldest districts, situated on the south bank of the River Clyde around four kilometres west city centre. Housing is post-war comprising 2 and 3 storey concrete structures of non-traditional design and post-war tenements. Almost 75% of housing is social rented, 17% owner-occupied, and almost 9% private rented. Regeneration plans include internal and external refurbishment.</p>	<p>Population of just over 1,000 of which almost 20% are aged 65 or over. Over 90% respondents described themselves as 'white Scottish' with less than 2% describing themselves as asylum seekers or refugees.</p>
	<p>Riddrie</p> 	<p>Situated about four kilometres east of city centre, a popular neighbourhood with good quality housing stock comprising four-in-a-block flats, tenements and semi-detached villas. The majority (almost 60%) of housing is owner-occupied, almost 40% social rented, and less than 3% private rented. Core stock investment is planned to improve internal and external fabric of existing homes</p>	<p>Population of approximately 4,700 of which 35% are aged 65 or over. Almost all (99%) respondents described themselves as 'white Scottish'</p>

	<p>Townhead</p> 	<p>Situated less than one kilometre north-east of city centre. Housing comprises eight MSFs, deck-access flats and tenements although GoWell study is focussing on MSFs. Almost all of the housing (91%) is social rented, 7% owner-occupied and 2% private rented. Regeneration plans involve physical refurbishment of MSFs.</p>	<p>Population of approximately 1,300 of which a quarter are aged 65 or over. The majority of respondents described themselves as 'white Scottish'</p>
	<p>Birness Drive</p> 	<p>Situated about four kilometres south of the city centre. Comprises four MSFs, consisting mainly of social rented, Glasgow Housing Association (GHA) stock which will receive internal and external refurbishment/improvements.</p>	<p>Study area population of approximately 446 in 2008. (Birness Drive was included in the GoWell programme following wave one survey)</p>

<p><u>Peripheral estates</u></p> <p>Large-scale housing estates on the city boundary where incremental changes are taking place and regeneration investment has been made.</p>	<p>Castlemilk</p> 	<p>Situated about eight kilometres south of the city centre, estate, an estate established in the 1950s to re-house families living in inner city slums. Housing mainly comprises tenement flats and houses. The majority of housing (80%) is social rented with the remainder largely owner-occupied or private rented.</p>	<p>Study area population of approx 5,300 of which almost 10% are aged 65 or over. The majority of GoWell participants describe themselves as 'white Scottish.'</p>
	<p>Drumchapel</p> 	<p>Located approximately 9 kilometres northwest of Glasgow city centre. Planned in the early 1950s, it contains a mixture of housing types including post-war tenements, some multi-storey flats and a growing number of late 20th/early 21st century semi-detached houses. 80% of houses are social rented, 20% owner-occupied and a very small number private-rented.</p>	<p>Study area population of approx 9,600 of which almost 10% are 65 years or over. 96% of GoWell participants described themselves as 'white Scottish'</p>

<p><u>Wider surrounding areas</u></p> <p>Neighbourhoods surrounding Red Road and Scotstoun MSFs which have been included to help measure any effects of area regeneration on neighbouring communities.</p>	<p>Balornock, New Balornock, Barmulloch, and Petershill</p> 	<p>Area surrounding the Red Road MSFs comprising houses, four-in-a-block flats, and tenement flats. 53% of housing is owner occupied, 44% social rented, and less than 3% private rented. Internal and external refurbishment of existing stock as well as new build housing is planned.</p>	<p>Study area population of approx 9,200 of which 20% are aged 65 or over. Almost all (98%) of GoWell participants described themselves as 'white Scottish' with very few asylum seekers or refugees</p>
	<p>Scotstoun and Yoker</p> 	<p>Area surrounding the Kingsway Court MSFs comprising a mixture of tenement flats, four-in-a-block flats, and houses. Almost equal proportions are owner-occupied (47%) or social rented (48%) with 4% private rented.</p>	<p>Study area population of approx 4,200 of which 20% are aged 65 or over. 94% of participants described themselves as 'white Scottish' with very few asylum seekers or refugees</p>

### **3. GoWell's main areas of interest with illustrative transferable research findings**

What follows is a discussion of GoWell's main themes of interest and emerging research findings from the programme that may be relevant to other urban areas, linking them to national policy concerns <sup>1</sup> and the evidence-base. In addition to the particular issues highlighted below, many of these themes can be related to the Scottish Government outcome "We have tackled the significant inequalities in Scottish society." <sup>6</sup>

#### **Health and wellbeing**

This area relates directly to the Scottish Government national outcomes:

*"We live longer, healthier lives" and "We have tackled the significant inequalities in Scottish society."*

*GoWell findings for self-reported physical health problems amongst respondents showed no major changes between 2006 and 2008 suggesting that self-reported health may not be influenced by housing and regeneration activity at an early stage in the process. One of the biggest challenges identified in findings was physical inactivity with two thirds of respondents across study areas reporting that, during the previous week, they had not taken any moderate or vigorous physical activity and one quarter reporting that they had not walked for at least ten minutes. Mental health problems (such as longer-term stress, anxiety and depression) increased across all study areas but particularly in the regeneration areas.*

Investigating the health and wellbeing impacts of regeneration activity in deprived communities is one of GoWell's primary areas of interest. Much of the research evidence to date regarding the relationship between housing improvement and health comprises cross-sectional studies which can only assess the relationship between housing and health outcomes rather than provide convincing evidence that better housing improves health. A systematic review, published by Thomson and colleagues in 2009 concluded that housing improvements can generate health improvements but the potential for health benefits may depend on baseline housing conditions and how carefully interventions are targeted.<sup>7</sup> The research team proposed that investigation of other outcomes, such as socio-economic impacts, associated with housing improvement was needed to investigate the potential for longer-term health impacts.

## **Housing and neighbourhoods**

This area relates directly to the Scottish Government's national outcome:

*"We live in well-designed, sustainable places where we are able to access the amenities and services we need"*

GoWell areas include housing of diverse types and ages, built to variable levels of density and quality. In regeneration areas, around eight in ten homes are in multi-storey flats whereas in wider surrounding areas and health improvement areas around seven in ten homes are a house or a 'four-in-a-block.' Homes in peripheral estates are evenly divided between houses and flats. Regeneration areas are dominated by social housing with nine out of ten dwellings in the social rented sector. Half of dwellings in the wider surrounding areas are privately owned homes in contrast to two in five dwellings in housing improvement areas and one in five dwellings in peripheral estates.

*GoWell survey findings indicate that housing improvement work has been widespread across study areas and has led to significant increases in housing satisfaction. Housing satisfaction has not risen in regeneration areas where clearances for demolition have been taking place but respondents in these areas feel safer inside their homes, probably due to the installation of secure locks and doors.*

A spectrum of regeneration investment and activity is being studied by GoWell, including major demolition and rebuild programmes, regeneration of housing and neighbourhoods and housing improvement work. GHA's improvement programme has included the installation of heating systems to almost all its stock, fitting of new kitchens and bathrooms (to over half its stock), external fabric improvements, and the fitting of new windows to most of its stock.

*In relation to perceptions of quality in homes and neighbourhoods, participants in the 2006 baseline survey identified deficiencies in their neighbourhoods more often than they identified deficiencies in their homes. Neighbourhood environments – and particularly parks and play areas – were given worse ratings than those given to public services. Residents of transformational regeneration areas were identified as seriously disadvantaged in terms of the aesthetics of their environments, the provision of safe, clean, green spaces, shops, and facilities like parks and children's play areas.*

In the GoWell transformational and local regeneration areas, very few residents have access to a garden whereas in other locations most people have a garden. Parks, open spaces and children's play areas were rated as being of much higher quality in 2008 than in 2006, across all study areas with the exception of the rating of play areas in local regeneration areas where there was no change.

*One of GHA's wider action programmes has been investing in the improvement of children's play areas and this activity could have contributed to these findings. Further analysis of the GoWell findings has found a link between better neighbourhood environments and better mental wellbeing which indicates that taking action to make buildings, streets, parks and open spaces attractive does matter to residents' wellbeing.*

Neighbourhood issues and problems have a direct impact on individual and community health and wellbeing. The Scottish Household Survey has shown that as areas become more deprived, perceptions of anti-social behaviour increase.<sup>8</sup>

*One of the striking findings from the 2008 GoWell survey was that feelings of safety in the neighbourhood at night-time had dropped since 2006 and the identification of a range of anti-social behaviours in the local area had risen. Feelings of safety dropped in all five types of area in the study, with large increases in the number of people who said they 'never walk alone after dark'. In contrast to deterioration in feelings of safety, perceptions of peacefulness of the local area improved significantly in all areas between 2006 and 2008 apart from in regeneration areas. This is not surprising given that regeneration activity is likely to impact upon how tranquil these areas seem. Future surveys, once regeneration activity is complete, may well detect changes in perceptions of neighbourhood issues and problems.*

### **Demographic make-up of communities and strength of social networks**

This issue relates directly to the Scottish Government Outcome:

*"We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others."*

The demographic characteristics of a neighbourhood may play a large part in shaping people's lives, neighbourhoods and communities. Some GoWell areas (WSAs and HIAs) have large elderly populations with many older people living alone. PEs have large numbers of younger adults, and only half of all adults of working age

have jobs. The residents of TRAs and LRAs are more likely to be male and relatively young. These areas are also characterised by having large numbers of families (and also large families) and large proportions of immigrant groups. Few immigrant or British born black and minority ethnic communities live in the other study areas.

There is extensive evidence that the quality of community life and community health and wellbeing are strongly influenced not only by the physical environment, but also by the strength of social networks, the availability of social support and community involvement and empowerment. <sup>9</sup>

*Levels of trust in other people, a sense of belonging and 'neighbourliness' fell in regeneration areas between 2006 and 2008. The availability of social support (the availability of practical, emotional or financial help when needed) seemed to be stable in WSAs and HIAs but fell in other types of area, particularly in PEs. Increasing numbers of people were displaying signs of social isolation – in many of the study areas, over 10% of people reported never having any social contact with others, and between 20% and 40% either did not have access to social support from others or, increasingly would not look for it. Impacts of regeneration activity within particular areas such as building demolition and clearance as well as issues such as relocation of residents etc may well have influenced these dimensions.*

One of GoWell's conclusions is that more attention and resource has been given to physical regeneration than social regeneration, one consequence of this being that physical regeneration has been more successful. GoWell recommends that regeneration strategies, policies and programmes should place more emphasis on supporting and enabling individuals to make changes to improve their own health and wellbeing, and to contribute to the enhancement of their communities, so that both people and places are transformed.

### **Access to employment**

This area relates directly to the Scottish Government outcomes:

*"We realise our full economic potential with more and better employment opportunities for our people."*

*"We live in a Scotland that is the most attractive place for doing business in Europe."*

*"We have improved the life chance for children, young people and families at risk."*

Sustainable economic growth is a major priority for the Scottish Government.<sup>1</sup> Employment is widely accepted as being good for health at an individual, community and societal level and there is robust evidence that being unemployed damages health and quality of life.<sup>10,11</sup> Regeneration is seen by national and local policy makers and practitioners as a crucial part of growing the economy through stimulating business activity and employment opportunities, as well as improving social inclusion and connectivity.<sup>12</sup>

*Higher reported employment rates were found among men in all study area types in 2008 compared with 2006. The same was found for women in two area types – TRAs and HIAs. High proportions of adults (both men and women) of working age (40-50% in regeneration areas; 20-30% in other areas) reported that they were economically active but did not have a job. Only around 11% of respondents who were of working age, were eligible for work and not in full- or part-time employment or full-time education, had sought work at some point during the year preceding the 2008 survey. These figures were higher (over 14%) in the TRAs and LRAs. The 2008 survey preceded the onset of the global recession during the autumn of 2008; the next survey may reveal a different picture.*

### **Tenant involvement in regeneration**

This area relates directly to the Scottish Government Outcome:

*“Our public services are high quality, continually improving, efficient and responsive to local people’s needs.”*

Community engagement is central to national and local regeneration strategies<sup>13,14,15</sup> and GoWell has been exploring the extent to which local communities have been involved in the planning and implementation of major regeneration programmes in their areas, and assessing the added value of community engagement in area transformation.

*There were improvements in all types of area in residents’ perceived influence over decisions affecting their local areas – but from a low base. In regeneration areas, around a third of residents in 2008 said they had any influence compared to around a half in the other area types. Also, community members involved in developing plans had no sense of any further involvement beyond this.*

These findings highlight a number of issues in relation to community engagement and tenant participation in regeneration that have relevance for regeneration programmes elsewhere in Scotland.

Despite recognition amongst regeneration policy makers and practitioners that successful approaches need to be holistic, employing effective multi-agency collaboration and meaningful public involvement, GoWell findings indicate that this is proving difficult to deliver in practice.<sup>16</sup> Regeneration practitioners seem to focus on spatial planning rather than community development when working towards sustainable communities. If community engagement is to be effective it should deal with regeneration processes as well as components and it should embrace the whole process of decision-making, not just a tightly defined stage within community master planning. In addition it should be democratic, accountable and inclusive with clear, transparent decision-making and power structures that are accessible to communities.

### **Conclusions**

Part One of this report has shown that learning from GoWell is relevant to other areas in Scotland. The diversity of the study areas, the mixed methodology employed in the research programme, and the richness of the emerging findings highlight many potential themes of interest and implications for policy and practice in regeneration areas across Scotland and further afield. As the GoWell programme continues, the research team and partners will continue to disseminate findings, build understanding of their implications with stakeholders and communities and use the programme to share learning and support practice on current and emerging priorities in area-based regeneration.

Part Two, which follows, assesses the extent to which areas similar to the GoWell study areas exist elsewhere in Scotland and presents an accompanying analysis of a range of indicators of health and wellbeing for these areas to provide practical examples of other communities where emerging learning from GoWell can be applied.

**PART TWO**

## **Background and aims**

The potential for the lessons of GoWell to be relevant and 'transferable' to other locations in Scotland (and, indeed, the rest of the UK) will depend to a considerable degree on whether the characteristics of the GoWell areas are shared with other parts of the country. The overall aim of this second part of the work, therefore, was to assess – in relatively simple terms – the extent to which 'similar' areas can be found in Scotland.

Identification of these areas was based on socio-economic characteristics. This is clearly a simplistic approach in that areas with similar levels of affluence, poverty or social structure may well differ considerably in terms of other important factors which are more difficult to measure: community wellbeing, social capital, cohesion, resilience and more. However, it is beyond the scope of this study (and, indeed, beyond the capabilities of existing data sets) to undertake a comparison of the GoWell study areas and other communities in Scotland in such detail. Instead, we have used a measure called 'income deprivation' (defined fully in the methodology section), which has been used previously to assess levels of deprivation in the GoWell study areas<sup>17</sup>. Importantly, this measure has been shown to be an excellent proxy for levels of 'multiple deprivation' within both Scotland and England<sup>18</sup>. Furthermore, the links between deprivation and a whole range of health and wellbeing related factors have been documented in countless studies and publications<sup>19, 20, 21, 22, 23</sup>: thus, although there are considerable limitations in this approach, it is still a useful manner in which to assess the existence of other areas in Scotland to which the lessons of GoWell may be relevant.

It should also be noted that this analysis is limited to Scotland. However, recently published research has shown that the income profiles of a number of English cities (or parts of those cities) are very similar to that of Glasgow<sup>24</sup>. Thus, if required, these analyses could be easily extended to other parts of the UK.

There were four specific aims of this part of the work:

1. To provide an overview of income deprivation across Scotland, particularly in relation to previous published estimates of levels of deprivation in the GoWell study areas.
2. To identify small areas in Scotland with levels of income deprivation comparable to the different GoWell areas (and types of areas).

3. To present a small number of important health and wellbeing related indicators for these areas, and to compare them with identical information for the GoWell areas.
4. From the above, to provide an overall assessment of the extent to which the broad characteristics of the GoWell areas are shared with other parts of Scotland.

