The Health of the Population of Forth Valley 2003-2004

The 15th Annual Report of the Director of Public Health

Trends in Health
Challenges of Primary Healthcare
Action Against Tobacco
Trends and Challenges in Oral Health
Public Health Nursing

NHS Forth Valley
General

The health of the people of Forth Valley continues to steadily improve. Over the past twenty years we have seen major improvements in life expectancy, major reduction in the risk of dying from heart attacks before the age of 65 and large falls in infectious diseases such as mumps, measles, rubella and tuberculosis. There has been a welcome and substantial decline in tobacco smoking. Increased length of life is now a challenge for pension funds. This improvement is very positive and welcome. We must acknowledge it. The overall level of premature mortality in Forth Valley in 2003 was less than that of Scotland and has improved on 2002. However premature mortality in the key diseases of stroke, lung cancer and breast cancer increased last year. The same figure for coronary heart disease has improved. These figures are based on relatively small numbers and we should not put too much emphasis on mortality figures in any single year.

In the background, however, there are challenges that NHS Forth Valley, Councils and other partners face. Some challenges can only be tackled at Scottish, UK, European and even world-wide level. We all have a duty to contribute to this work.

The gap in health between the most affluent and the most socially deprived although narrowing slightly in Forth Valley, continues to be a major reason that Scotland experiences worse overall health than the rest of the UK. This year’s report highlights the higher levels of premature death in the Clackmannanshire and Falkirk populations relative to Stirling. While we are positively tackling tobacco smoking as the major preventable cause of ill-health the excess use of alcohol is a steadily increasing problem in Forth Valley and affects all ages and social classes. While illegal drugs tend to have a higher profile alcohol use is by far the greater threat to individual health and the health and safety of our communities. The steady decline in price of alcohol in real terms is a major reason for increased consumption and can only be countered by action at a European level.

Obesity is another challenge. We do not want to follow the pattern of the USA yet the early signs are there: a visible increase in the number of overweight children and adults. Tackling this requires a combination of effort. Education of young people and adults is important but at a national and at community level with food manufacturers is beginning to bear rewards. Heavy marketing of high calorie and high fat foods can be tackled nationally. At the same time the declining physical activity of young people and adults contributes to obesity. Recent work in community schools, with Sport Scotland and in the community is very encouraging. Significant investment in schools sport co-ordinators should bear rewards for present and future generations.

Modernising healthcare services

Health services including hospital services are an important component of health improvement. I am pleased to highlight the importance of the modernisation of health services in Forth Valley set out in the NHS Forth Valley Healthcare Strategy. We have debated and discussed the future path of hospital services for over 10 years. Positive open engagement with the general public, their parliamentary representatives and clinicians means that we now have a robust solution. A new single acute hospital for the Forth Valley population linked to the development of community hospitals, mental health and primary care services will help us to bring many services closer to people in their own communities. But it will take another five years to make this vision reality and interim changes in a planned / emergency balance in the two present infirmaries will be essential. The people of Forth Valley need a modern NHS capable of providing better, quicker and safer services.

Smoking and health

The evidence is clear and overwhelming - tobacco smoke is a major cause of premature death and illness in the Forth Valley population. Dr Mac Armstrong, Chief Medical Officer for Scotland, in his 2003 annual report to the First Minister noted in the context of tobacco control policy "There can be no single goal which is more worthwhile in terms of its overall contribution to the health and well-being of people in Scotland."

In the five years from 1998 to 2002 men from the most affluent areas in Forth Valley lived 6.5 years longer than those in the most deprived areas, while women lived four years longer. Over half of this gap in life expectancy can be attributed to tobacco smoking. Despite action to reduce tobacco smoking the rate of smoking is still too high (29% of the adult Forth Valley population in 2000). About 750 current and ex-smokers die each year in Forth Valley from smoking related disease. Too many people are exposed involuntarily to environmental tobacco smoke in work and public places (37% in Forth Valley in 2000).

NHS Forth Valley and the Clackmannanshire and Stirling Councils strongly support a change in the law to make enclosed public places smoke free. Their joint letter of response to the Scottish Executive consultation on smoking in public places in September 2004 and widespread support for legislation is one of the highlights of this year. I expect to see further expansion of NHS and partners’ services to help smokers reap the health and economic rewards of stopping smoking.

Food and health

The food we eat is an important part of all our lives. Many of the important social events of our lives hinge around meals. We are lucky in Forth Valley to have a very innovative project, Forth Valley Food Links, that looks at food in its totality. The key theme is that we should be growing more food locally and buying it locally. Fresh fruit and vegetables grown locally and sold locally means fresher food but also less polluting transport of food. This project has encouraged young people and adults to grow food and to taste top class produce. The farmers’ markets across Forth Valley were one of the products of earlier work of this project working with the Soil Association. The three Councils, the Scottish Executive and NHS Forth Valley funded this project.
Oral health
Although many older people have no teeth at all this is becoming more unusual as dental health improves. A reduction in eating sugary foods and the use of fluoride toothpaste means that many young people have all their teeth with no fillings or extractions. Challenges however remain. Socially deprived families experience much poorer dental health. The gains in health may also be being eroded by the heavy marketing of sugary foods and fizzy drinks.

Prescription medicines and health
The figure of £53 million spent on prescription medicines every year in Forth Valley may come as a surprise to many. Medicines are a vital part of maintaining and improving health. This report gives examples of what is being done to ensure high quality of prescribing and also reports how NHS Forth Valley introduces new medicines for the population. The key messages are firstly the value of clinicians and patients working together to maximise the benefit of medicines prescribed. Secondly we must always ask if a new medicine is worth the additional cost relative to existing drugs or other types of treatment.

Public health nursing
Health visitors, school nurses, dental nurses and district nurses are key to improving community health. Working with individuals and families they are best able to assess the needs of communities and families. In past years some of their knowledge and skills were not used optimally as they were drawn more and more into clinical work in health centres and GP practices. Many of the inequalities in health and life circumstances do not need to be demonstrated with statistics – they are obvious to all. The ‘new public health’ nurse has much to offer and will be working with others in schools and communities to reduce inequality and health.

Domestic abuse
Many people in the Forth Valley population experience a serious and debilitating form of ill-health. These are overwhelmingly women and the ill-health is due to physical and or mental abuse by a husband or partner. This can also severely affect the woman’s children. Domestic abuse is experienced across all levels of society and is often hidden. Services for these women are quite naturally very confidential but this can mean that public awareness of this problem is very limited. Abuse of this nature can be subtle and controlling but this is no less damaging. All domestic abuse is unacceptable and we must all ensure that the needs of women experiencing abuse are taken seriously and that they are sign-posted to services that are sensitive to their needs.

Primary health care
There is a rich diversity of communities across Forth Valley. This year we have chosen to profile three primary healthcare teams to illustrate differences between communities and how practices adapt to meet the needs of the people they serve. There are huge differences between practice populations at Carron in Falkirk, Killin in rural Stirlingshire and the Airthrey Park Practice at Stirling University. The practices have responded to the needs of each by providing different services. Interestingly two of the practices took the opportunity to work to a ‘personal medical services’ contract. This enabled them to develop a service tailored to the needs of the population served.

Communicable disease
Protecting the population against communicable disease remains a major challenge and is no less important today than fifty or one hundred years ago. Communicable diseases continue to change and provide new challenges. We can be proud that over 76% of the over 65s in Forth Valley took up influenza vaccination last winter. This was the highest rate in any Scottish NHS Board area. We look to increase the rate further and also increase the uptake in others at risk such as those with diabetes and lung disease.

Measles, mumps and rubella (MMR) continued to attract headlines last year. In Forth Valley we have assertively supported MMR as the vaccine of choice. The initial ‘research’ paper by Dr Andrew Wakefield and colleagues has now been effectively discredited. MMR is a safe vaccine. NHS Forth Valley responded promptly to an outbreak of mumps at Stirling University this spring. Over 20 university students contracted mumps and there were over 40 in the community. Mumps is a serious disease and at least three were admitted to hospital with complications of the infection. We also responded very actively with an immunisation campaign and immunised over 400 students with MMR. This was the first concerted action of this type in Scotland and the Scottish Executive is now requiring all NHS Boards to take similar action.