## **Methodology**

### *Income deprivation*

'Income deprivation' data for 2005 were used as the basis for many of the analyses. Income deprivation is derived from Department of Work and Pensions (DWP) benefits data, and was used in the 2006 Scottish Index of Multiple Deprivation (SIMD)<sup>25</sup>. It is a measure of the proportion of the population in receipt of key income-related benefits in 2005, as well as children dependent on adult recipients of those benefits<sup>1</sup>. Comparisons were made on the basis of 2005 data as this preceded regeneration activity in the GoWell study areas, and thus provides an overview of deprivation in the communities prior to any loss or change of population.

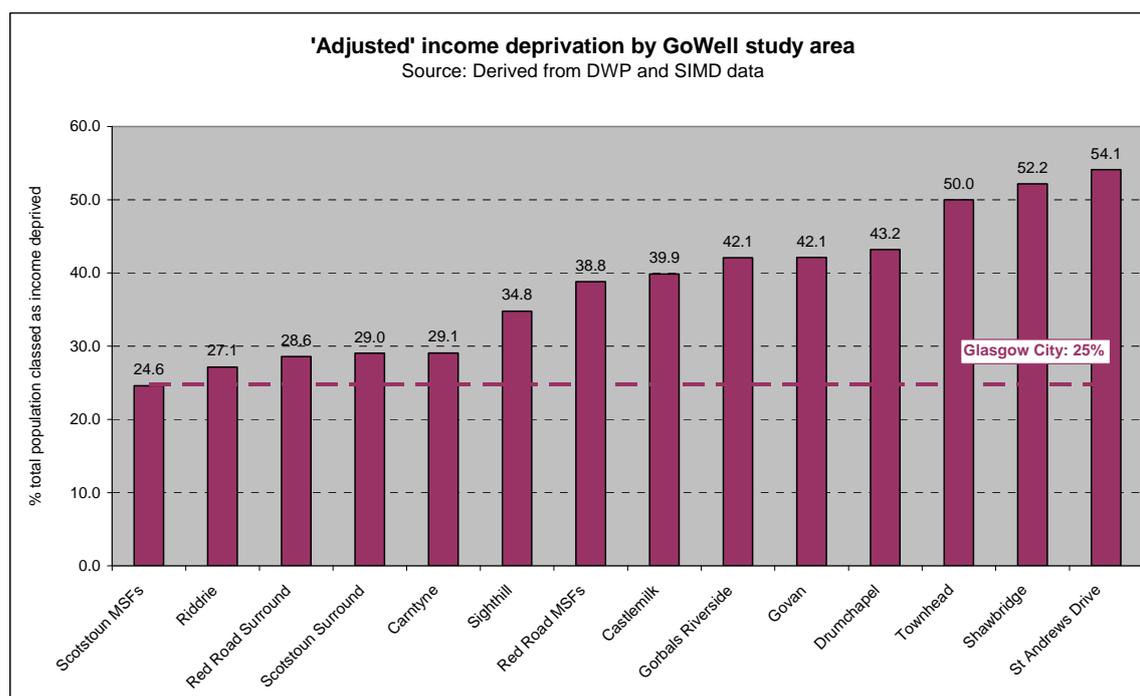
### *Identifying similarly deprived areas*

Previous analyses of levels of deprivation in the GoWell areas showed that all the study areas were deprived relative to elsewhere in Glasgow and Scotland, but that there was also a spectrum of deprivation across the areas. As Figure 2.1 shows, this ranged from around 25% of the population being classed as deprived in the Scotstoun 'core' area to levels of 50% or more in Townhead, Shawbridge and St. Andrew's Drive. Thus, all the GoWell study areas have approximately 25% or more of their population classed as 'deprived' in these terms. This 25% 'threshold' (which, coincidentally, also reflects the total level of deprivation across Glasgow City in 2005) was therefore used for the purposes of identifying other comparably deprived areas elsewhere in Scotland.

---

<sup>1</sup> The components of 'income deprivation', as defined by the 2006 SIMD, are: number of elderly in receipt of Guaranteed Pension Credit; number of working age adults in receipt of Income Support; number of adults in receipt of Job Seekers Allowance; number of children dependent on a recipient of Income Support; number of children dependent on a recipient of Job Seekers Allowance. The total number of these 'income deprived' are shown as a percentage of the total population in each small area.

Figure 2.1<sup>2</sup>



Analyses of deprivation were further stratified by deprivation grouping, based on the same set of earlier analyses in which levels of deprivation were aligned to Glasgow deprivation 'deciles'. The latter were calculated by dividing the population of Glasgow City into ten equally sized groups (deciles), ranked according to the proportion of the population in each classed as deprived. This showed that the GoWell areas are placed within deciles six to ten (where decile one is the *least* deprived tenth of the population of Glasgow and decile ten the *most* deprived); these groupings were used in the analyses to differentiate between the different levels of deprivation seen across the study areas.

<sup>2</sup> Note that Figure 2.1 refers to 'adjusted' levels of income deprivation. This relates to methodological issues concerning the fact that asylum seekers (resident in a number of GoWell areas) are ineligible to claim the welfare benefits used in the calculation of this deprivation measure. This required adjustment of the figures to remove asylum seekers from the population denominator. Full details are available from the relevant GoWell report.<sup>17</sup>

### *Health and wellbeing related indicators*

The geographical areas at which levels of deprivation are measured in Scotland using the SIMD are too small to allow presentation of a broad range of health related information<sup>3</sup>. Furthermore, the boundaries of the GoWell areas do not fit within commonly used administrative geographies for which such data are routinely published. Thus, to allow comparison of health related indicators between the GoWell areas and similarly deprived communities, a different geographical classification was used: so-called 'intermediate zones' (IZs). This is a set of areas (with an average population size of around 4,000) developed by the Scottish Government at which a range of administrative data are published<sup>26</sup>. A small number of IZs were selected which contained all, or part of, the relevant GoWell study areas, and where the housing and socio-economic characteristics of the IZ were similar in nature to those of the study area. These selections were made using mapping (Geographic Information System (GIS)) software. Intermediate Zones in other parts of Scotland with matching levels of deprivation were then selected. A number of relevant health related indicators were selected from the ScotPHO 2008 Community Health and Wellbeing Profiles<sup>27</sup> (which present data for all IZs in Scotland) for the GoWell-related IZs and the other comparably deprived Scottish communities. A full list of the indicators, together with definitions and original sources, is included in Appendix 1.

---

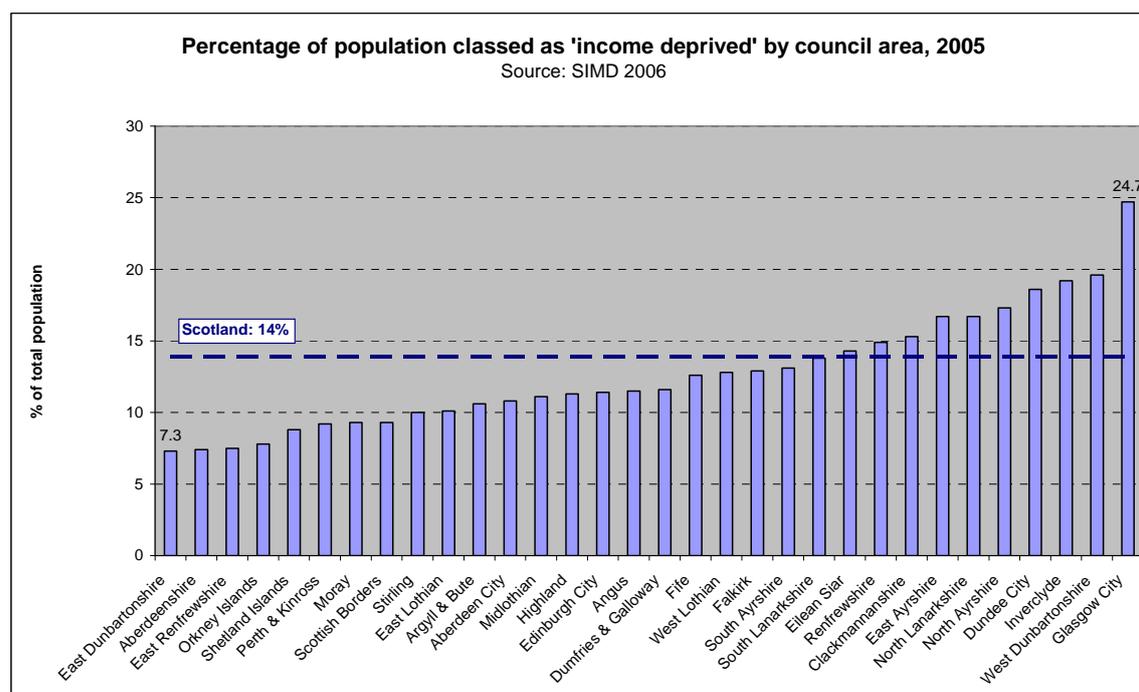
<sup>3</sup> These small areas, called 'datazones', contain on average only around 750 people. It is therefore not possible to show 'robust' statistics of health outcomes such as morbidity or mortality at this level, given the small numbers of events to which the statistics relate.

## Results

### Overview of income deprivation

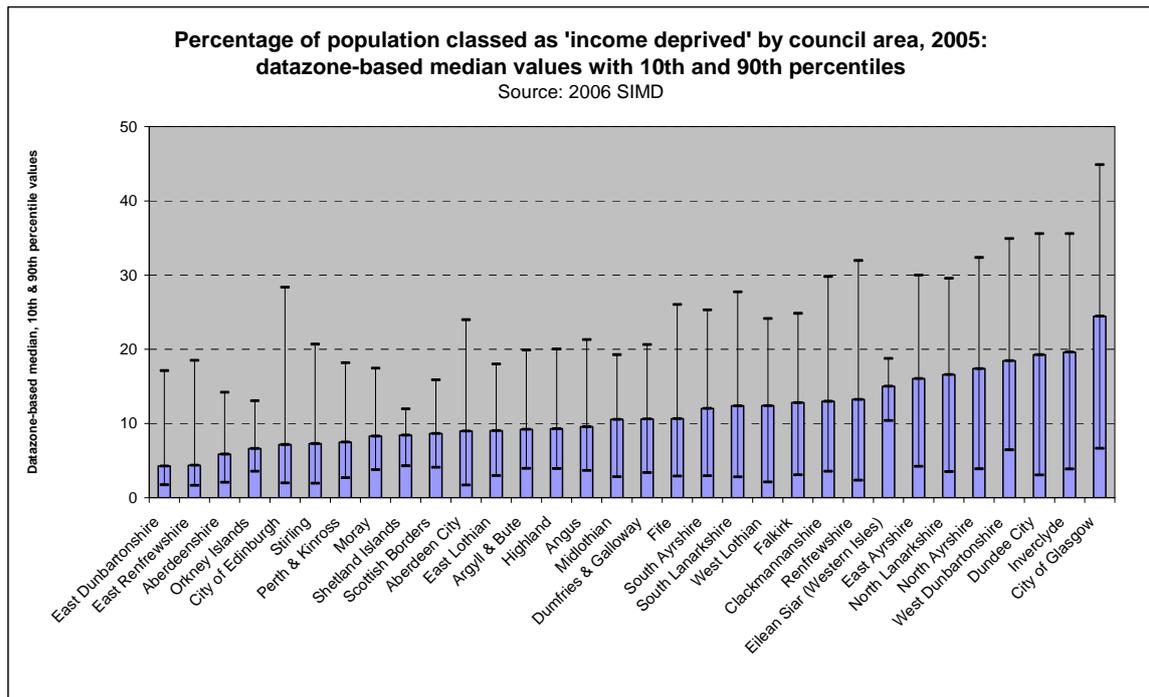
Figure 2.2 shows, for each local authority in Scotland, the proportion of the population classed as 'income deprived' in 2005. The figures range from 7.3% in East Dunbartonshire to around 25% in Glasgow City. Clearly, however, within each local authority area the rates of deprivation vary considerably. Figure 2.3 presents similar information at local authority level, but additionally includes a measure of the distribution of levels of deprivation across the council areas (specifically, the 10<sup>th</sup> and 90<sup>th</sup> percentile values<sup>4</sup>). What this shows is that, for example, although Edinburgh's overall level of deprivation is relatively small, the extent to which it varies across the city is much greater than that of other local authorities with similarly low overall levels of deprivation (e.g. Aberdeenshire, East Renfrewshire).

Figure 2.2



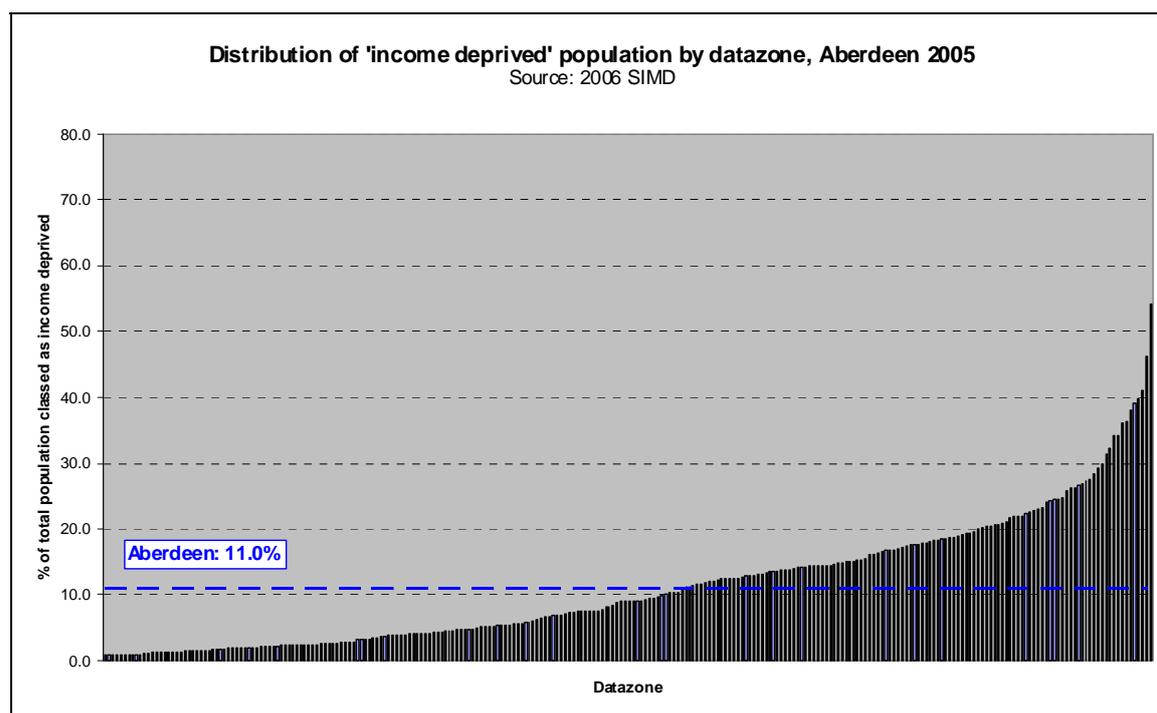
<sup>4</sup> The 10<sup>th</sup> and 90<sup>th</sup> percentiles are the 'cut-off' points below which 10 and 90 percent of values (in this case deprivation levels) lie. Presenting these statistics is simply a way of showing the range of deprivation across each local authority's small areas, while excluding possible 'outliers'. Note also that the percentiles and median values presented in the Figure, refer to the percentage of the population classed as income deprived *across each datazone* within every local authority area. Thus, for Glasgow the median value *for all datazones in the city* is 24.5: this is very slightly different from the overall percentage *of the total population* classed as deprived in these terms (24.7).

Figure 2.3



A starker picture of the distribution of (and indeed, inequalities in) levels of deprivation can be shown by examining the proportions of the population classed as deprived within every small area (datazone) within the council areas. Figure 2.4 shows this for Aberdeen, with deprivation levels ranging from under 1% to in excess of 50%. Similar distributions for Edinburgh, Dundee and Glasgow are included within Appendix 2.