We continue to increase our surveillance of communicable diseases. New organisms continue to arise and the re-emergence of Sudden Acute Respiratory Syndrome (SARS) or new aggressive types of influenza are real threats we must be prepared for. This preparation includes early warning and review of available hospital isolation facilities.

Summary
Health in Forth Valley continues to improve. It could be much better and the poorest in our community die younger and suffer more ill-health. The partnership work of the three Councils, the NHS and others has moved up a gear and is working to improve life circumstances and narrow inequalities. Tackling problems together achieves a better result. Improvement of income, housing and educational attainment is the platform from which to tackle difficult issues like smoking, poor diet, physical activity and substance use. It is vital that we ensure early and effective access to services by those who are presently effectively excluded from leading positive healthy lifestyles. Investment in health partnerships is the key to improving the health of the people of Forth Valley.

Dr Malcolm McWhirter
Director of Public Health
**CHAPTER 1**

**Key Health Facts**

**Population**

Table 1.01 provides Forth Valley projected population estimates for 2008, 2013 and 2018 that are based on the year 2002 projections by the Registrar General for Scotland.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>15,319</td>
<td>13,810</td>
<td>13,496</td>
<td>13,787</td>
<td>7,857</td>
<td>7,177</td>
<td>7,013</td>
<td>7,163</td>
<td>7,462</td>
<td>6,633</td>
<td>6,483</td>
<td>6,624</td>
</tr>
<tr>
<td>5-14</td>
<td>35,532</td>
<td>33,143</td>
<td>30,695</td>
<td>29,233</td>
<td>18,034</td>
<td>17,202</td>
<td>16,158</td>
<td>15,473</td>
<td>17,498</td>
<td>15,941</td>
<td>14,537</td>
<td>13,760</td>
</tr>
<tr>
<td>30-44</td>
<td>64,014</td>
<td>58,785</td>
<td>53,536</td>
<td>52,027</td>
<td>30,946</td>
<td>28,418</td>
<td>29,305</td>
<td>30,799</td>
<td>33,068</td>
<td>30,367</td>
<td>26,958</td>
<td>25,200</td>
</tr>
<tr>
<td>45-59</td>
<td>55,987</td>
<td>58,909</td>
<td>62,789</td>
<td>64,488</td>
<td>27,535</td>
<td>28,928</td>
<td>29,305</td>
<td>29,357</td>
<td>30,492</td>
<td>29,981</td>
<td>31,990</td>
<td>32,788</td>
</tr>
<tr>
<td>60-74</td>
<td>39,063</td>
<td>43,947</td>
<td>47,200</td>
<td>49,658</td>
<td>18,121</td>
<td>20,912</td>
<td>22,576</td>
<td>23,782</td>
<td>20,942</td>
<td>23,035</td>
<td>24,624</td>
<td>25,876</td>
</tr>
<tr>
<td>75 &amp; over</td>
<td>19,170</td>
<td>20,949</td>
<td>23,469</td>
<td>26,488</td>
<td>6,809</td>
<td>7,993</td>
<td>9,483</td>
<td>11,052</td>
<td>12,361</td>
<td>12,956</td>
<td>13,986</td>
<td>15,436</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>279,370</strong></td>
<td><strong>283,354</strong></td>
<td><strong>286,528</strong></td>
<td><strong>289,723</strong></td>
<td><strong>134,280</strong></td>
<td><strong>138,289</strong></td>
<td><strong>141,384</strong></td>
<td><strong>144,302</strong></td>
<td><strong>145,090</strong></td>
<td><strong>145,065</strong></td>
<td><strong>145,144</strong></td>
<td><strong>15,442</strong></td>
</tr>
</tbody>
</table>

Source: Registrar General Office (Scotland) 2002 based projections

Table 1.02 provides the mid-year population estimates for Forth Valley and Council areas. The Registrar General for Scotland estimated the population of Forth Valley to be 279,680 in 2003.

<table>
<thead>
<tr>
<th>Age</th>
<th>Scotland</th>
<th>Forth Valley</th>
<th>Clackmannanshire</th>
<th>Falkirk</th>
<th>Stirling</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>263,828</td>
<td>15,191</td>
<td>2,546</td>
<td>8,050</td>
<td>4,604</td>
</tr>
<tr>
<td>5-19</td>
<td>937,881</td>
<td>53,335</td>
<td>9,378</td>
<td>26,881</td>
<td>17,120</td>
</tr>
<tr>
<td>20-29</td>
<td>613,504</td>
<td>31,904</td>
<td>5,022</td>
<td>16,965</td>
<td>9,941</td>
</tr>
<tr>
<td>30-44</td>
<td>1,150,450</td>
<td>63,990</td>
<td>10,966</td>
<td>34,221</td>
<td>18,857</td>
</tr>
<tr>
<td>45-64</td>
<td>1,272,674</td>
<td>71,570</td>
<td>12,576</td>
<td>36,993</td>
<td>22,093</td>
</tr>
<tr>
<td>65-74</td>
<td>452,266</td>
<td>24,505</td>
<td>4,086</td>
<td>12,855</td>
<td>7,612</td>
</tr>
<tr>
<td>75+</td>
<td>366,797</td>
<td>19,185</td>
<td>3,106</td>
<td>9,955</td>
<td>6,143</td>
</tr>
<tr>
<td><strong>All Ages</strong></td>
<td><strong>5,057,400</strong></td>
<td><strong>279,680</strong></td>
<td><strong>47,680</strong></td>
<td><strong>145,920</strong></td>
<td><strong>86,370</strong></td>
</tr>
</tbody>
</table>

Source: Registrar General Office (Scotland) 2004

Figure 1.1 illustrates the projected population by age band over the period 2002–2018. It can be seen that the overall population of Forth Valley will increase and that the population will have a greater proportion of older people (those over 60 years).
Births

Table 1.03 provides perinatal mortality (stillbirths and deaths in the first week after birth) and infant mortality (deaths in the first year of life excluding deaths in the first week) rates for Forth Valley from 1996 to 2003. There were 2,926 live births in 2003, 106 more than in 2002 (2820). The birth rate for Forth Valley at 10.5 was slightly higher than the Scottish rate of 10.4 per 1,000 population.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>50.3</td>
<td>48.3</td>
<td>48.1</td>
<td>49.7</td>
<td>51.6</td>
<td>54.2</td>
<td>54.3</td>
<td>54.6</td>
</tr>
<tr>
<td>2002</td>
<td>51.6</td>
<td>48.1</td>
<td>49.7</td>
<td>51.6</td>
<td>54.2</td>
<td>54.3</td>
<td>54.6</td>
<td>54.6</td>
</tr>
</tbody>
</table>

Table 1.03 Perinatal and Infant Mortality, Forth Valley, 1996 - 2003

Source: Registrar General Office (Scotland) 2004

There were 17 stillbirths in 2003, an increase of five from 2002, with a rate of 5.8 per 1,000 live and stillbirths. The birth rate per 1,000 women aged 15-44 for Forth Valley was 50.3, slightly higher than the Scottish rate of 49.4.

Perinatal and infant mortality rates for Forth Valley and the three Council areas are provided in Table 1.04. Falkirk had the highest rate of live births per 1,000 women aged 15-44. Clackmannanshire had the highest rate for stillbirths per 1,000 live and stillbirths and for perinatal mortality. Stirling had the lowest infant mortality rate. It should be noted that all of these rates are based on small numbers.

Of the 3,363 recorded pregnancies (births, stillbirths and terminations) for Forth Valley residents in 2003, 569 (17%) resulted in therapeutic abortions (564, 17% in 2002). Of all terminations there were 15 (2.6%) among those under the age of 16, an increase of nine from 2002 (Table 1.05).

The Forth Valley target of reducing the number of teenage pregnancies in 13-15 year olds by 20% between 1995 and 2010 looks unlikely to be achieved as the number of births fluctuates considerably from year to year. In the period from 1999-2003 there have been no births to 13 year olds, a few to 14 year olds (6) and the majority to 15 year olds (25).

Deaths

Table 1.06 provides the number of deaths in Forth Valley broken down by age. There were 3,073 deaths in 2003, a decrease of 46 (1.5%) from 2002. Of all deaths, 59% were of people aged 75 and over. Deaths in those under the age of 65 totalled 614, a decrease of 24 in the same age group for 2002 (638). Deaths under 65 represent 20% of total deaths.

Table 1.05 Outcome of Pregnancy by Age, Forth Valley 2003

Source: ISD, 2004

Deaths

Table 1.06 provides the number of deaths in Forth Valley broken down by age. There were 3,073 deaths in 2003, a decrease of 46 (1.5%) from 2002. Of all deaths, 59% were of people aged 75 and over. Deaths in those under the age of 65 totalled 614, a decrease of 24 in the same age group for 2002 (638). Deaths under 65 represent 20% of total deaths.

Table 1.04 Perinatal & Infant Mortality, 2003: Scotland, Forth Valley and Council areas

Source: Registrar General Office (Scotland) 2004

ANNUAL REPORT 2003-2004
Table 1.06: Deaths by Age, Forth Valley Residents, 1996-2003

<table>
<thead>
<tr>
<th>Age</th>
<th>2003 No.</th>
<th>2003 Rate*</th>
<th>2002 Rate</th>
<th>2001 Rate</th>
<th>2000 Rate</th>
<th>1999 Rate</th>
<th>1998 Rate</th>
<th>1997 Rate</th>
<th>1996 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>15</td>
<td>5.1</td>
<td>5.1</td>
<td>7.2</td>
<td>4.7</td>
<td>4.6</td>
<td>5.8</td>
<td>5.8</td>
<td>7.4</td>
</tr>
<tr>
<td>1-4</td>
<td>1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
<td>0.3</td>
<td>0.6</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>5-14</td>
<td>8</td>
<td>0.2</td>
<td>0.0</td>
<td>0.3</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>15-24</td>
<td>13</td>
<td>0.4</td>
<td>0.7</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.5</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>25-34</td>
<td>25</td>
<td>0.7</td>
<td>1.2</td>
<td>0.6</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>35-44</td>
<td>76</td>
<td>1.7</td>
<td>1.6</td>
<td>1.7</td>
<td>1.5</td>
<td>1.5</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>45-54</td>
<td>142</td>
<td>3.7</td>
<td>3.9</td>
<td>4.3</td>
<td>3.6</td>
<td>4.1</td>
<td>3.6</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td>55-64</td>
<td>334</td>
<td>9.9</td>
<td>10.3</td>
<td>9.8</td>
<td>10.2</td>
<td>10.6</td>
<td>10.5</td>
<td>10.7</td>
<td>10.8</td>
</tr>
<tr>
<td>65-74</td>
<td>630</td>
<td>25.7</td>
<td>28.7</td>
<td>27.0</td>
<td>28.7</td>
<td>29.2</td>
<td>29.2</td>
<td>30.4</td>
<td>33.8</td>
</tr>
<tr>
<td>75-84</td>
<td>999</td>
<td>67.2</td>
<td>66.4</td>
<td>65.8</td>
<td>73.1</td>
<td>73.6</td>
<td>71.1</td>
<td>74.0</td>
<td>77.3</td>
</tr>
<tr>
<td>85+</td>
<td>830</td>
<td>192.6</td>
<td>183.5</td>
<td>180.8</td>
<td>178.4</td>
<td>185.0</td>
<td>191.3</td>
<td>183.4</td>
<td>184.0</td>
</tr>
</tbody>
</table>

All ages: 3073 11.0 11.2 10.8 10.9 11.2 11.0 11.0 11.7

* Age-specific rate per 1000 population

Source: Registrar General Office (Scotland) 2004

Figure 1.2 illustrates this information in a graphical way. The death rate and the actual size of the 75+ population is increasing.

Standardised mortality ratios (SMRs) indicate the extent to which mortality locally differs from that of Scotland. The SMR is the number of actual deaths in an area as a percentage of the number of those expected if Scottish death rates had applied, standardised for differences in the age distribution of the population. The rate in Scotland is taken as the standard and is represented as 100.

Table 1.07: SMR all deaths, Forth Valley & Council areas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Forth Valley</td>
<td>99</td>
<td>101</td>
<td>99</td>
<td>93</td>
<td>95</td>
</tr>
<tr>
<td>Clackmannanshire</td>
<td>97</td>
<td>101</td>
<td>96</td>
<td>94</td>
<td>89</td>
</tr>
<tr>
<td>Falkirk</td>
<td>103</td>
<td>107</td>
<td>103</td>
<td>96</td>
<td>97</td>
</tr>
<tr>
<td>Stirling</td>
<td>92</td>
<td>91</td>
<td>95</td>
<td>87</td>
<td>95</td>
</tr>
</tbody>
</table>

Table 1.08 SMR for Selected Cause of Death, Forth Valley, 1999-2003

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancer</td>
<td>877</td>
<td>106</td>
<td>827</td>
<td>100</td>
<td>789</td>
</tr>
<tr>
<td>Cancer, Lung</td>
<td>217</td>
<td>103</td>
<td>214</td>
<td>98</td>
<td>212</td>
</tr>
<tr>
<td>Cancer, Breast</td>
<td>71</td>
<td>115</td>
<td>64</td>
<td>107</td>
<td>74</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>593</td>
<td>97</td>
<td>662</td>
<td>106</td>
<td>611</td>
</tr>
<tr>
<td>Stroke</td>
<td>377</td>
<td>111</td>
<td>362</td>
<td>103</td>
<td>413</td>
</tr>
</tbody>
</table>

Source: Registrar General Office (Scotland) 2004

Figure 1.3 illustrates the variations in SMRs that have occurred since 1993.
Council area for 2003 are provided in Table 1.09. Deaths from cancer of the lung are highest in Clackmannanshire with an SMR of 120. Cancer of the breast is highest in Falkirk with an SMR of 141. Falkirk has also the highest ratio of deaths from coronary heart disease with an SMR of 100 and Clackmannanshire has the highest ratio of deaths from stroke with an SMR of 136.

Table 1.09 shows a 5-year average (1999 – 2003) SMR calculated for selected causes of death in the Forth Valley and Council areas. This gives a more balanced account of the behaviour of mortality in Forth Valley, relative to Scotland as a whole, than annual SMR figures. This table clearly highlights the higher incidence of stroke deaths in both the Falkirk and Stirling Council areas. Falkirk has the highest SMR for all of these selected causes.

In Forth Valley as a whole, deaths due to lung cancer and coronary heart disease are lower than the Scottish average. Deaths due to all cancers were at the Scottish rate (100) but were worse than the Scottish rate for both cancer of the breast and stroke.