Figure 2.4



*Identifying areas with similar levels of deprivation as the GoWell study areas*

The distributions of deprivation presented above suggest that there are likely to be a number of areas in Scotland with income deprivation levels at or above the levels of deprivation seen in the GoWell study areas (i.e. with at least 25% of their population classed as income deprived). Figures 2.5-2.7 confirm this. Figures 2.5 and 2.6 show the location of all small areas (datazones) in Scotland where at least 25% of the population is classed as income deprived. Such areas can be found within every local authority area in Scotland, with the exception of only Moray, the Western Isles, Orkney and Shetland. However, there is clearly a much higher concentration of these areas in the Central Belt. Figure 2.7 graphically summarises the data presented in the maps, showing the proportion of small areas within each local authority with income deprivation rates of at least 25%. The figures range from 2% of small areas in Aberdeenshire to over 30% in West Dunbartonshire (and almost 50% in Glasgow).

Figure 2.5: Map showing the location of datazones where 25% or more of the population were classed as 'income deprived' in 2005.

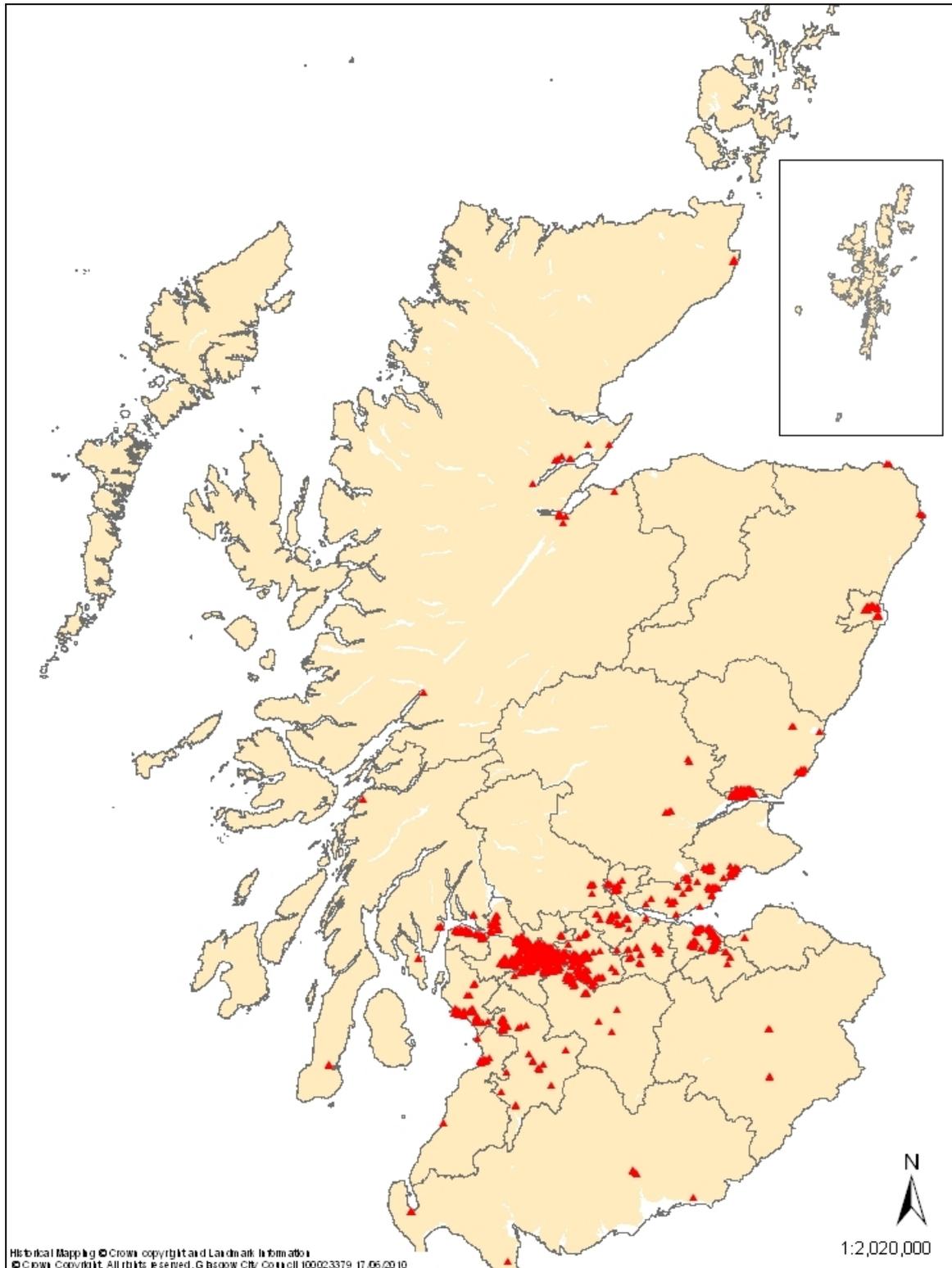


Figure 2.6: Thematic map showing levels of income deprivation in 2005 across all Scottish datazones.

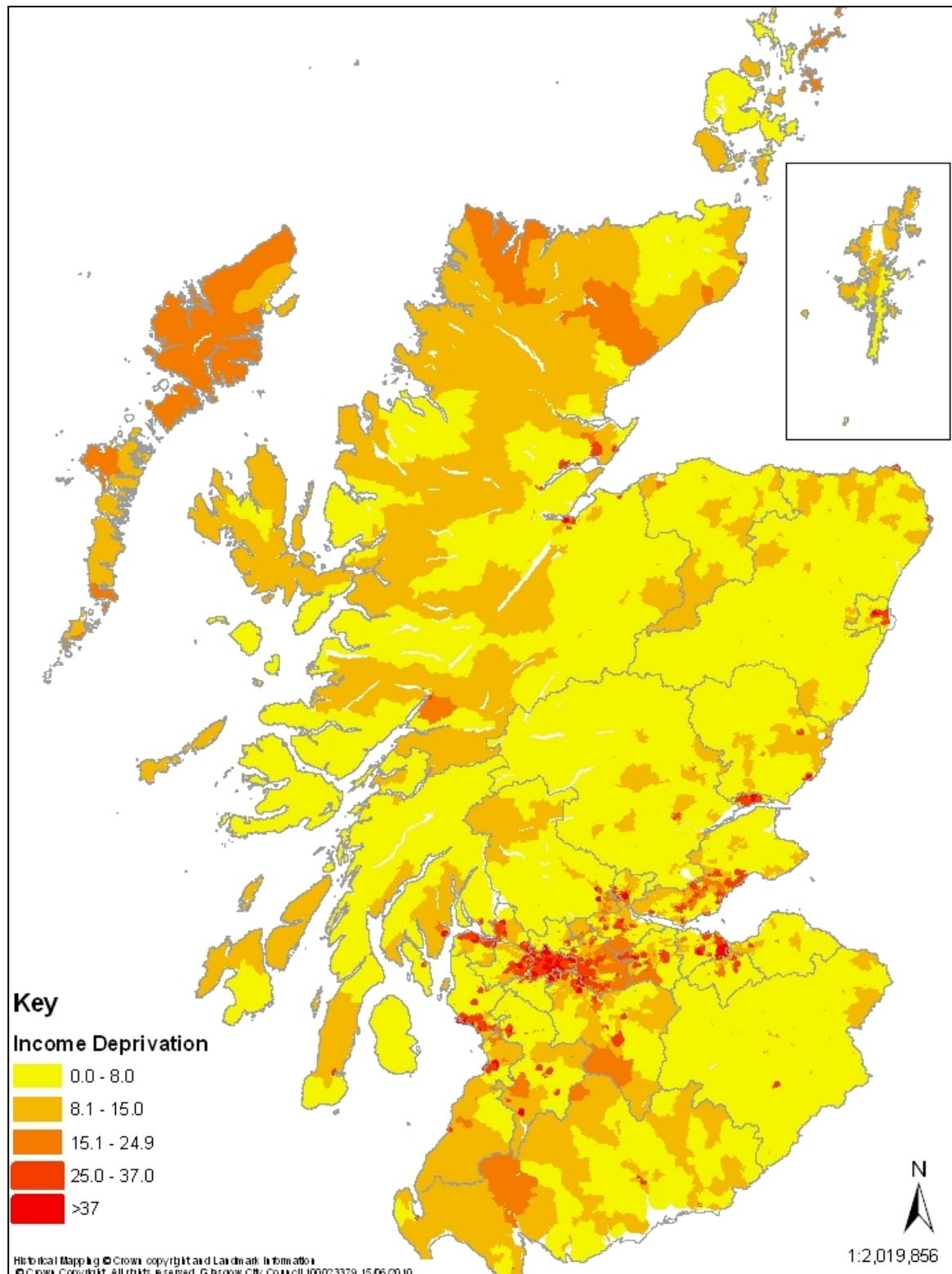
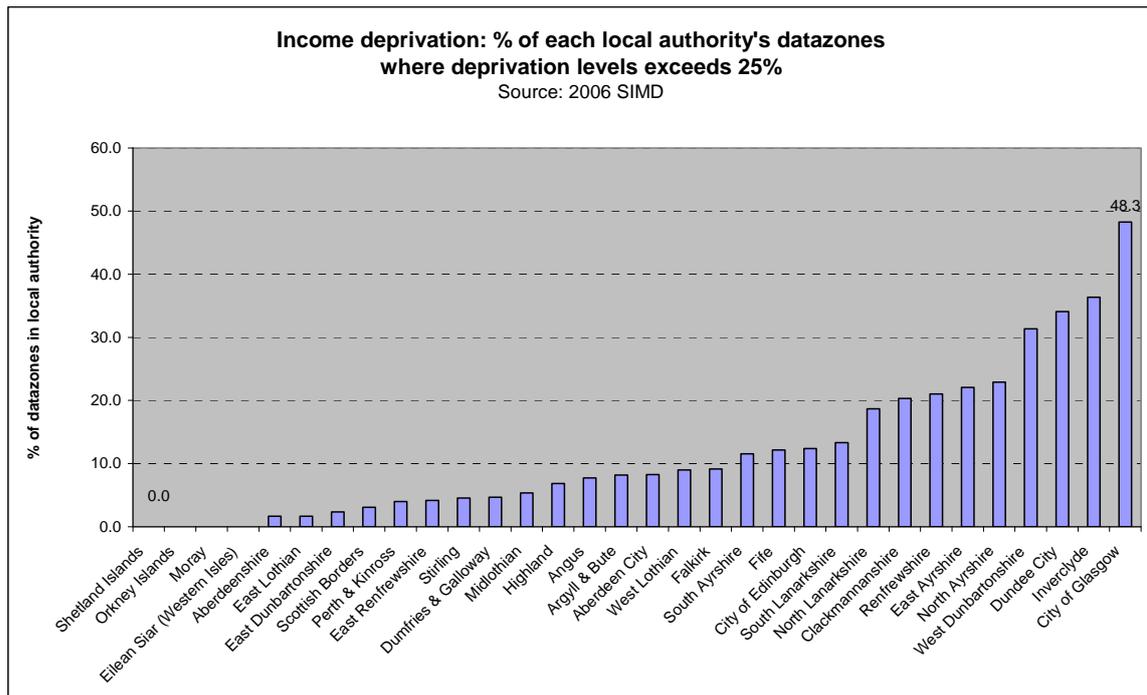


Figure 2.7

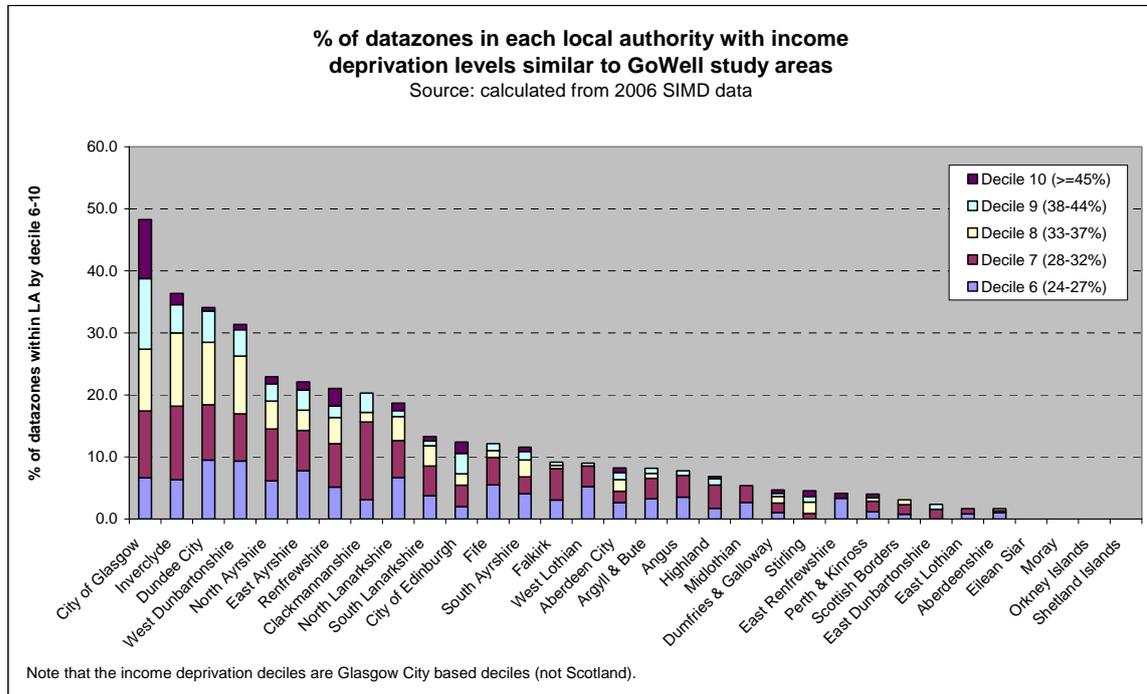


As outlined in the 'methods' section above, previous analyses of deprivation in the GoWell areas showed there to be a spectrum of deprivation ranging from 25% to over 50% of the study areas' populations. When relating these to Glasgow City deprivation deciles, the GoWell areas were placed within the more deprived deciles 6 to 10. Figure 2.8 shows the percentage of small areas within each local authority area which have deprivation levels matching the values in Glasgow deciles 6-10. This shows that in the case of Inverclyde, for example, not only do more than one third (36%) of the area's datazones have deprivation levels of 25% and above, but also that those datazones cover the full spectrum of deprivation seen in the GoWell study areas (i.e. they have deprivation levels matching those seen in Glasgow deciles 6, 7, 8, 9 and 10).

Although the actual *numbers* of datazones that these figures represent are not shown here, there is a total of 40 such small areas within Inverclyde, while there are almost 80 within North Lanarkshire, almost 70 in Edinburgh, over 60 in Dundee, and 55 in Fife. Unsurprisingly, the largest number (proportionally as well as in absolute terms) of equally deprived small areas is found in Glasgow itself. In almost half of all local authority areas, datazones can be found with levels of income deprivation that are spread across the spectrum of deprivation represented by deciles 6-10: in other

words, in all these areas we can find – in deprivation terms at least – ‘matching’ communities for the GoWell study areas.

Figure 2.8



### GoWell area types

In addition to confirming that many areas in Scotland have levels of deprivation similar to the individual GoWell areas, it is useful to clarify that this is obviously also true when we restrict the analyses to GoWell *area types*, rather than the individual study areas. Table 2.1 below summarises levels of 2005 income deprivation by area type. Figures 2.7 and 2.8 above confirm that there are a considerable number of areas/communities within Scotland with comparable levels of deprivation to that found within each of the five types of study area included within GoWell.