Table 1.09: SMR for Selected Cause of Death, 2003, Forth Valley & Council areas

<table>
<thead>
<tr>
<th>Cause</th>
<th>Forth Valley</th>
<th>Clackmannanshire</th>
<th>Falkirk</th>
<th>Stirling</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancer</td>
<td>106</td>
<td>100</td>
<td>115</td>
<td>94</td>
</tr>
<tr>
<td>Cancer, Lung</td>
<td>103</td>
<td>120</td>
<td>117</td>
<td>70</td>
</tr>
<tr>
<td>Cancer, Breast</td>
<td>115</td>
<td>70</td>
<td>141</td>
<td>95</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>97</td>
<td>98</td>
<td>100</td>
<td>92</td>
</tr>
<tr>
<td>Stroke</td>
<td>111</td>
<td>136</td>
<td>107</td>
<td>103</td>
</tr>
</tbody>
</table>

Rates based on fewer than 20 deaths in bold
Source: Registrar General Office (Scotland) 2004

Table 1.10 SMR for selected causes of death 1999-2003 Forth Valley & Council areas

<table>
<thead>
<tr>
<th>SMR 5Years</th>
<th>Forth Valley</th>
<th>Clackmannanshire</th>
<th>Falkirk</th>
<th>Stirling</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancers</td>
<td>100</td>
<td>97</td>
<td>110</td>
<td>90</td>
</tr>
<tr>
<td>Cancer lung</td>
<td>99</td>
<td>105</td>
<td>119</td>
<td>79</td>
</tr>
<tr>
<td>Cancer breast</td>
<td>107</td>
<td>102</td>
<td>113</td>
<td>98</td>
</tr>
<tr>
<td>CHD</td>
<td>95</td>
<td>93</td>
<td>106</td>
<td>93</td>
</tr>
<tr>
<td>Stroke</td>
<td>110</td>
<td>101</td>
<td>113</td>
<td>109</td>
</tr>
</tbody>
</table>

Source: Registrar General Office (Scotland) 2004

Authors
Euan Headridge, Information Analyst
Susanne McLellan, Health Statistician
CHAPTER 2
Trends in Health

Cause of death: mortality targets
This chapter illustrates trends in the principal causes of death and achievement towards targets set for selected causes of mortality.

Figure 2.1 shows the trends for cancer mortality for the under 75 age group in Forth Valley and Scotland, and coronary heart disease against two specific targets - deaths up to 75 years and deaths between 45 and 74 years, whilst Figure 2.2 shows the stroke mortality trend for the same age group (45 to 74 years). Both are shown against a three-year average rather than actual annual values.

Coronary heart disease
For this period, there are two distinct targets. The first is for all deaths up to 75 years and a narrower target group of 45-74 years. For the wider group the target is to reduce the death rate from coronary heart disease before the age of 75 to 65.3 per 100,000 by the year 2010 (baseline year 1995) (Figure 2.1). The rate in 2003 was 77.5 per 100,000, a slight decrease from 81.4 the previous year.

For the narrower age band (45-74 years) the target is 304.9 per 100,000 by the year 2005. The rate in 2003 was 220.9. Although this is well within the target it should be noted that the difference from the Scottish rate is narrowing.

Cancer
The target is to reduce the total death rate from cancer (of all types) before the age of 75 to 117.6 per 100,000 by the year 2010 (baseline year 1995) (Figure 2.1). The rate for 2003 was 151.8 per 100,000. A reduction of 23% will be required if this target is to be achieved.
Stroke
For those aged 45-74 years, the target is to reduce the death rate from 105 per 100,000 in 1995 to 84 per 100,000 by the year 2005. The rate in 2003 was 73.2 per 100,000 (Figure 2.2). This is a significant reduction from the 2001 figure of 96.5 per 100,000. Therefore the stroke mortality rate is below target but is slightly above the national average.

Accidents/suicide & undetermined deaths
Figure 2.3 provides both the accident and the suicides and undetermined mortality trend for Forth Valley and Scotland. Although there are now no targets specified it should be noted that the Forth Valley rates are better than the Scottish rates for both accidents (22/26) and for suicides & undetermined deaths (13/16), a slight improvement since last year.

Local variations
Figure 2.4 shows mortality over the last year for selected causes of death within each of the three Council areas. The populations have been age adjusted to make the comparisons more valid.

Other indicators of health status
Birth and infancy
Figure 2.5 illustrates perinatal and post-perinatal mortality trends for Forth Valley and Scotland. Perinatal mortality in Forth Valley (8.15) (stillbirths and deaths in the first week after birth) is slightly higher than the Scottish value (8.04). Post-perinatal mortality (deaths in the first year of life but excluding deaths in the first week) shows an unpredictable trend in Forth Valley and Scotland.
Premature mortality
The definition of premature mortality for this chart is death before the age of 75. This is different to the definition used in Chapter 3. Figure 2.6 illustrates the years of life lost due to selected causes of death. Years of life lost for deaths below the age of 75 due to suicide & undetermined deaths, respiratory disease and accidents have all fallen. The number of years of life lost due to all cancers, coronary heart disease and strokes have risen slightly in 2003.

Summary
The targets referred to in this chapter are shown below.

### Targets for the next period – 2005 and 2010

<table>
<thead>
<tr>
<th>Target group</th>
<th>Rates per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1995 Value</td>
</tr>
<tr>
<td><strong>Coronary Heart Disease</strong> – To reduce deaths in the under 75s by 50% (1995-2010)</td>
<td>130.6</td>
</tr>
<tr>
<td><strong>Coronary Heart Disease</strong> – To reduce deaths in those aged 45 to 74yrs by 20% (1995-2005)</td>
<td>381.2</td>
</tr>
<tr>
<td><strong>All Cancer</strong> – To reduce deaths in people under 75yrs by 20% (1995-2010)</td>
<td>147.0</td>
</tr>
<tr>
<td><strong>Strokes</strong> – To reduce deaths in the 45-74 yrs age group by 20% (1995-2005)</td>
<td>105.0</td>
</tr>
</tbody>
</table>

Authors
Euan Headridge, Information Analyst
Susanne McLellan, Health Statistician
CHAPTER 3
Inequalities in Health

Health inequalities are clearly apparent in Forth Valley between men and women, between the affluent and the deprived, and between different geographic areas. These inequalities in health are the consequence of differences in: opportunity, access and use of services, financial income and lifestyle.

As a result of these inequalities, people living in deprived areas are more likely to experience negative influences on health than people living in more affluent circumstances. People with disabilities and those from ethnic minorities may also experience harmful influences on health.

The most commonly used measure of deprivation in Scotland is the Carstairs and Morris index. It is an area-based measure, which uses four indicators related to material deprivation: no car ownership, male unemployment, over-crowding, and social class four or five. Carstairs scores were first created based on 1981 Census data, they were updated in 1991, and earlier this year they were updated based on 2001 Census data. The Carstairs scores were grouped into seven categories (DEPCATs) by McLoone and are allocated on a postcode sector basis, ranging from 1 (most affluent) to 7 (most deprived). There are no category 7 postcodes in Forth Valley, and due to relatively low numbers, categories 1 & 2 have been combined, as have categories 5 & 6. Figure 3.1 compares the distribution of the population within each deprivation category based on the 1991 and 2001 census.

### Deprivation Associated Health Measures

#### Alcohol related hospital discharges

Excessive alcohol assumption can often be associated with increasing levels of deprivation. It is, therefore, not surprising to find that hospital admissions from alcohol related illness are more than three times higher in the most deprived areas of Forth Valley (84.4 per 10,000 population in DEPCAT 5&6) compared to the most affluent (24.6 per 10,000 population in DEPCAT 1&2). See Figure 3.2

#### Lung cancer mortality

Lung cancer mortality is also positively related to deprivation. Figure 3.3 shows that people living in the most deprived areas of Forth Valley are twice as likely to die from lung cancer as people living in the least deprived areas. A major contributing factor to the prevalence of lung cancer is smoking, which is also heavily correlated with deprivation.
inequalities in health between communities are obvious and very apparent

Accidental deaths
The occurrence of accidents is typically more frequent in more deprived communities. In turn, mortality from accidents is also higher in the most deprived areas of Forth Valley. Figure 3.4 shows accidental death rates per 100,000 population. Mortality from accidents is nearly twice as likely in the most deprived areas of Forth Valley (23.8 per 100,000 population in DEPCAT 5&6) compared to the most affluent areas (13.3 per 100,000 population in DEPCAT 1&2).

Mortality in Forth Valley
Standardised Mortality Ratios (SMRs) were calculated for selected causes of death by deprivation category. Table 3.01 shows these five year SMRs (1999-2003). It is clear that the ratio for breast cancer is generally higher in the more affluent areas, which is reflective of the national position. However, the reverse is true for coronary heart disease, cancer of all types, and especially lung cancer. This is not surprising as all of these conditions are known to be related to smoking and poor diet, which tend to be positively linked to deprivation.

Table 3.01: 5 yr SMRs for selected causes of death by Deprivation Category 1999-2003 (Aged <75 yrs)

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Deprivation Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1&amp;2</td>
</tr>
<tr>
<td>All Causes</td>
<td>72</td>
</tr>
<tr>
<td>All Cancers</td>
<td>88</td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>65</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td><strong>124</strong></td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>57</td>
</tr>
<tr>
<td>Stroke</td>
<td>85</td>
</tr>
</tbody>
</table>

Note: An SMR of 100 suggests that local mortality rates are the same as national mortality rates when age differences in the two populations are taken into account. Scores over 100 (shown in bold) suggest higher than average mortality in an area, scores less than 100 lower than average mortality.

How does your community compare?
SMRs for selected causes of death by community were calculated as part of the Forth Valley Community Health Profiles, which have been developed with joint work between the NHS and the Councils of Falkirk, Stirling, and Clackmannanshire. The profiles include various indicators of health and are available in full on our website at www.show.scot.nhs.uk/nhsfv.

The health of a community is difficult to quantify and great care should be taken when interpreting any health statistics. It is important to look at patterns within the communities rather than to concentrate on specific figures. Smaller communities have a smaller number of life events, which can make the information less meaningful, and populations in smaller communities fluctuate more in percentage terms than larger communities. However, these warnings of interpretation aside, it is clear from the patterns in Table 3.02 that inequalities in health between communities are obvious and very apparent.
### Table 3.02: Standardised Mortality Ratios for selected causes of death by community 1999-2003 (Persons aged <75 yrs)

<table>
<thead>
<tr>
<th>Community</th>
<th>Council Area</th>
<th>All Causes</th>
<th>Cancer</th>
<th>Coronary Heart Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberfoyle &amp; Gartmore</td>
<td>Stirling</td>
<td>65 89</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Ballfron</td>
<td>Stirling</td>
<td>69 86</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Bannockburn</td>
<td>Stirling</td>
<td>94 88</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Braehead &amp; Broomridge</td>
<td>Stirling</td>
<td>89 78</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Bridge of Allan</td>
<td>Stirling</td>
<td>60 78</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Buchlyvie, Menteith</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Armprim</td>
<td>Stirling</td>
<td>68 106</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Callander</td>
<td>Stirling</td>
<td>85 104</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Cambusbarron</td>
<td>Stirling</td>
<td>108 100</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>Causewayhead</td>
<td>Stirling</td>
<td>59 92</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Comtont</td>
<td>Stirling</td>
<td>107 117</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Cowie</td>
<td>Stirling</td>
<td>111 102</td>
<td>137</td>
<td></td>
</tr>
<tr>
<td>Doune &amp; Deanston</td>
<td>Stirling</td>
<td>81 102</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Drymen, Balmaha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Rowardennan</td>
<td>Stirling</td>
<td>76 93</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Dunblane</td>
<td>Stirling</td>
<td>60 65</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Fallin</td>
<td>Stirling</td>
<td>125 148</td>
<td>147</td>
<td></td>
</tr>
<tr>
<td>Fintry &amp; Carron</td>
<td>Stirling</td>
<td>54 87</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Gargunnock</td>
<td>Stirling</td>
<td>50 52</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Killearn</td>
<td>Stirling</td>
<td>47 53</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Kings Park &amp; Viewforth</td>
<td>Stirling</td>
<td>61 79</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Kippen &amp; Thornhill</td>
<td>Stirling</td>
<td>71 75</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>North Villages</td>
<td>Stirling</td>
<td>78 85</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Plean</td>
<td>Stirling</td>
<td>164 137</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>Raploch</td>
<td>Stirling</td>
<td>167 140</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Riverside &amp; Cambuskenneth</td>
<td>Stirling</td>
<td>70 153</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>St Ninians &amp; Whins of Milton</td>
<td>Stirling</td>
<td>91 85</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Stirling Town Centre</td>
<td>Stirling</td>
<td>132 98</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>Strathtyblair</td>
<td>Stirling</td>
<td>62 96</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Torbex</td>
<td>Stirling</td>
<td>39 42</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Stirling SPUR SIP</td>
<td>Stirling</td>
<td>239 190</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>Stirling Wider SPUR</td>
<td>Stirling</td>
<td>89 95</td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>Stirling</td>
<td></td>
<td>85 91</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Avon</td>
<td>Falkirk</td>
<td>71 87</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Banknock</td>
<td>Falkirk</td>
<td>110 141</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Beancross</td>
<td>Falkirk</td>
<td>108 120</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Bonnybridge</td>
<td>Falkirk</td>
<td>119 120</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>Borrowstoun</td>
<td>Falkirk</td>
<td>84 86</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Camelon</td>
<td>Falkirk</td>
<td>133 155</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Carrongrange</td>
<td>Falkirk</td>
<td>130 146</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Darnie</td>
<td>Falkirk</td>
<td>109 119</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Falkirk</td>
<td>140 132</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>Dean</td>
<td>Falkirk</td>
<td>115 123</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Denny</td>
<td>Falkirk</td>
<td>104 110</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Denny South</td>
<td>Falkirk</td>
<td>75 86</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Dundas/Kerse</td>
<td>Falkirk</td>
<td>86 83</td>
<td>102</td>
<td></td>
</tr>
</tbody>
</table>

Falkirk Town Centre          | Falkirk      | 95 109     | 93     |                        |
Forthside                   | Falkirk      | 97 102     | 114    |                        |
Grahamsford                 | Falkirk      | 109 104    | 114    |                        |
Grange & Blackness          | Falkirk      | 109 102    | 134    |                        |
Hall Glen                   | Falkirk      | 96 103     | 112    |                        |
Herbertshire                | Falkirk      | 96 113     | 117    |                        |
Inchrya                     | Falkirk      | 115 138    | 121    |                        |
Kinnaird                    | Falkirk      | 88 102     | 93     |                        |
Kinnel & Whitecross         | Falkirk      | 92 86      | 100    |                        |
Larbert                     | Falkirk      | 88 113     | 73     |                        |
Laurieston                  | Falkirk      | 86 87      | 75     |                        |
Middlefield                 | Falkirk      | 104 98     | 141    |                        |
Polmont                     | Falkirk      | 74 83      | 71     |                        |
Redding & Westquarter       | Falkirk      | 93 97      | 99     |                        |
Reddingtonmuirhead,         | Falkirk      | 116 123    | 82     |                        |
Brightons & Rumford         | Falkirk      | 92 96      | 81     |                        |
Summerford                  | Falkirk      | 69 88      | 52     |                        |
Tryst                       | Falkirk      | 96 124     | 98     |                        |
Woodlands                   | Falkirk      | 154 156    | 147    |                        |
Zetland                     | Falkirk      | 100 109    | 101    |                        |
Alloa Claremont             | Clackmannshire| 76 96      | 72     |                        |
Alloa East                  | Clackmannshire| 158 133    | 148    |                        |
Alloa Mar                   | Clackmannshire| 129 111    | 111    |                        |
Alloa North                 | Clackmannshire| 92 77      | 58     |                        |
Alloa West                  | Clackmannshire| 107 100    | 90     |                        |
Alva North                  | Clackmannshire| 74 60      | 95     |                        |
Alva South                  | Clackmannshire| 113 111    | 121    |                        |
Clackmannan                 | Clackmannshire| 97 112     | 127    |                        |
Delph & Cambus              | Clackmannshire| 102 82     | 71     |                        |
Devon &                     | Clackmannshire| 77 79      | 92     |                        |
Clackmannan North           | Clackmannshire| 60 71      | 46     |                        |
Dollar & Muckhart           | Clackmannshire| 101 80     | 135    |                        |
Fairfield                   | Clackmannshire| 116 110    | 152    |                        |
Gartmorn                    | Clackmannshire| 88 101     | 82     |                        |
Menstrie                    | Clackmannshire| 108 90      | 120   |                        |
Muinside                    | Clackmannshire| 135 196    | 97     |                        |
St Serfs                    | Clackmannshire| 68 70      | 72     |                        |
Tillicoultry East           | Clackmannshire| 134 154    | 127    |                        |
Tillicoultry West           | Clackmannshire| 142 120     | 135   |                        |
Clackmannshire SIP          | Clackmannshire| 101 101    | 102    |                        |
Forth Valley                | Clackmannshire| 96 102     | 95     |                        |

**Source:** GRO(Scotland)

Note: An SMR of 100 suggests that local mortality rates are the same as national mortality rates when age differences in the two populations are taken into account. Scores over 100 (shown in bold) suggest higher than average mortality in an area, scores less than 100 lower than average mortality.