Table 2.1: **Levels of income deprivation (2005) by GoWell area type**

	% of population classed as income deprived
Scotland	13.9
Glasgow City	24.7
Wider Surrounding Area	28.7
Housing improvement areas	32.1
Local regeneration areas	36.7
Major Transformation Area	39.5
Peripheral estates	42.0

#### *Health and wellbeing indicators*

As outlined above, to enable presentation of a broader range of health and wellbeing related information, a different geographical classification was used: so-called 'Intermediate Zones' (IZs). This was necessary because: (a) datazones (used in the above analyses of deprivation) are too small to show statistically 'robust' measures of this type of information; and (b) the boundaries of the GoWell study areas do not fit with any of the commonly used administrative geographies for which these data are available. Thus, to compare health and wellbeing related indicators for GoWell areas in relation to other communities in Scotland, we need to match the study areas to corresponding IZs (i.e. IZs which include all or some of the study areas, and which have similar housing and socio-economic characteristics) and compare them with other IZs in the country.

For the purposes of illustration, six GoWell study areas (representing four of the five area types<sup>5</sup>) were selected, for which 'appropriate', corresponding, IZs could be used. Table 2.2 lists the IZs relevant to the selection of GoWell study areas.

---

<sup>5</sup> Note that no such 'appropriate' IZs could not be found to represent any of the three local regeneration areas (Gorbals Riverside, Scotstoun MSFs, St Andrews Drive). In each case the corresponding IZ is much larger, and contains a different mix of housing and population than the GoWell area.

Table 2.2: **Examples of GoWell study areas, with corresponding ‘Intermediate Zones’ (IZs).**

Decile/ Deprivation range	Example GoWell Study area	Area Type	Approx. population size, 2005	% income deprived	Relevant IZ code & name	Approx. population size, 2005	% income deprived
Decile 6 - income deprivation 24%-27%	Riddrie	Housing Improvement Area	4,600	27%	S02000657 (Carntyne)	3,400	27%
Decile 7 - income deprivation 28%-32%	Red Road Surround	Wider Surrounding Area	9,200	29%	S02000687 (Barmulloch)	3,500	34%
	Scotstoun surround	Wider Surrounding Area	4,100	29%	S02000684 (Scotstoun South & West)	4,100	32%
Decile 8 - income deprivation 33%-37%	Sighthill	Major Transformation Area	5,500	35%	S02000676 (Cowlairs & Port Dundas)	4,000	35%
Decile 9 - income deprivation 38%-44%	Castlemilk	Peripheral Estate	5,300	40%	S02000588 (Glenwood North)	4,100	43%
	Govan	Housing Improvement Area	1,100	42%	S02000649 (Ibrox)	2,900	40%
Decile 10 - income deprivation >=45%	<i>No IZs relevant to Townhead, Shawbridge or St. Andrew's Drive (i.e. covering all or part of the areas, and matching the socio-economic characteristics) could be identified</i>						

Figures 2.9-2.24 below compare a range of health and wellbeing related indicators for these ‘pseudo’ GoWell areas with those of comparably deprived IZs from across Scotland. Thus, only IZs with at least 25% of their population classed as deprived are included in these Figures.

The data are presented under the headings of: health & function; 'new inequalities'; social environment; physical environment; and population breakdown.

Each Figure shows the levels of a single indicator (e.g. life expectancy in years, rate of teenage pregnancies) for each IZ, arranged by increasing levels of deprivation (from 25% to more than 50%). Purple triangles represent the GoWell IZs listed in the above Table; blue dots represent the other, comparably deprived Scottish IZs. In all cases the blue horizontal line shows the measure (e.g. rate) for Scotland as a whole.

The individual GoWell IZs are named on the first chart only (Figure 2.9), but as all data are ordered by level of deprivation, their relative position is the same on all subsequent Figures.

Note that a full list of all the comparably deprived IZs (i.e. with codes and descriptive names) can be found in Appendix 3.

*Figures 2.9-2.11: Health and function – life expectancy; IB/SDA claimants*

Figures 2.9 and 2.10 show that male and female life expectancy in virtually all these more deprived IZs is lower than the Scottish average. There is also a clear relationship between life expectancy and income deprivation: the former decreases as the latter increases. Such a relationship is more strikingly evident in the analysis of incapacity benefit (IB) and severe disability allowance (SDA) claimants (Figure 2.11); and all IZs (GoWell and non-GoWell) again have considerably higher claimant rates than the national average.

Figure 2.9

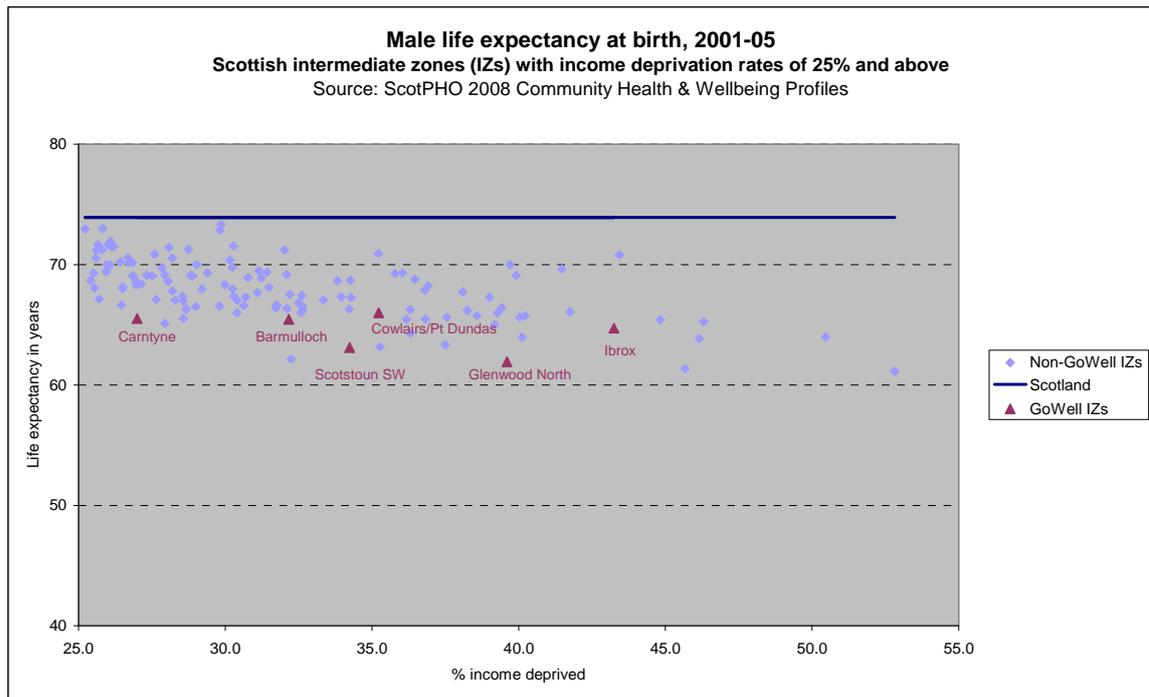


Figure 2.10

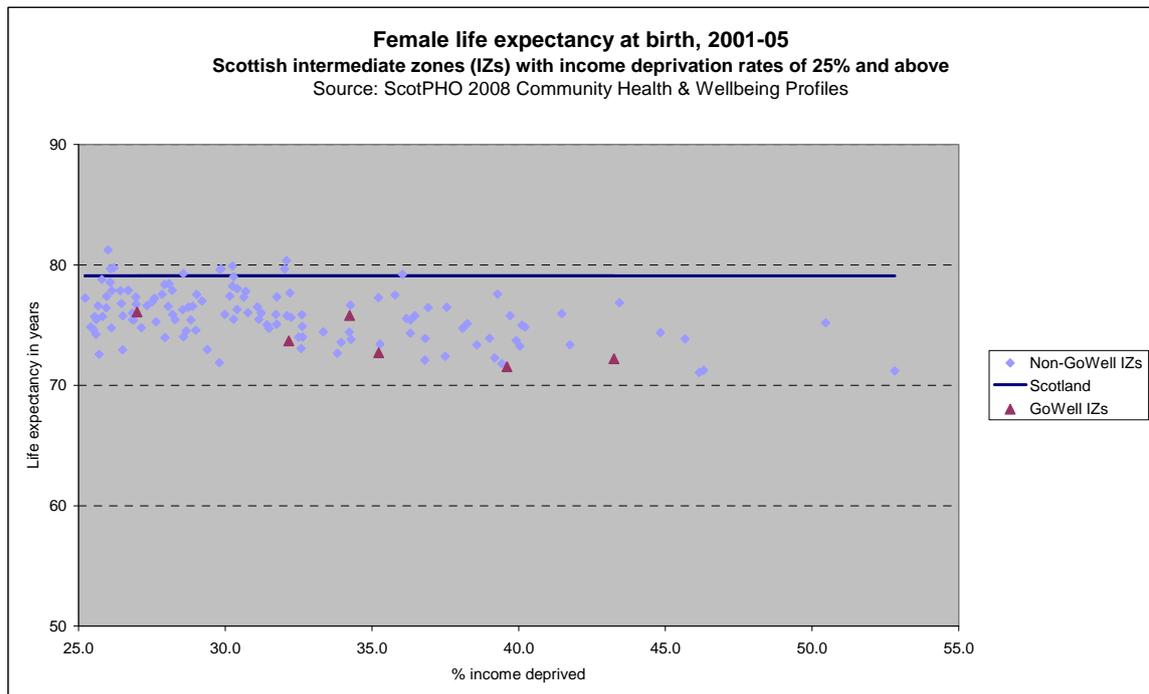
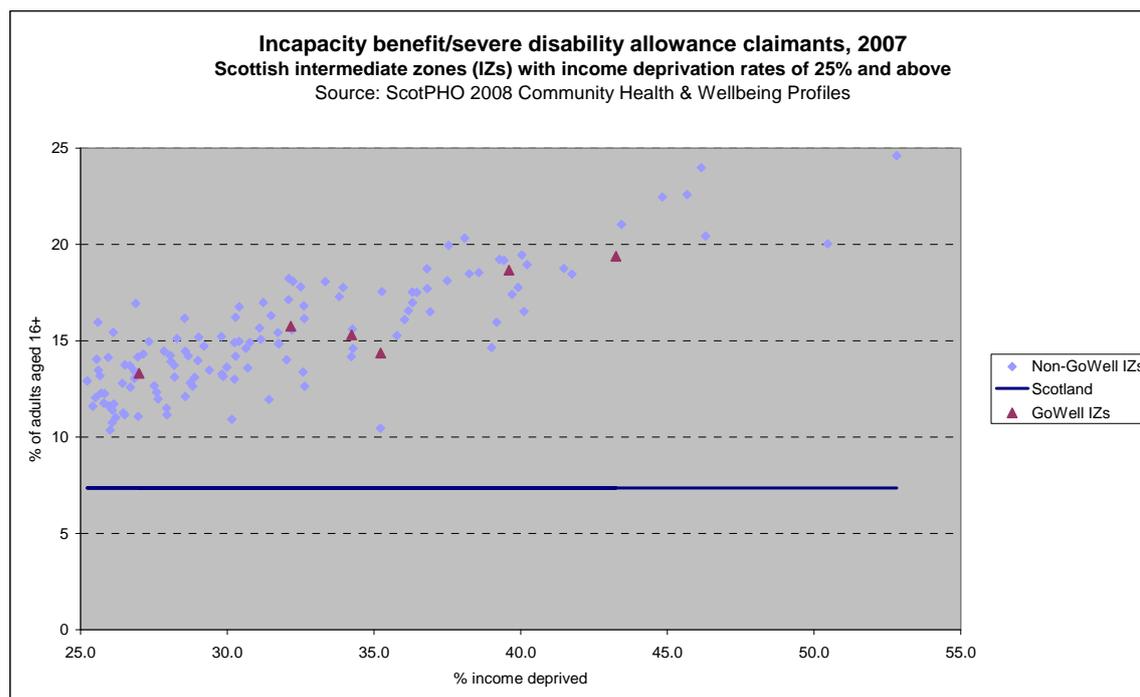


Figure 2.11



*Figures 2.12-2.15: The 'new inequalities' – alcohol, drugs, suicide, violence*

Figures 2.12-2.15 are presented under the heading 'the new inequalities', reflecting recent research which showed the increasing influence of such self-destructive factors on health inequalities in Scotland in recent years<sup>6</sup>.

However, interpretation of suicide, drugs, and assault-related data can be problematic at the level of IZ, given the small size of this geographical unit of analysis and the relatively rare number of actual 'events' recorded at this level. Despite that, however, Figures 2.12-2.14 clearly show higher than average rates among these more deprived areas. A much clearer pattern and relationship (with less fluctuation) can be seen in relation to alcohol related hospitalisation (Figure 2.15). For all four of these indicators, rates in the GoWell areas tend to be comparable to those seen in other, equally deprived, locations.

<sup>6</sup> Leyland A.H., Dundas R., McLoone P., Boddy F.A. Inequalities in mortality in Scotland 1981-2001. MRC Social and Public Health Sciences Unit, 2007.