Note: Values shown in italics are based on less than 10 actual events.
The latest Scottish Index of Multiple Deprivation (SIMD) was published in June 2004. It updates the 2003 index, which was discussed in last year’s report. Whilst SIMD 2004 uses the same basic methodology that was developed for the previous index, significant improvements have been made in both the geographic unit of analysis, and the updating of data.

SIMD 2004 is based on the recently introduced small area geography called data zones, enabling small pockets of deprivation to be identified, which could previously have been missed in analysis based on electoral wards or postcode sectors.

There are 371 data zones in Forth Valley*, 64 in Clackmannanshire, 110 in Stirling, and 197 in Falkirk. The data zones have an average population of between 750-800.

The data for SIMD 2004 was sourced from the 2001 census along with a range of administrative systems. A total of 31 indicators were used to describe the various aspects of deprivation and these were then grouped into six domains, namely Income, Employment, Health, Education, Skills and Training, Housing, and Geographic Access and Telecommunications. A score was then produced for each of the domains, which has been ranked across Scotland to give a relative picture of each dimension of deprivation. The domain indices were then combined into an overall Scottish Index of Multiple Deprivation (SIMD). There are 6505 data zones in Scotland, the most deprived data zone for each index is ranked 1, and the least deprived is ranked 6505.

**Most deprived 20% of data zones in Scotland**

Forth Valley* has 53 data zones in the most deprived 20% of Scottish data zones, as measured by the overall index (SIMD). These 53 data zones account for 4% of the most deprived data zones in Scotland. There are six data zones in Forth Valley* which fall into the worst 5% of data zones, these are located on the map above. It is not surprising to find that three of these are neighbouring data zones in Raploch. **Table 3.03** shows the number of deprived data zones within each Council area.
Significant improvements have been made in both the geographic unit of analysis, and the updating of data

Table 3.04 shows the population of the deprived data zones within each Council area. In Clackmannanshire one in every four people is living in the most deprived 20% of data zones, in Falkirk this reduces to one in every seven people, and in Stirling only one in fourteen people are living in the most deprived zones.

In addition to the overall deprivation ranking referred to above, the SIMD 2004 results were ranked by each of the six individual domains of deprivation. Table 3.05 shows the number of data zones in Forth Valley that are in the most deprived Scottish data zones for these domains. It can be seen that ‘Education, Skills & Training’, Employment & Access are the most prevalent types of disadvantage in Forth Valley.*

Further information on the Scottish Index of Multiple Deprivation 2004 can be found at www.scotland.gov.uk/SIMD2004

* For the purposes of this analysis, Forth Valley comprises the Council areas of Falkirk, Stirling, and Clackmannanshire. This is how Forth Valley has previously been defined, however due to recent GRO boundary amendments this is no longer the case. The changes are very minor but mean that the 3 Councils are no longer coterminous with the NHS Board boundary. For further details please visit the NHS Forth Valley website at www.show.scot.nhs.uk/nhsfv

Table 3.04: Number of deprived data zones in Forth Valley and Scotland

<table>
<thead>
<tr>
<th>Area</th>
<th>Most Deprived 5% in Scotland</th>
<th>Most Deprived 10% in Scotland</th>
<th>Most Deprived 15% in Scotland</th>
<th>Most Deprived 20% in Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackmannshire</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Falkirk</td>
<td>1</td>
<td>7</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Stirling</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>325</td>
<td>651</td>
<td>976</td>
<td>1,031</td>
</tr>
<tr>
<td>Scotland</td>
<td>325</td>
<td>651</td>
<td>976</td>
<td>1,031</td>
</tr>
</tbody>
</table>

Source: Scottish Index of Multiple Deprivation 2004

Table 3.05: Population of deprived data zones in Forth Valley and Scotland

<table>
<thead>
<tr>
<th>Area</th>
<th>Most Deprived 5% in Scotland</th>
<th>Most Deprived 10% in Scotland</th>
<th>Most Deprived 15% in Scotland</th>
<th>Most Deprived 20% in Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackmannshire</td>
<td>1,817</td>
<td>3,122</td>
<td>7,421</td>
<td>12,326</td>
</tr>
<tr>
<td>Falkirk</td>
<td>624</td>
<td>4,793</td>
<td>9,586</td>
<td>20,333</td>
</tr>
<tr>
<td>Stirling</td>
<td>2,369</td>
<td>4,015</td>
<td>4,696</td>
<td>6,458</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>4,810</td>
<td>11,930</td>
<td>21,703</td>
<td>39,117</td>
</tr>
<tr>
<td>Scotland</td>
<td>262,914</td>
<td>525,051</td>
<td>778,714</td>
<td>1,031,783</td>
</tr>
</tbody>
</table>

Source: Scottish Index of Multiple Deprivation 2004

Table 3.06: Most deprived data zones in Forth Valley by domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Most Deprived 5% in Scotland</th>
<th>Most Deprived 10% in Scotland</th>
<th>Most Deprived 15% in Scotland</th>
<th>Most Deprived 20% in Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>4</td>
<td>16</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Employment</td>
<td>8</td>
<td>22</td>
<td>42</td>
<td>60</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>11</td>
<td>24</td>
<td>37</td>
</tr>
<tr>
<td>Education, Skills &amp; Training</td>
<td>16</td>
<td>29</td>
<td>50</td>
<td>77</td>
</tr>
<tr>
<td>Housing</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Access etc</td>
<td>7</td>
<td>24</td>
<td>42</td>
<td>63</td>
</tr>
<tr>
<td>Overall</td>
<td>6</td>
<td>16</td>
<td>30</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: Scottish Index of Multiple Deprivation 2004

*Crown copyright material is reproduced with the permission of the controller of HMSO and the Queens Printer for Scotland.*
Life Expectancy

Life expectancy in the United Kingdom continues to rank very highly in the world league tables. However there are still marked differences in life expectancy between countries in the UK (Table 3.06), between Council areas (Table 3.07), and between people of different socio-economic status (Table 3.08), as well as apparent gender differences.

Men and women in Scotland continue to have the worst life expectancy in the United Kingdom (Male 73.3 yrs, Female 78.8 yrs). When comparing life expectancy by Council areas in the United Kingdom, Scottish Council areas accounted for seven of the ten areas with the lowest life expectancy for men, and six out of ten for women. Men in Rutland can expect to live almost 13 years longer than men in Glasgow, and women in Kensington & Chelsea can expect to live nearly eight years longer than their contemporaries in Glasgow.

Within Forth Valley, Stirling has the highest life expectancy for both sexes, whilst Clackmannanshire has the lowest life expectancy. Men living in Stirling can expect to live 1.8 years longer than their contemporaries in Clackmannanshire, and women in Stirling can expect to live 1.5 years longer than women in Clackmannanshire. See Table 3.07.