Figure 2.12

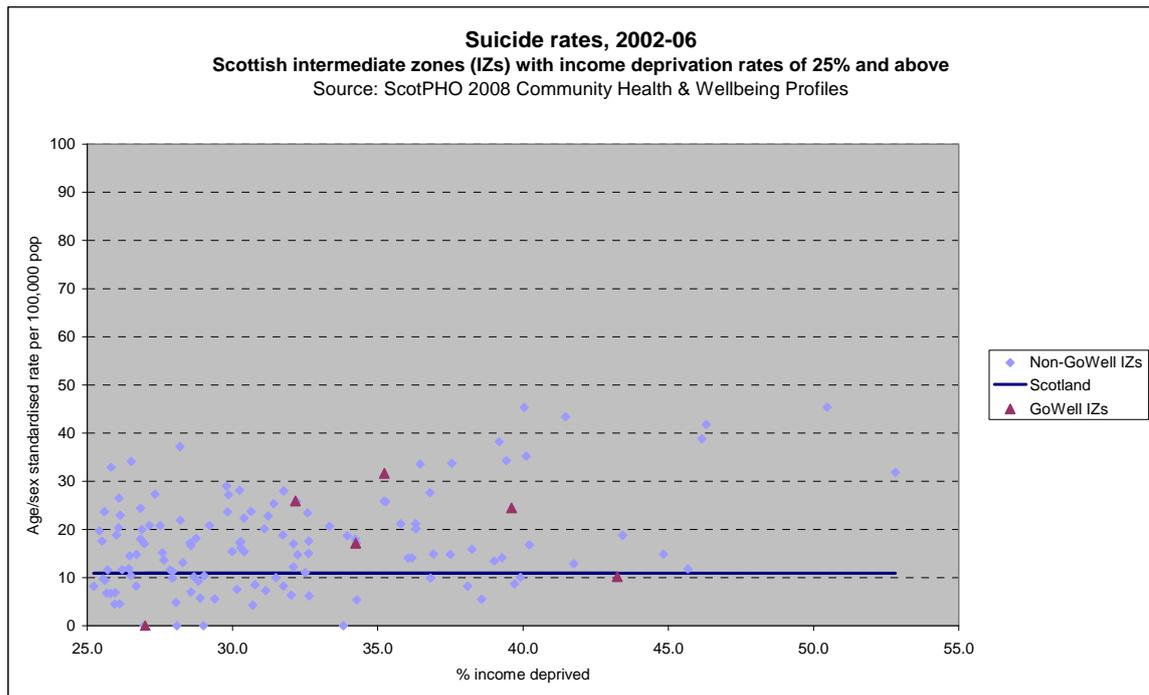


Figure 2.13

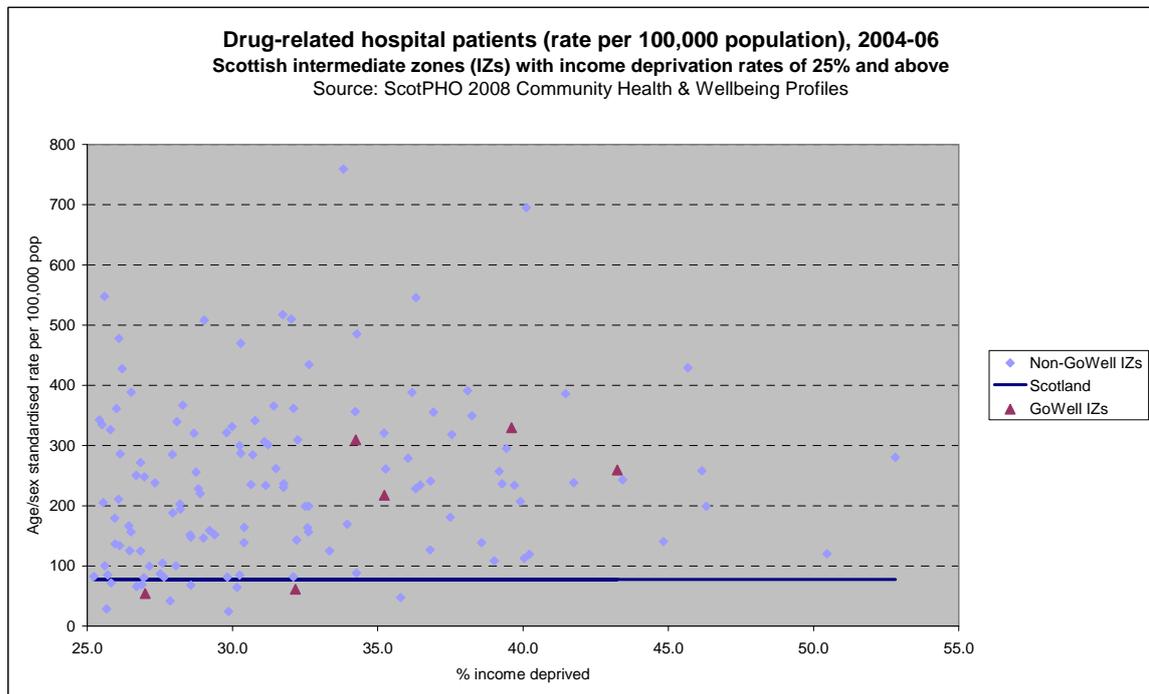


Figure 2.14

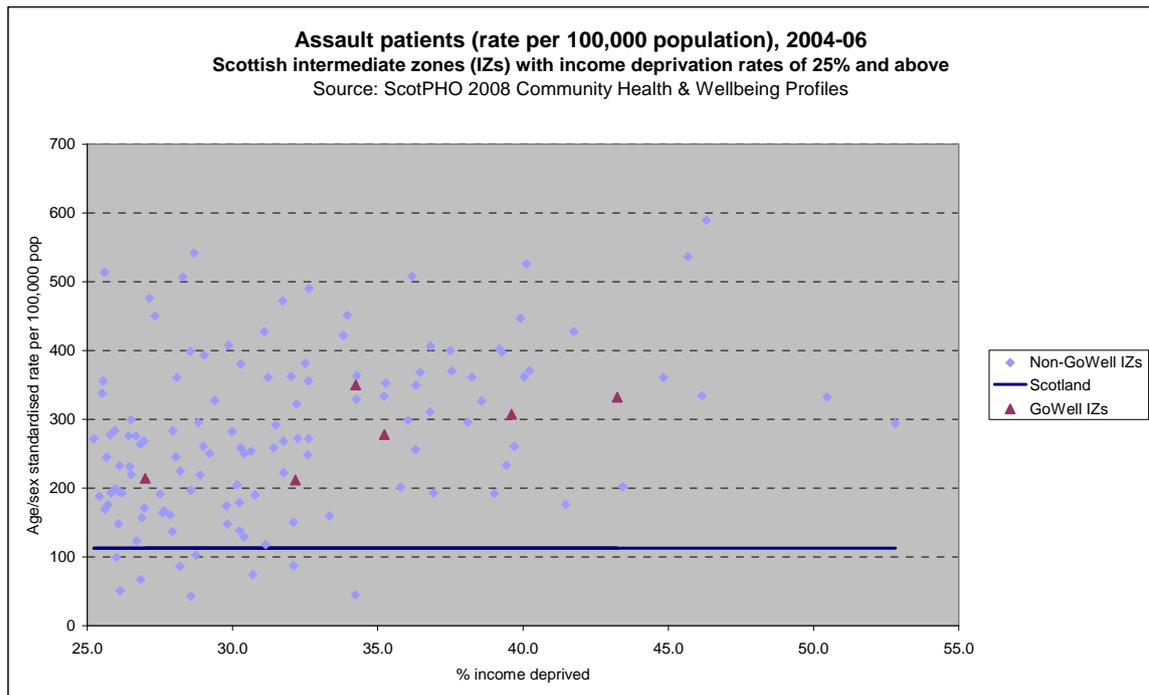
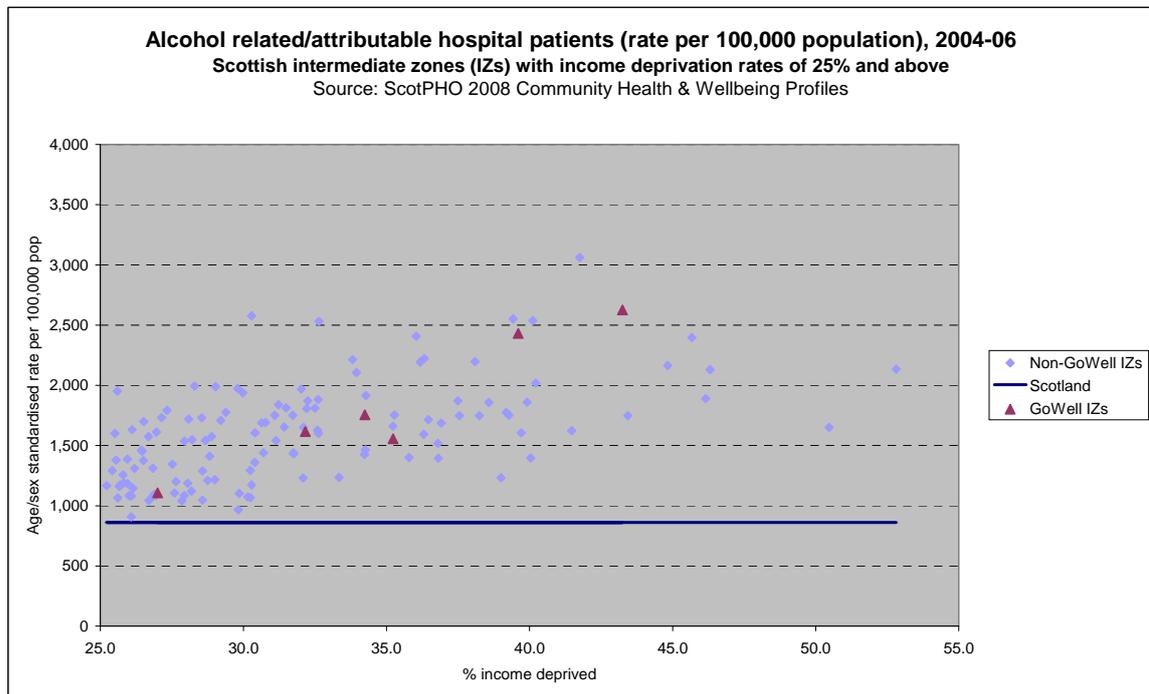


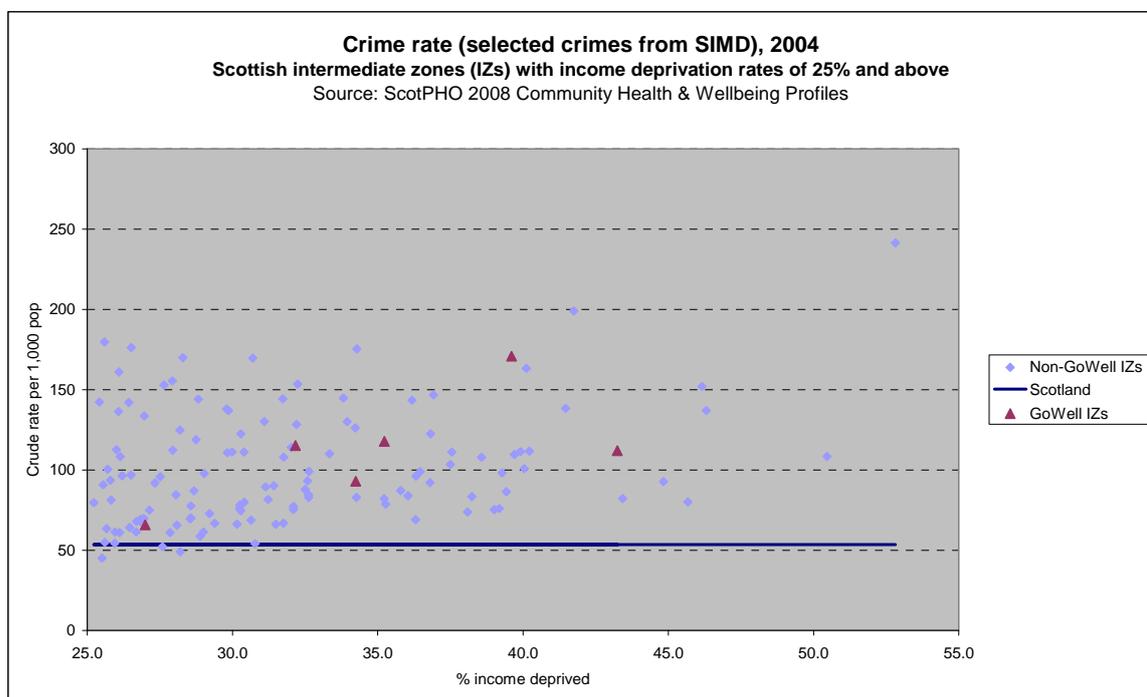
Figure 2.15



*Figures 2.16-2.19: Social environment – crime, education, parenting*

Figures 2.16 to 2.19 show that deprived IZs (both GoWell and non-GoWell) have – in the vast majority of cases – relatively high rates of crime, teenage pregnancy<sup>7</sup>, and lone parents on income support, as well relatively low rates of school-based educational attainment. The clearest links with levels of income deprivation can be seen in the case of the education and lone parent data<sup>8</sup>. There is a less clear association with crime and teenage pregnancy – again, however, this is likely to relate to the small size of geographical area, and the small number of events (crimes, teenage pregnancies) recorded at this level.

Figure 2.16



<sup>7</sup> Note that IZs in Tayside are omitted from these teenage pregnancy data. Further details in Appendix 1.

<sup>8</sup> Note, however, that as Figure 2.19 relates to income support, and as the income deprivation measure includes recipients of this benefit, a strong linear relationship would be expected.

Figure 2.17

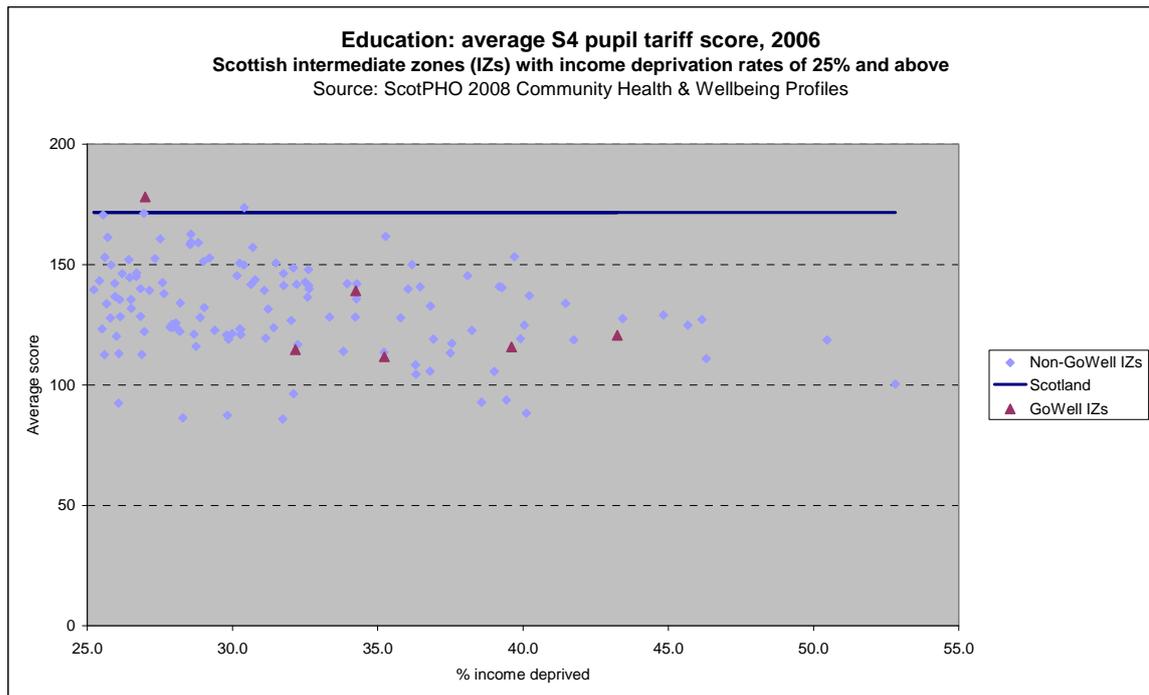


Figure 2.18

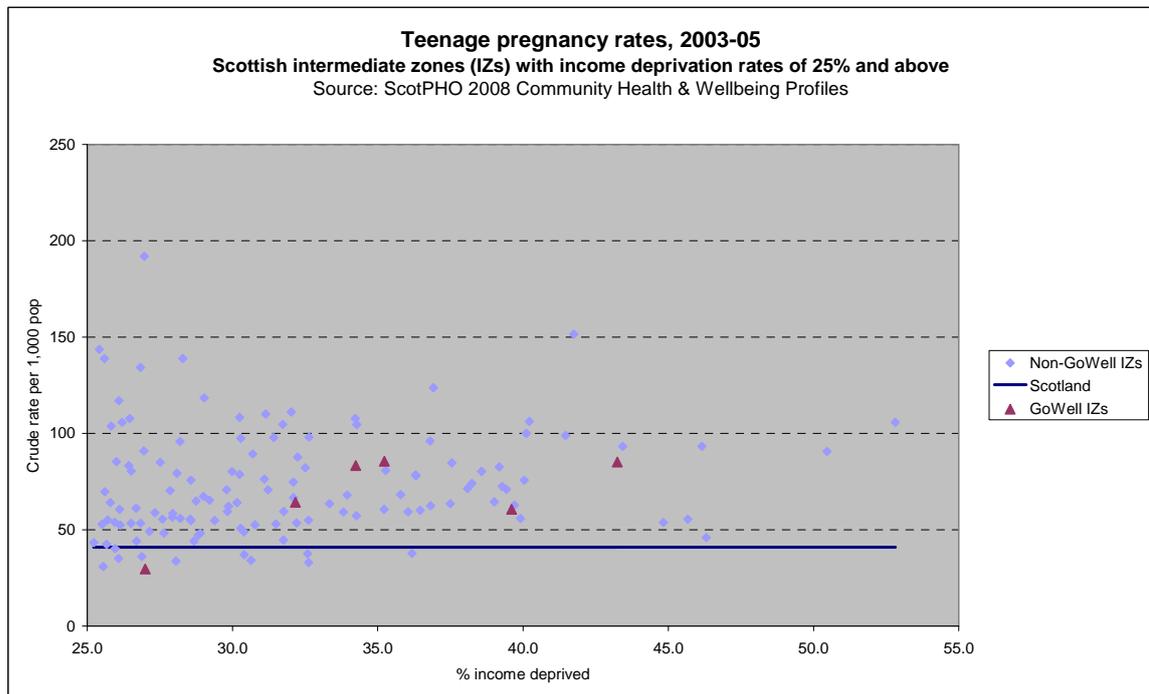
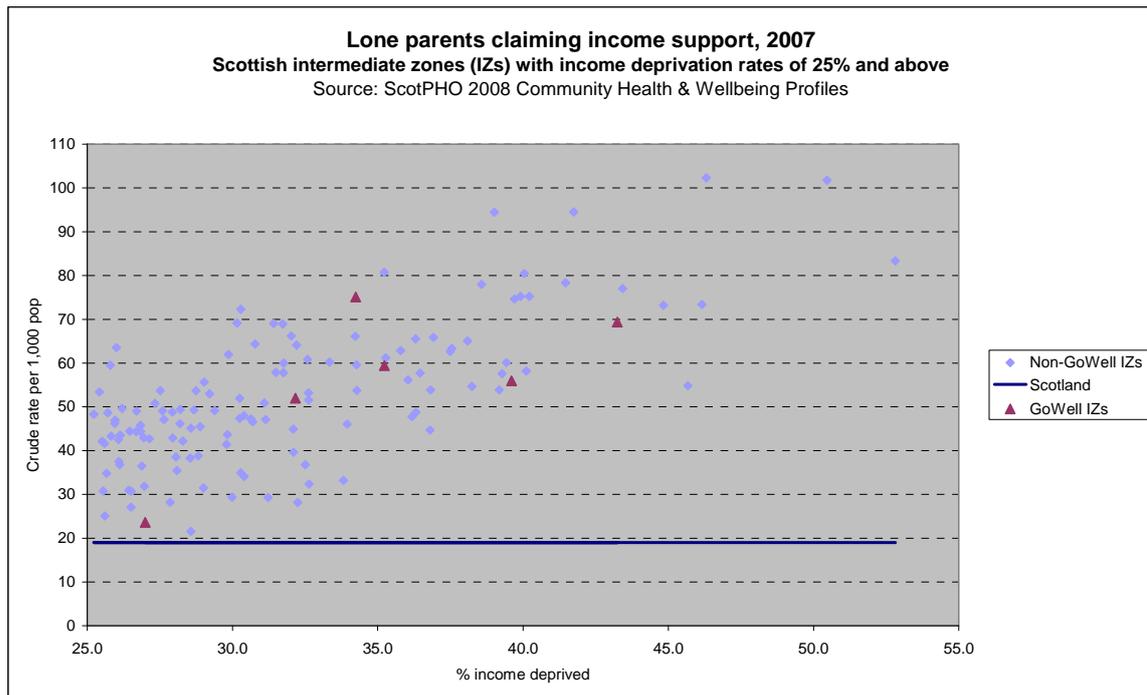