Table 3.06: Life Expectancy by country 2000-2002

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>73.3</td>
<td>78.8</td>
</tr>
<tr>
<td>England</td>
<td>76.0</td>
<td>80.6</td>
</tr>
<tr>
<td>Wales</td>
<td>75.4</td>
<td>80.1</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>75.2</td>
<td>80.1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>75.7</td>
<td>80.4</td>
</tr>
</tbody>
</table>

Source: Government Actuary’s Department

Table 3.07: Life Expectancy by council area 1999-2001

<table>
<thead>
<tr>
<th>Council Area</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stirling</td>
<td>75.2</td>
<td>79.6</td>
</tr>
<tr>
<td>Falkirk</td>
<td>73.6</td>
<td>78.6</td>
</tr>
<tr>
<td>Clackmannanshire</td>
<td>73.4</td>
<td>78.1</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>74.0</td>
<td>78.8</td>
</tr>
</tbody>
</table>

Source: GRO (Scotland)

Table 3.08: Life Expectancy by deprivation category 2001-03

<table>
<thead>
<tr>
<th>Depcat</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&amp;2</td>
<td>77.8</td>
<td>80.3</td>
</tr>
<tr>
<td>3</td>
<td>75.5</td>
<td>79.1</td>
</tr>
<tr>
<td>4</td>
<td>73.1</td>
<td>78.3</td>
</tr>
<tr>
<td>5&amp;6</td>
<td>72.8</td>
<td>77.4</td>
</tr>
</tbody>
</table>

Source: GRO (Scotland)
Healthy Life Expectancy (HLE), which represents the number of years that an individual can expect to live in good health

Healthy life expectancy

Life expectancy is widely used as a single summary measure of population health. However life expectancy (LE) counts all years of expected life the same regardless of whether they have been enjoyed in good health or with significant disability. A variety of measures have therefore been derived to incorporate a ‘healthy’ element into life expectancy. One such measure is Healthy Life Expectancy (HLE), which represents the number of years that an individual can expect to live in good health.

First estimates of HLE for Scotland were published in March 2004 by ISD (Information & Statistics Division). There are two different methods used to calculate HLE depending on how ‘good health’ is defined. These are:

- Use of limiting longstanding illness (LLI), where ‘good health’ is defined as reporting the absence of LLI, and
- Use of self-assessed general health status (SAH), where ‘good health’ is defined as reporting health as ‘good’ or ‘fairly good’.

The sources of health status data used are the Scottish Household Survey, the General Household Survey, and the 2001 Census.

Table 3.09 shows HLE estimates at birth and age 65 for the Forth Valley area. It is clear from this that inequalities in HLE are wider for males than females, and are wider at age 65 than at birth. Results also show that inequalities in HLE are wider than inequalities in LE, as deprived populations and geographical areas with low life expectancy also tend to have a relatively low proportion of time spent in good health.

The full report on Healthy Life Expectancy in Scotland can be found at the following website: http://www.isdscotland.org/isd/files/HLE_report_2004.pdf

<table>
<thead>
<tr>
<th>Area</th>
<th>Males At birth</th>
<th>Males At age 65</th>
<th>Females At birth</th>
<th>Females At age 65</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HLE(LLI)</td>
<td>HLE(SAH)</td>
<td>HLE(LLI)</td>
<td>HLE(SAH)</td>
</tr>
<tr>
<td>Clackmannanshire</td>
<td>51.6</td>
<td>63.1</td>
<td>6.3</td>
<td>11.0</td>
</tr>
<tr>
<td>Falkirk</td>
<td>51.3</td>
<td>65.2</td>
<td>6.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Stirling</td>
<td>57.5</td>
<td>66.3</td>
<td>9.5</td>
<td>11.1</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>53.5</td>
<td>65.1</td>
<td>7.4</td>
<td>10.7</td>
</tr>
<tr>
<td>Scotland</td>
<td>53.8</td>
<td>64.3</td>
<td>7.6</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Source: ISD Scotland
Potential life years lost

‘Years of Life Lost’ is an indicator of premature mortality that is used earlier in this report, but it is only based on deaths up to the age of 75 years. Therefore, a new indicator has been developed called ‘Potential Life Years Lost’, which takes into account gender differences and health inequalities. It is based on life expectancy in the most affluent areas (what we could all potentially achieve), and allows us to see the extent to which premature mortality occurs due to inequalities.

A potential life year lost is the difference between the actual age of death and the expected natural age of death if everyone experienced the life expectancy of the most affluent, which is assumed to be 77.8 years for males and 80.3 years for females – the life expectancy for a newborn in the most affluent areas of Forth Valley.

In 2003, 22,502 years of potential life were lost in Forth Valley. The major causes of potential life years lost are revealed in Figure 3.5. Cancer is the single most common cause, as it accounts for 35% of years lost, followed by coronary heart disease, which accounts for 16%.

Figure 3.6 shows the potential life years lost per 100,000 population for men and women in Forth Valley. There are gender differences between the causes of premature mortality. Men are 6.5 times more likely to die prematurely from suicide, five times more likely to die from accidents, and three times more likely to die from coronary heart disease. On the other hand, women are slightly more likely to die prematurely from cancer or stroke than their male counterparts. The potential life years lost from all causes was 9,333 per 100,000 for men compared to 6,852 for women. Therefore, in 2003, men were more likely to die prematurely than women.

Potential life years lost per 100,000 population by Council area are shown in Figure 3.7. Clackmannanshire has the highest premature mortality from suicides, accidents, and coronary heart disease, and by far the highest premature mortality from stroke. Falkirk has the highest premature mortality from cancer.
Communicable diseases are an important and ever-changing public health issue. Mortality rates from communicable diseases have been drastically reduced through improved social conditions such as good housing, clean drinking water and proper sanitation systems. However, the threat from communicable disease is now more complex than at any other time in human history. Global travel, population change, the emergence of new diseases, antibiotic resistance, the increase in the numbers of people with weakened immune systems, the threat of bioterrorism; all increase the threat from communicable diseases.

Formally notified diseases
Medical practitioners notify suspected or confirmed cases of specific communicable diseases to the Director of Public Health. Since these notifications must be made on first suspicion they do not always represent the true burden of disease experienced by the community. However the trends over time can identify re-emerging diseases, and epidemics (Table 4.01).

During the year 2003 there was a small fall in notifications in keeping with a general fall over the last eight years (Figure 4.1). Notifications of chickenpox dominated, representing 69% of all diseases notified. This was similar to the pattern in 2002.

<table>
<thead>
<tr>
<th>Disease</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillary dysentery</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>1054</td>
<td>1422</td>
<td>1167</td>
<td>1378</td>
<td>1278</td>
</tr>
<tr>
<td>Erysipelas</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>486</td>
<td>519</td>
<td>457</td>
<td>455</td>
<td>445</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Malaria</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Measles</td>
<td>27</td>
<td>32</td>
<td>24</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>18</td>
<td>10</td>
<td>13</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Mumps</td>
<td>20</td>
<td>13</td>
<td>11</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Rubella</td>
<td>51</td>
<td>35</td>
<td>31</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>Scarlet fever</td>
<td>39</td>
<td>22</td>
<td>19</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>Viral hepatitis</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Whooping cough</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory TB</td>
<td>14</td>
<td>9</td>
<td>12</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Non-respiratory TB</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1730</strong></td>
<td><strong>2075</strong></td>
<td><strong>1753</strong></td>
<td><strong>1955</strong></td>
<td><strong>1851</strong></td>
</tr>
</tbody>
</table>
Gastro-intestinal illness

Campylobacter

Campylobacter remains the major identified cause of diarrhoeal illness within Forth Valley, even though laboratory notifications of Campylobacter decreased by 20% last year from 360 (2002) to 286 (2003) (Table 4.02).

Nationally a 13% decrease was also reported (SCIEH provisional figures).

Campylobacter, whilst generally not a serious illness, is an extremely unpleasant disease that prevents sufferers from attending work or school for several days. Campylobacter tends to occur sporadically affecting just one family member and only rarely causing outbreaks. As the incubation period is between two and five days identifying the source of infection is not easy. The organism is widely distributed in the environment, in many animals.