Figure 2.19



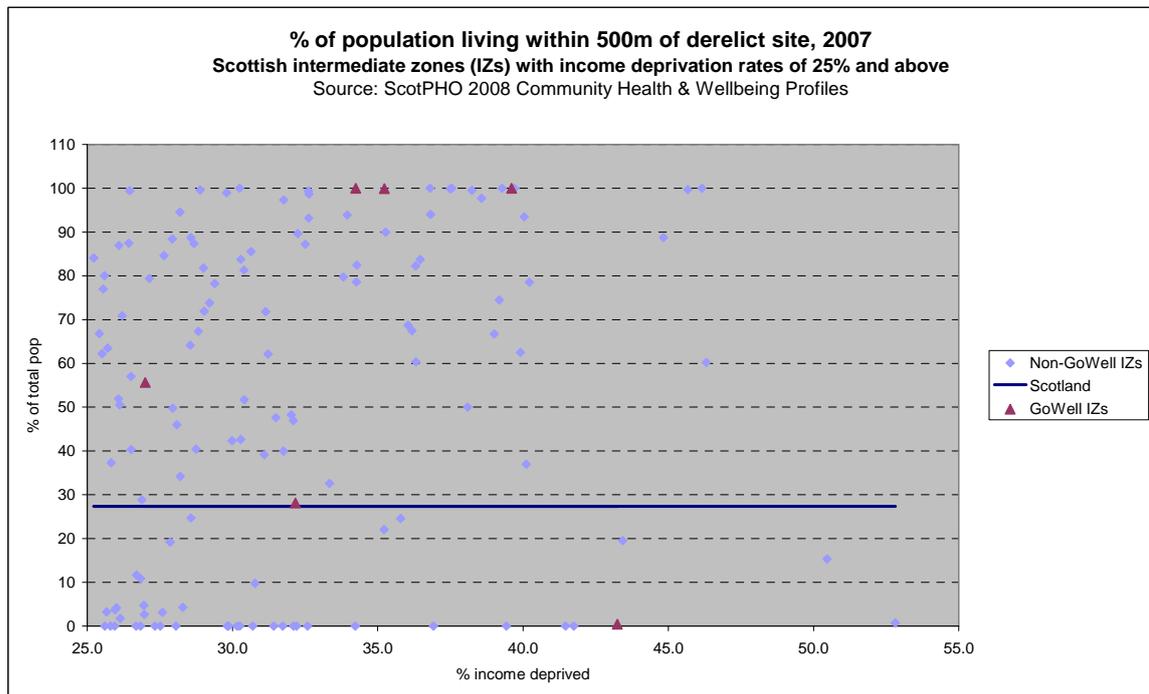
*Figures 2.20-2.21: Physical environment – road traffic accidents; proximity to derelict sites*

As Figure 2.20 suggests, interpretation of road accident hospitalisation rates are also difficult at the level of IZ. Similar difficulties exist in relation to the second indicator of the physical environment which shows the percentage of the population living within 500m of a derelict site (Figure 2.21). However, this Figure does still suggest that a large number of deprived IZs are located within, or in close proximity to, environments of potentially poorer overall quality – an issue that has been highlighted in recent years by other research<sup>28</sup>.

Figure 2.20



Figure 2.21



*Figures 2.22-2.24: Population*

The final Figures in this section compare the age breakdown of the population in the GoWell IZs with other deprived IZs in Scotland. As one might expect for an indicator of this type, there is considerable variation across the different Scottish areas. It is also noticeable that the first of the GoWell IZs (Carntyne) has a quite different demographic profile to many other areas, with relatively fewer children and relatively more elderly people.

Figure 2.22

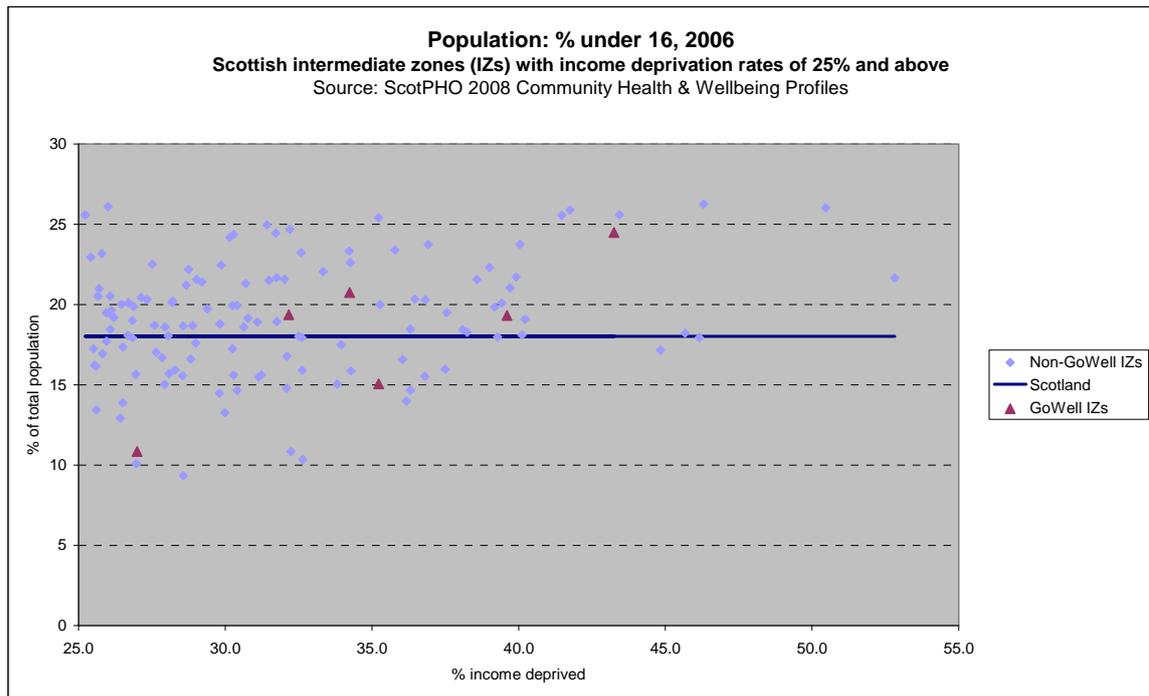


Figure 2.23

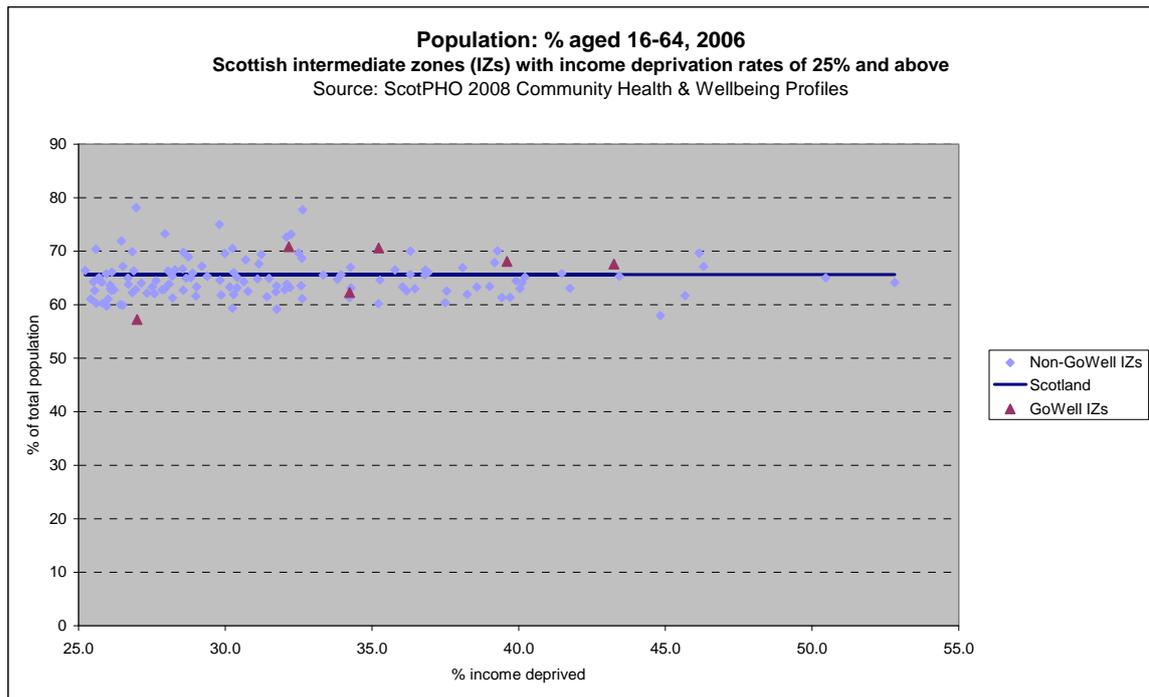
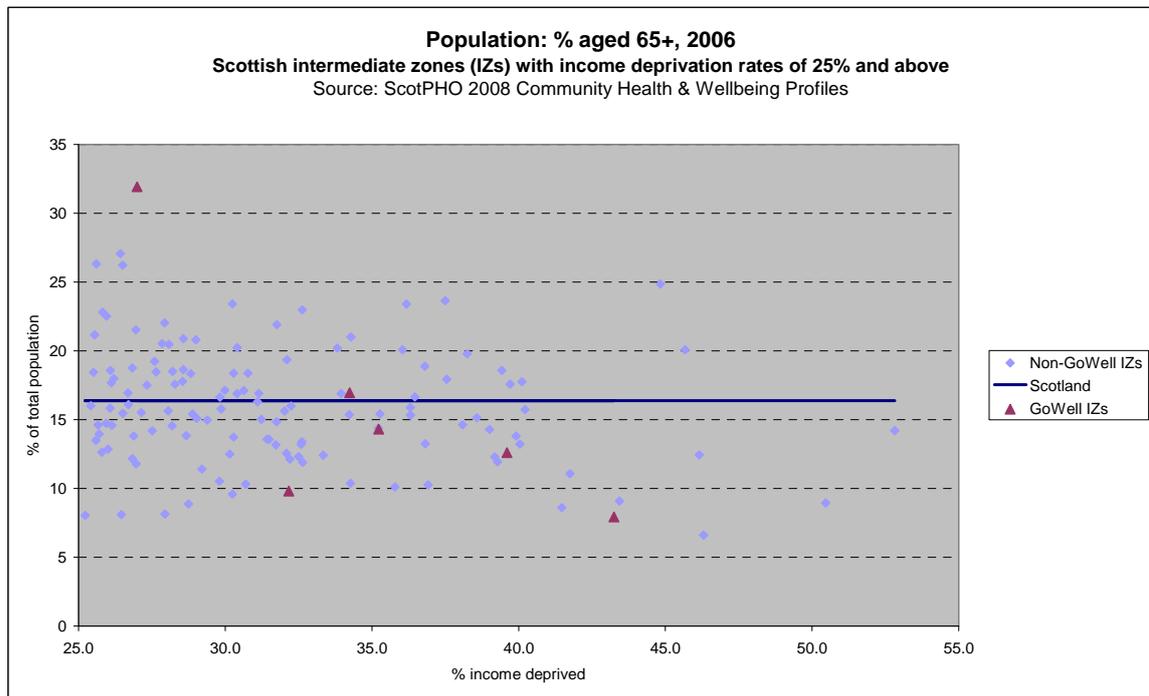


Figure 2.24



In summary, all the above Figures show that:

- in the vast majority of cases, the selected indicators in deprived IZs compare poorly with national figures (e.g. lower life expectancy, much higher levels of alcohol and drugs harm, higher crime and assault rates, higher levels of teenage pregnancy).
- a deprivation-related gradient is evident for the majority of indicators (e.g. higher rates of alcohol related harm in areas with higher rates of deprivation).
- less clear patterns (e.g. with considerable fluctuations) are seen for indicators such as suicide, drugs hospitalisations, and road traffic accidents, reflecting the small size of the geographical units of analysis (i.e. IZs), and the relatively rare number of actual 'events' recorded at such geographies.
- importantly for the purposes of this project, the data strongly suggest that areas in Scotland with similar levels of deprivation to the GoWell areas tend to also have similar health and wellbeing profiles.

## Discussion and conclusions

The analyses presented in this part of the report highlight a number of issues:

- Areas with high levels of deprivation are not confined to Glasgow: there are simply more of them concentrated within that city.
- Areas with deprivation levels matching the GoWell study areas can be found across Scotland. Only four of the country's 32 local authority areas do not contain areas with income deprivation levels of 25% or more.
- A large number of local authority areas contain communities with deprivation levels not only exceeding 25%, but matching the levels found *across the whole spectrum of deprivation* seen in the GoWell areas.
- Generally speaking, areas with similar levels of deprivation tend to have comparable profiles of a broad range of health and wellbeing related factors.

This last point illustrates the fact that income deprivation is not only a good proxy for multiple deprivation, but also a good marker of a range of important health and social factors. By identifying areas with levels of deprivation similar to the GoWell areas, we can point to communities that are likely to be similar in a number of ways – including facing many of the same issues that have been highlighted in the GoWell surveys (and indeed other surveys and studies of deprived neighbourhoods). This is not to disregard the fact (highlighted in the introduction to this section) that the approach adopted in these analyses has been relatively simplistic and may well mask important characteristics of neighbourhoods and their populations not reflected by routine data sets.

Finally, whilst we recognise that some of the other areas identified in this report may in fact not require, or may have already experienced, regeneration programmes, their profiles on a range of indicators suggest that learning from GoWell (for example in relation to community engagement and empowerment, community interventions, and aspects of social regeneration) is likely still to be relevant. Many communities in Scotland (and, by extension, in the rest of the UK) share a number of characteristics with the GoWell communities and are looking for ways to become healthier, sustainable and more cohesive. For all these areas, a number of lessons learned from the GoWell approach may well be relevant.

## Appendix 1: Definitions and sources for Tables and Figures.

Figure(s)	Description and notes	Source
2.1	<p>'Adjusted' income deprivation by GoWell study area and study area, 2005.</p> <p>Note that this Figure is taken from a previous GoWell report<sup>17</sup>, from which full details of all definitions, sources and methodology are available. Briefly, however, the Figure shows the percentage of the total population in each study area (and for Glasgow City as a whole) who were classed as 'income deprived' in the 2006 Scottish Index of Multiple Deprivation (SIMD) (based on 2005 Department of Work &amp; Pensions (DWP) data). The components of 'income deprivation', as defined by the 2006 SIMD, are: number of elderly in receipt of Guaranteed Pension Credit; number of working age adults in receipt of Income Support; number of adults in receipt of Job Seekers Allowance; number of children dependent on a recipient of Income Support; number of children dependent on a recipient of Job Seekers Allowance. The total number of these 'income deprived' is shown as a percentage of the total population in each area.</p> <p>Note also that full details on the income domain of the Scottish Index of Multiple Deprivation are available from the Scottish Government website at:  <a href="http://www.scotland.gov.uk/Topics/Statistics/SIMD">http://www.scotland.gov.uk/Topics/Statistics/SIMD</a>.</p>	DWP; 2006 SIMD
2.2	<p>Percentage of the total population in each Scottish local authority area classed as income deprived, 2005.</p> <p>See above definition of the income deprivation component of the 2006 SIMD.</p>	2006 SIMD

Figure(s)	Description and notes	Source
2.3	<p>Percentage of the total population in each Scottish local authority area classed as income deprived in 2005 – median, 10<sup>th</sup> percentile and 90<sup>th</sup> percentile values for datazones in each local authority area.</p> <p>See above definition of the income deprivation component of the 2006 SIMD.</p> <p>Note also that the 10<sup>th</sup> and 90<sup>th</sup> percentiles, and median values, presented in the Figure, refer to the percentage of the population classed as income deprived for <i>all</i> datazones <i>within</i> every local authority area. Thus, for Glasgow the median value for all datazones in the city is 24.5: this is very slightly different from the overall percentage of the total population classed as deprived in these terms (24.7%).</p> <p>The 10th and 90th percentiles are the ‘cut-off’ points below which 10 and 90 percent of values (in this case deprivation levels) lie. Presenting these statistics is simply a way of showing the range of deprivation across each local authority’s small areas, while excluding possible ‘outliers’ by focussing on a narrower range of values.</p>	2006 SIMD
2.4 – 2.8; Table 2.1; A1 – A3 (in Appendix 2)	<p>Further analyses, and presentation, of rates of datazone-based income deprivation from the 2006 SIMD.</p> <p>Please also note the following in relation to the maps shown in Figures 2.5 and 2.6: reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and database right 2009. All rights reserved. Ordnance Survey Licence number 100023379.</p>	2006 SIMD

Figure(s)	Description and notes	Source
Table 2.2	<p>Examples of GoWell study areas, with corresponding 'Intermediate Zones' (IZs).</p> <p>Intermediate Zones were derived by the Scottish Government. Further details are available from the relevant Scottish Government publication<sup>26</sup>.</p> <p>Income deprivation data shown in the Table are derived from the same source discussed above.</p>	Scottish Government; 2006 SIMD
2.9-2.10	<p>Male and female life expectancy at birth for selected Intermediate Zones (IZs), 2001-05.</p> <p>Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a>.</p>	ScotPHO Health & Wellbeing profiles, 2008
2.11	<p>Percentage of all adults aged 16+ claiming incapacity benefit/severe disability allowance (SDA), 2007 (quarter ending February), by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a>.</p>	As above
2.12	<p>Alcohol related and attributable hospital patients: number of patients discharged from hospital (annually) with alcohol related and attributable conditions expressed as directly age-sex standardised rate per 100,000 population per year (3-year average, 2004-06) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a>.</p>	As above

Figure(s)	Description and notes	Source
2.13	Drug related hospital patients: number of patients discharged from hospital with drug related conditions over 3 years expressed as directly age-sex standardised rate per 100,000 population per year (3-year average, 2004-06) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.14	Deaths from suicide (all ages), expressed as a directly age-sex standardised rate per 100,000 population per year (5-year average, 2002-06) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.15	Assault patients discharged from hospital (annually), expressed as directly age-sex standardised rate per 100,000 population per year (3-year average, 2004-06) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.16	Crime rate: number of crimes (based on SIMD crimes of violence; drug offences; domestic house breaking; minor assault; and vandalism) expressed as a crude rate per 1,000 population, 2004, by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above

Figure(s)	Description and notes	Source
2.17	<p>School-based educational attainment: average tariff score of all pupils enrolled in stage S4 of publicly funded secondary schools, 2006-07, by selected IZ.</p> <p>The average tariff score enables different types of certification to be considered together, making it easier to compare average attainment for 10 different areas. The tariff score of a pupil is calculated by allocating a score to each level of qualification and award, using the Unified Points Score scale. For example, a Standard Grade at level 1 counts as 38 points and at level 4 counts as 14 points. Data in this indicator are restricted to S4 pupils attending publicly funded secondary schools. The data do not include: pupils attending publicly funded special schools and private independent schools; adults attending publicly funded secondary schools; and pupils educated outwith the school education system (e.g. at home).</p> <p>Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a>.</p>	As above
2.18	<p>Teenage (&lt;18 years) pregnancies expressed as a 3-year average crude rate per 1,000 females aged 15-17 per year (2003-05), by selected IZ. Data from NHS Tayside not included. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a>.</p>	As above

Figure(s)	Description and notes	Source
2.19	Lone parents in receipt of income support – rate per 1,000 population aged 16-64, 2007(quarter ending February), by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.20	Road traffic accident casualties – all ages: patients discharged from hospital (annually) after a road traffic accident emergency admission, expressed as 3-year average directly age-sex standardised rate per 100,000 population per year (2004-06) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.21	Percentage of total population living within 500 metres of a derelict site. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above
2.22 – 2.24	Population: percentage of total population in each age band (0-15 yrs; 16-64; 65+) by selected IZ. Further details on method of calculation and original data sources are available from the ScotPHO website: <a href="http://www.scotpho.org.uk/profiles">http://www.scotpho.org.uk/profiles</a> .	As above

## Appendix 2: Income deprivation distributions: Glasgow, Edinburgh and Dundee.

Figure A1

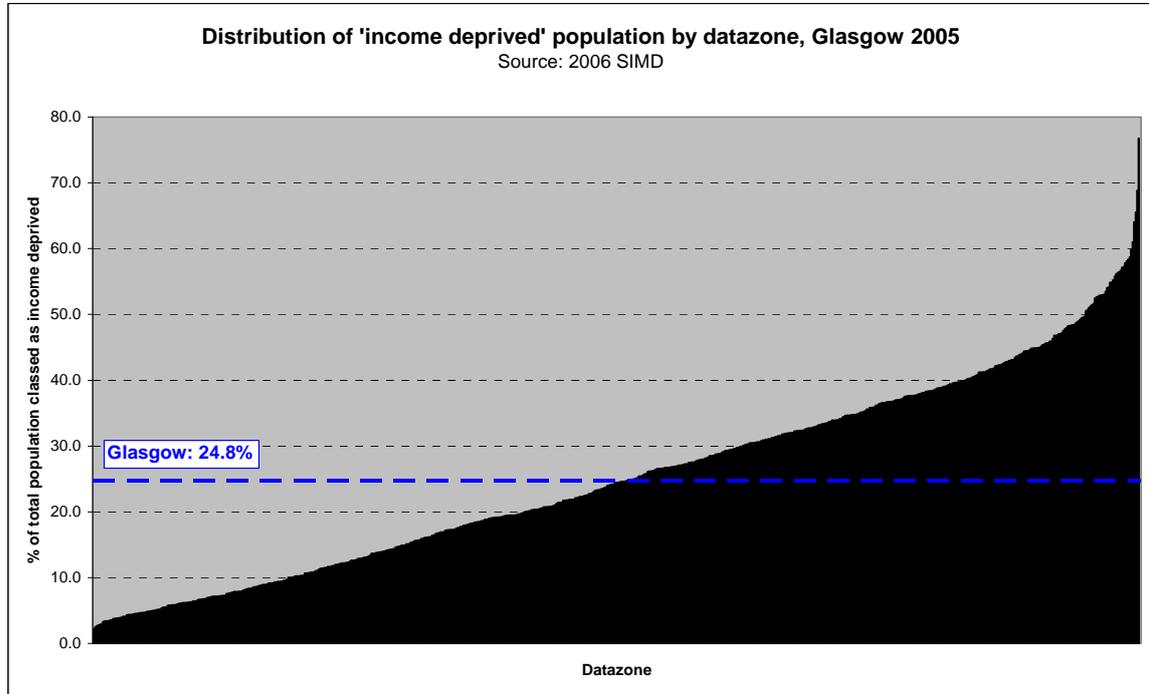


Figure A2

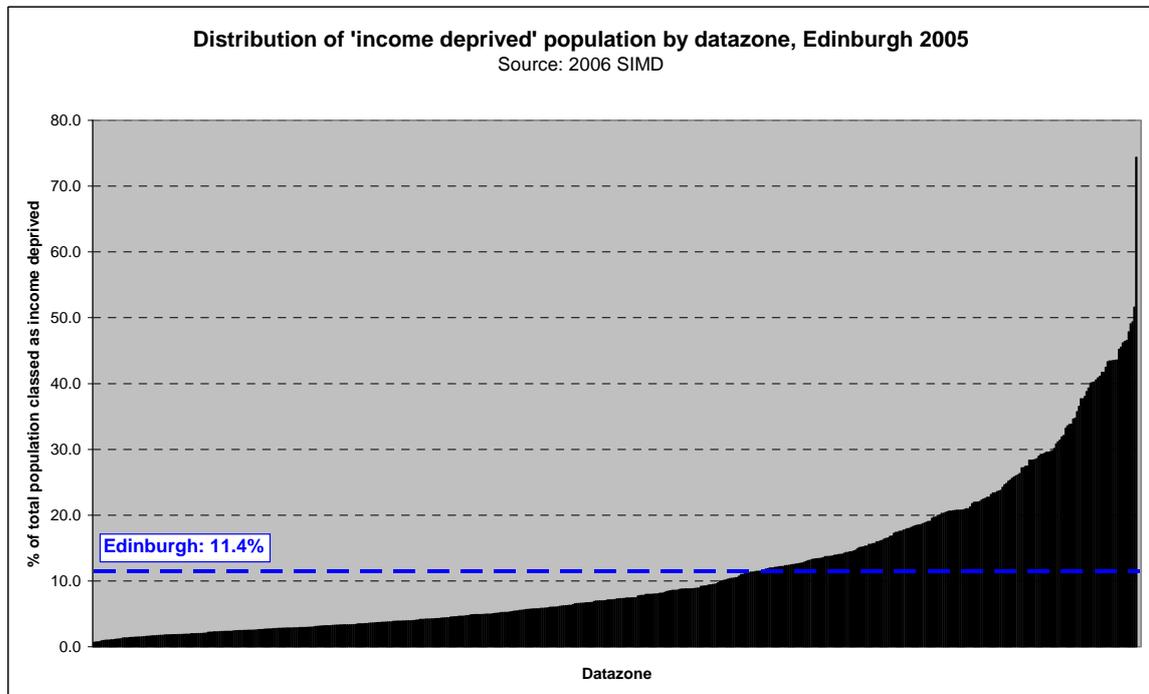
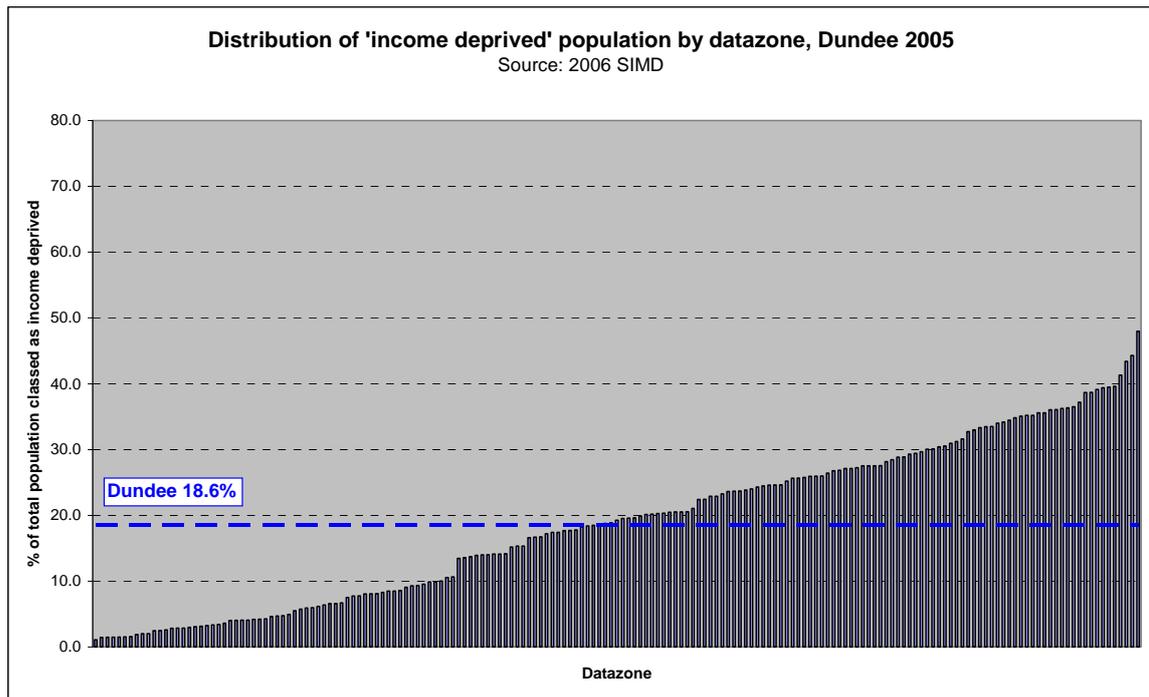


Figure A3



**Appendix 3: List of all intermediate zones in Scotland with income deprivation levels of at least 25% in 2005.**

Code	Name	Local authority	Total population	% income deprived
S02000228	Kirkton	Dundee City	3,889	25.0
S02001157	Westburn and Newton	South Lanarkshire	3,770	25.2
S02000187	Lincluden and Lochside	Dumfries & Galloway	4,162	25.4
S02000851	Kilwinning West and Blacklan	North Ayrshire	4,018	25.5
S02000640	Greenfield	Glasgow City	5,214	25.5
S02000222	Douglas West	Dundee City	4,219	25.6
S02000036	Tillydrone	Aberdeen City	3,450	25.6
S02000706	Knightswood Park West	Glasgow City	3,612	25.6
S02000905	Kirkshaws	North Lanarkshire	5,416	25.7
S02001184	n/a	West Dunbartonshire	4,618	25.7
S02000850	Stevenson Hayocks	North Ayrshire	3,989	25.8
S02000225	Ardler and St Marys	Dundee City	5,311	25.8
S02001005	Linwood South	Renfrewshire	4,159	25.8
S02000774	Port Glasgow Upper East	Inverclyde	5,188	25.9
S02000606	Crookston North	Glasgow City	3,082	26.0
S02000526	Kirkcaldy Templehall East	Fife	4,964	26.0
S02000524	Kirkcaldy Hayfield and Smeaton	Fife	3,386	26.1
S02000540	Buckhaven and Muiredge	Fife	3,105	26.1
S02000230	Doon Valley South	East Ayrshire	3,473	26.1
S02000549	Glenrothes Auchmuty	Fife	2,464	26.1
S02000512	Kirkcaldy Linktown and Seafield	Fife	3,164	26.2
S02000112	Arbroath Harbour	Angus	4,206	26.3
S02000881	Motherwell South	North Lanarkshire	3,844	26.4
S02000680	Petershill	Glasgow City	5,177	26.5
S02000638	Craigton	Glasgow City	4,316	26.5
S02000104	Fraserburgh Harbour and Broadsea	Aberdeenshire	3,070	26.5
S02000214	Lochee	Dundee City	5,388	26.5
S02000589	Castlemilk	Glasgow City	5,228	26.7
S02001186	n/a	West Dunbartonshire	6,053	26.7
S02000547	Methil Methilhill	Fife	4,108	26.7
S02001007	Paisley Gallowhill and Hillington	Renfrewshire	5,437	26.8
S02000350	Calders	Edinburgh, City of	4,319	26.8
S02000208	Stobswell	Dundee City	4,833	26.9
S02001097	Strutherhill	South Lanarkshire	3,672	26.9
S02000699	Knightswood East	Glasgow City	3,896	27.0
S02000420	Great Junction Street	Edinburgh, City of	3,616	27.0
S02000657	Carntyne	Glasgow City	3,404	27.0
S02000918	Airdrie North	North Lanarkshire	5,752	27.1
S02000587	Darnley East	Glasgow City	4,551	27.2
S02001146	Fernhill and Cathkin	South Lanarkshire	3,831	27.3
S02000277	Hillhead	East Dunbartonshire	4,136	27.5
S02000637	Cardonald North	Glasgow City	3,998	27.6
S02001185	n/a	West Dunbartonshire	4,146	27.6
S02000709	Blairdardie East	Glasgow City	5,655	27.9
S02000530	Kirkcaldy Gallatown and Sinclairtown	Fife	3,691	27.9

Code	Name	Local authority	Total population	% income deprived
S02000670	Sighthill	Glasgow City	4,398	27.9
S02000217	The Glens	Dundee City	4,678	28.0
S02001137	Burnbank Central and Udston	South Lanarkshire	4,363	28.1
S02001160	Burnhill and Bankhead North	South Lanarkshire	3,614	28.1
S02000546	Methil East	Fife	3,629	28.2
S02000641	Penilee	Glasgow City	5,428	28.2
S02000038	Woodside	Aberdeen City	3,372	28.3
S02000780	Greenock Upper Central	Inverclyde	4,358	28.5
S02000994	Johnstone North West	Renfrewshire	3,465	28.6
S02000669	Woodside	Glasgow City	3,311	28.6
S02000844	Stevenston Ardeer	North Ayrshire	2,553	28.7
S02000422	West Pilton	Edinburgh, City of	5,715	28.7
S02000667	Riddrie and Hogganfield	Glasgow City	5,742	28.8
S02000694	Springburn East and Cowlares	Glasgow City	4,569	28.9
S02000697	Balornock	Glasgow City	3,914	29.0
S02000015	Torry East	Aberdeen City	4,103	29.0
S02000592	Carnwadric West	Glasgow City	4,985	29.2
S02000216	Charleston	Dundee City	3,956	29.3
S02000653	Easterhouse East	Glasgow City	3,042	29.4
S02000644	Ibrox East and Cessnock	Glasgow City	3,319	29.8
S02001142	Whitehill	South Lanarkshire	2,780	29.8
S02001122	Fairhill	South Lanarkshire	2,351	29.9
S02000602	Pollokshaws	Glasgow City	5,546	30.0
S02000218	Douglas East	Dundee City	3,407	30.0
S02000211	Hilltown	Dundee City	5,846	30.0
S02001191	n/a	West Dunbartonshire	5,173	30.2
S02000378	Bingham, Magdalene and the Christians	Edinburgh, City of	3,776	30.2
S02000696	Yoker South	Glasgow City	3,706	30.2
S02001069	Ayr North Harbour, Wallacetown and Newton South	South Ayrshire	4,613	30.3
S02000538	Ballingry	Fife	3,041	30.3
S02000470	Bainsford and Langlees	Falkirk	3,283	30.4
S02000632	Shettleston North	Glasgow City	4,555	30.4
S02000660	Drumoyne and Shieldhall	Glasgow City	5,921	30.6
S02000358	Broomhouse and Sighthill	Edinburgh, City of	3,606	30.7
S02000674	Garthamlock, Auchinlea and Gartloch	Glasgow City	3,276	30.8
S02000584	Carmunnock South	Glasgow City	3,399	30.8
S02000775	Port Glasgow Mid, East and Central	Inverclyde	5,367	31.1
S02000428	Waterfront and Granton	Edinburgh, City of	5,385	31.1
S02000615	Govanhill East and Aikenhead	Glasgow City	4,102	31.2
S02000254	Altonhill North and Onthank	East Ayrshire	4,137	31.4
S02000778	Greenock East	Inverclyde	5,592	31.5
S02000034	Heathryfold and Middlefield	Aberdeen City	4,318	31.7
S02000601	Crookston South	Glasgow City	4,173	31.8
S02000543	Methil West	Fife	2,604	31.8
S02000841	Irvine Castlepark South	North Ayrshire	3,410	32.0
S02000673	Whiteinch	Glasgow City	3,247	32.1
S02000410	Restalrig and Lochend	Edinburgh, City of	3,766	32.1

Code	Name	Local authority	Total population	% income deprived
S02000684	Scotstoun South and West	Glasgow City	4,079	32.2
S02000782	Braeside, Branchton, Lower Larkfield and Ravenscra	Inverclyde	4,878	32.2
S02000635	Calton, Gallowgate and Bridgeton	Glasgow City	5,334	32.2
S02000226	Whitfield	Dundee City	5,487	32.3
S02000629	Parkhead East and Braidfauld North	Glasgow City	3,292	32.5
S02000617	Pollok North and East	Glasgow City	4,665	32.6
S02000630	Tollcross	Glasgow City	3,750	32.6
S02000691	Springburn	Glasgow City	4,699	32.6
S02000647	Gallowgate North and Bellgrove	Glasgow City	3,686	32.6
S02001070	Lochside, Braehead and Whitletts	South Ayrshire	4,144	32.8
S02000153	Alloa South and East	Clackmannanshire	4,634	33.3
S02000221	Linlathen and Midcraigie	Dundee City	5,223	33.5
S02000835	Irvine Fullarton	North Ayrshire	2,756	33.8
S02001001	Paisley North West	Renfrewshire	3,352	33.9
S02000849	Ardrossan Central	North Ayrshire	3,054	34.1
S02000333	Gracemount, Southouse and Burdiehouse	Edinburgh, City of	5,095	34.2
S02000687	Barmulloch	Glasgow City	3,560	34.2
S02000646	Barlanark	Glasgow City	4,827	34.3
S02000846	Saltcoats Central	North Ayrshire	3,124	34.3
S02000240	Shortlees	East Ayrshire	4,435	35.2
S02000676	Cowlairs and Port Dundas	Glasgow City	3,957	35.2
S02000678	Blackhill and Barmulloch East	Glasgow City	3,470	35.3
S02000714	Drumry West	Glasgow City	3,549	35.8
S02000610	Toryglen and Oatlands	Glasgow City	5,860	36.0
S02000781	Greenock Town Centre and East Central	Inverclyde	5,857	36.2
S02000704	Maryhill East	Glasgow City	3,286	36.3
S02000628	Gorbals and Hutchesontown	Glasgow City	5,400	36.3
S02000654	Cranhill, Lightburn and Queenslie South	Glasgow City	5,935	36.5
S02000693	Wyndford	Glasgow City	4,353	36.8
S02000700	Maryhill West	Glasgow City	2,776	36.8
S02000419	Muirhouse	Edinburgh, City of	5,575	36.9
S02000692	Possil Park	Glasgow City	5,118	37.5
S02000620	Braidfauld	Glasgow City	4,887	37.5
S02000585	Glenwood South	Glasgow City	5,492	38.1
S02000701	Milton West	Glasgow City	3,768	38.2
S02000878	Craigneuk Wishaw	North Lanarkshire	3,922	38.6
S02000634	Laurieston and Tradeston	Glasgow City	3,869	39.0
S02000712	Drumchapel South	Glasgow City	3,307	39.0
S02000666	Roystonhill, Blochairn, and Provanmill	Glasgow City	6,013	39.2
S02000648	Carntyne West and Haghill	Glasgow City	5,074	39.3
S02001174	Raploch	Stirling	2,719	39.4
S02000649	Ibrox	Glasgow City	2,891	39.6
S02000708	Milton East	Glasgow City	3,667	39.7
S02000597	Nitshill	Glasgow City	5,264	39.9
S02000716	Drumry East	Glasgow City	2,837	40.0
S02000252	Altonhill South, Longpark and Hillhead	East Ayrshire	3,308	40.1

Code	Name	Local authority	Total population	% income deprived
S02000663	Craigend and Ruchazie	Glasgow City	4,933	40.2
S02000348	Clovenstone and Drumbryden	Edinburgh, City of	6,241	41.5
S02000744	Inverness Merkinch	Highland	2,908	41.7
S02000656	Govan and Linthouse	Glasgow City	5,187	42.3
S02000588	Glenwood North	Glasgow City	4,086	43.2
S02000362	Niddrie	Edinburgh, City of	3,380	43.4
S02000643	Old Shettleston and Parkhead North	Glasgow City	3,192	44.8
S02000619	Dalmarnock	Glasgow City	3,709	45.7
S02000685	Keppochill	Glasgow City	4,526	46.2
S02001003	Paisley Ferguslie	Renfrewshire	4,181	46.3
S02000633	Parkhead West and Barrowfield	Glasgow City	4,711	48.7
S02000715	Drumchapel North	Glasgow City	3,432	50.5
S02000662	Central Easterhouse	Glasgow City	3,270	50.9
S02000354	Greendykes and Niddrie Mains	Edinburgh, City of	2,700	52.8
S02000652	North Barlanark and Easterhouse South	Glasgow City	3,583	54.7

## REFERENCES

- <sup>1</sup> Scottish Government website. *Scotland Performs. National Outcomes*.  
<http://www.scotland.gov.uk/About/scotPerforms/outcomes/susplaces>. Website accessed September 2010.
- <sup>2</sup> Thomson H, Atkinson R, Petticrew M, Kearns A. Do urban regeneration programmes improve public health and reduce health inequalities? A synthesis of the evidence from UK policy and practice (1980-2004). *J Epidemiol Community Health*. 2006 Feb;**60**(2):108-15.
- <sup>3</sup> GoWell website  
[http://www.gowellonline.com/index.php?option=com\\_content&task=view&id=65&Itemid=109](http://www.gowellonline.com/index.php?option=com_content&task=view&id=65&Itemid=109) . Accessed September 2010.
- <sup>4</sup> Bond L, Sautkina E, Kearns A. *Mixed messages about mixed tenure: do reviews tell the real story?* Housing Studies (in press).
- <sup>5</sup> GoWell. *Synthesis of Research Findings 2006-2009*. GoWell, 2010.  
[http://www.gowellonline.com/index.php?option=com\\_docman&task=doc\\_download&gid=123](http://www.gowellonline.com/index.php?option=com_docman&task=doc_download&gid=123)
- <sup>6</sup> Scotland Performs. *National Outcomes. Inequalities*  
<http://www.scotland.gov.uk/About/scotPerforms/outcomes/inequalities> Website accessed September 2010.
- <sup>7</sup> Thomson H, Thomas S, Sellstrom E, Petticrew M. The health impacts of housing improvement: a systematic review of intervention studies from 1887 to 2007. *Am J Public Health*. 2009 ;**99** Suppl 3:S681-92.
- <sup>8</sup> Scottish Government. *Scotland's People Annual Report. Results from 2007/2008 Scottish Household Survey*. Edinburgh: Scottish Government, 2009.
- <sup>9</sup> Crawford F. *Doing it differently. An asset-based approach to wellbeing*. Glasgow: Scottish Council Foundation, 2005.
- <sup>10</sup> Jin RL, Shah CP, Svoboda TJ. The impact of unemployment on health: a review of the evidence. *Can Med Assoc J* 1995;**153**:529-40.
- <sup>11</sup> Mitchell R., Dorling D. and Shaw M. *Reducing Health Inequalities in Britain*. Bristol: Joseph Rowntree Foundation, 2000.
- <sup>12</sup> Crawford F, Beck S, Hanlon P. *Will Glasgow Flourish? Learning from the past, analysing the present and planning for the future*. Glasgow: GoWell, 2007.
- <sup>13</sup> Scottish Executive. *People and Place: Regeneration Policy Statement*. Edinburgh: Scottish Executive, 2006.  
<http://www.scotland.gov.uk/Publications/2006/06/01145839/0>

- 
- <sup>14</sup> Communities Scotland. *National Standards for Community Engagement*. Edinburgh: Communities Scotland, 2006.  
[http://www.scdc.org.uk/uploads/standards\\_booklet.pdf](http://www.scdc.org.uk/uploads/standards_booklet.pdf)
- <sup>15</sup> Glasgow Housing Association. *Tenant Participation Strategy*. Glasgow: GHA, 2005. [http://www.gha.org.uk/content/mediaassets/doc/GHA\\_TPS2005.pdf](http://www.gha.org.uk/content/mediaassets/doc/GHA_TPS2005.pdf).
- <sup>16</sup> Beck S, Hanlon PW, Tannahill CE, Crawford FA, Ogilvie R et al. How will area regeneration impact on health? Learning from the GoWell study *Public Health* 2010;**124**:125-130.
- <sup>17</sup> Walsh D. *Health and Wellbeing in Glasgow and the GoWell Areas – deprivation based analyses*. GoWell, 2008.  
[http://www.gowellonline.com/index.php?option=com\\_docman&task=doc\\_details&gid=98](http://www.gowellonline.com/index.php?option=com_docman&task=doc_details&gid=98)
- <sup>18</sup> Walsh D, Bendel N., Jones R, Hanlon P. It's not 'just deprivation': Why do equally deprived UK cities experience different health outcomes? *Public Health* (2010), doi:10.1016/j.puhe.2010.02.006.  
<http://dx.doi.org/10.1016/j.puhe.2010.02.006>
- <sup>19</sup> NHS Health Scotland. *Community Health & Wellbeing Profiles for Scotland*. NHS Health Scotland 2004.
- <sup>20</sup> Scottish Executive. *Social focus on deprived areas 2005*. Edinburgh: Scottish Executive, 2005
- <sup>21</sup> Scottish Executive. *High Level Summary of Equality Statistics: Key Trends for Scotland 2006*. Edinburgh 2006
- <sup>22</sup> Carstairs V, Morris R. *Deprivation and health in Scotland*. Aberdeen: Aberdeen University Press; 1991
- <sup>23</sup> Leyland AH, Dundas R, McLoone P, Boddy FA *Inequalities in mortality in Scotland 1981-2001*. MRC Social and Public Health Sciences Unit, 2007.
- <sup>24</sup> Walsh D., Bendel N., Jones R., Hanlon P. *Investigating a 'Glasgow Effect': Why do equally deprived UK cities experience different health outcomes?* Glasgow Centre for Population Health, April 2010.
- <sup>25</sup> Scottish Executive. *Scottish Index of Multiple Deprivation 2006*. Available at:  
<http://www.scotland.gov.uk/Topics/Statistics/SIMD>
- <sup>26</sup> Scottish Government. *Scottish Neighbourhood Statistics: Intermediate Geography Background Information*. Scottish Government, 2005. Available at:  
<http://www.scotland.gov.uk/Publications/2005/02/20732/53086>

---

<sup>27</sup> ScotPHO. *Community Health and Wellbeing Profiles*. ScotPHO, 2008. Available at: [www.scotpho.org.uk/profiles](http://www.scotpho.org.uk/profiles).

<sup>28</sup> Fairburn J, Walker G, Mitchell G. *Investigating Environmental Justice In Scotland: Links Between Measures Of Environmental Quality And Social Deprivation*. Edinburgh: Scotland and Northern Ireland Forum for Environmental Research (SNIFFER), 2005.