Table 4.02: Communicable Disease Notifications for Forth Valley 2003 by Council area

<table>
<thead>
<tr>
<th>Disease</th>
<th>Clackmannanshire</th>
<th>Falkirk</th>
<th>Stirling</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillary Dysentery</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>276</td>
<td>687</td>
<td>315</td>
<td>1278</td>
</tr>
<tr>
<td>Erysipelas</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Food Poisoning</td>
<td>38</td>
<td>159</td>
<td>87</td>
<td>284 *</td>
</tr>
<tr>
<td>(Campylobacter)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Poisoning Total</td>
<td>53</td>
<td>272</td>
<td>117</td>
<td>442 *</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Malaria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Measles</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Mumps</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Rubella</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>7 *</td>
</tr>
<tr>
<td>Scarlet Fever</td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>Viral Hepatitis</td>
<td>2</td>
<td>11</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory TB</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Non Respiratory TB</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>349</strong></td>
<td><strong>1010</strong></td>
<td><strong>485</strong></td>
<td><strong>1847</strong></td>
</tr>
</tbody>
</table>

* 1 case of Food Poisoning, 1 Rubella case, and 2 cases of Campylobacter notified by another district
Campylobacter tends to occur sporadically affecting just one family member and only rarely causing outbreaks including domestic pets and wild birds and is found commonly on uncooked poultry meat and red meat offal such as liver. Infection could be either due to eating contaminated or uncooked foods or by transmission from a number of other sources. However, a survey by the Food Standards Agency during 2001 found that 52% of fresh chicken and 31% of frozen chicken on retail sale in England had Campylobacter present. Whilst proper cooking makes this meat safe to eat, the potential for contamination to occur in our homes and at food businesses is great.

Campylobacter is also a problem outside the UK and many infections are acquired during trips abroad.

**E. coli O157**
11 cases of *E. coli O157* occurred in Forth Valley during 2003. Both Forth Valley and Scotland experienced a 35% decrease in cases compared to 2002 (Table 4.03, Figure 4.2 and Table 4.04).

Infections caused by *E. coli O157* have become the most feared of gastro-enteric diseases worldwide. The organism can cause life-threatening illness, particularly in those under five years and those over 65 years of age.

The initial symptoms of *E. coli O157* are of abdominal pain and diarrhoea which often becomes blood stained. In vulnerable age groups the bacteria can produce a powerful toxin in the bloodstream which can cause multiple organ damage leading to death or permanent damage to vital organs. In children under five a condition called Haemolytic Uraemic Syndrome (HUS) rapidly causes kidney failure and patients require renal dialysis and may develop permanent kidney damage. HUS can occasionally affect fit and healthy adults and older children.

*E. coli O157* infections can be contracted from eating contaminated foodstuffs or drinking water; and also from contact with animals particularly cattle, goats and sheep which may carry the bacteria in their guts without signs of illness.

A number of high profile food borne outbreaks of *E. coli O157* have occurred in the western world. The largest outbreak in the United Kingdom occurred in 1997 across Lanarkshire, Forth Valley, and Glasgow when 21 people died and 279 people were infected. This outbreak was traced to a butcher’s shop and led to the introduction of legislation which requires the licensing of all butchers shops selling ready to eat food alongside raw meat.

Other outbreaks have been caused by un-pasteurised milk, cheese and undercooked beef-burgers.

Unlike some gastro-enteric infections only small numbers of *E. coli O157* bacteria are needed to cause infection.

As few bacteria are needed to transmit the disease, person-to-person spread in young children is highly likely and therefore action needs to be taken to keep sufferers away from other children until the bacteria is no longer excreted. This is particularly important in primary schools and nurseries.

### Table 4.03: Laboratory isolates of E. coli O157 1999-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Forth Valley</th>
<th>Scotland*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>10</td>
<td>294</td>
</tr>
<tr>
<td>2000</td>
<td>13</td>
<td>197</td>
</tr>
<tr>
<td>2001</td>
<td>11</td>
<td>235</td>
</tr>
<tr>
<td>2002</td>
<td>17</td>
<td>229</td>
</tr>
<tr>
<td>2003</td>
<td>11</td>
<td>148*</td>
</tr>
</tbody>
</table>

*Data from SCIEH.  *Provisional data

ANNUAL REPORT 2003-2004 21
Typhoid and Paratyphoid

These illnesses are well known to most people but are fortunately rare. However with travel to the Indian subcontinent being common place, travellers and visitors to the UK are occasionally infected.

One case of typhoid and one case of paratyphoid occurred in Forth Valley residents who had recently spent time in Pakistan. Only one needed to be admitted for a short stay in hospital and made a full recovery. In order to prevent spread of the disease, contacts of the patient were traced and screened to ensure they had not become infected.

Typhoid and paratyphoid symptoms include fever, headache, malaise, loss of appetite, cough and constipation more frequently than diarrhoea. Prompt antibiotic therapy is important. The disease is spread easily from person-to-person and via contaminated food and water. Infected persons can continue to excrete the organism for several weeks and a small percentage of patients become lifetime carriers of the disease.

‘Travel medicine’ relates not only to the vaccines, such as yellow fever vaccine, required for entry to countries of the world, and medication to prevent malaria. It includes basic advice on good hygiene and non-risk taking behaviour that should be practised in an unfamiliar environment. We have begun to map the travel services offered by GP practices across Forth Valley. This map will help us to identify the gaps in current services and introduce new services in the future.

Notification and confirmation of measles, mumps and rubella cases in 2003

Measles, mumps and rubella are all notifiable diseases. When a clinician suspects one of these illnesses they notify the Health Protection Team (HPT) and a saliva kit test is sent to the GP to confirm clinical diagnosis. Table 4.05 shows the number of notifications received this year. These numbers need to be treated with caution as only one case of measles was confirmed and one case of mumps.

There was a significant increase in cases of mumps at the start of 2004, leading to the declaration of a mumps epidemic in Scotland by the Chief Medical Officer (CMO), in August. During the first 12 weeks of 2004 there were 168 confirmed cases of mumps in Scotland, compared to eight cases over the first 12 weeks of 2003. As a direct result of this epidemic the CMO encouraged all NHS Boards in Scotland to vaccinate 17 to 20 year old individuals who attend institutions including universities, colleges and prisons before the end of summer 2004.

In Forth Valley there was only one confirmed case of mumps in 2003, however there were four confirmed cases within the first 12 weeks of 2004 and a significant increase in the number of notifications (Table 4.01). Improved surveillance highlighted an association with the University of Stirling. Subsequently a MMR immunisation campaign took place for the 17 to 20 year old students living in university accommodation. This took place over the Easter period 2004, and achieved a 25.3% uptake. The immunisation campaign appears to have succeeded in limiting the development of clusters of mumps at the University.
This mumps epidemic in older children and young adults is not due to the decline in uptake of the MMR vaccine in recent years. The current infections can be explained by this age group’s susceptibility, as they would not have received MMR (vaccination against mumps was only introduced as part of MMR vaccine in 1988) and would also lack naturally acquired immunity since the disease was less common when they were children. The NHS Board is delivering a second mumps immunisation programme, in October, focusing on 17 to 20 year olds in institutions across Forth Valley.

### Childhood primary immunisation

Compared to the rest of Scotland primary immunisation coverage was just above the national average with MMR uptake registering the only decline from last year’s figures (Table 4.06).

Immunisation against communicable diseases has probably saved more lives than any other public health intervention. As little as 50 years ago, measles, mumps and rubella were common diseases in the UK. Whilst they were often associated with mild disease, for some they had more serious consequences. This included pneumonia (1 in 25 children with measles), deafness (1 in 25 with mumps) and death (1 in 2,500-5,000 with measles). Since the introduction of vaccines the occurrence of these diseases has decreased considerably. However, fears about the safety of MMR in the early 1990s have resulted in some parents refusing MMR for their children.

Despite the considerable amount of scientific evidence supporting the use of MMR there has been a drop in the number of children being vaccinated both within Forth Valley and nationally.

2003 was the first year of the last five years that Forth Valley did not achieve greater than 90% uptake of the MMR vaccine. This was against a backdrop of a 1% fall in the national uptake figures for MMR from 87.8% (2002) to 86.8% (2003) (Table 4.06). The national target is 95% coverage.

However, from April 2004 to June 2004 MMR uptake levels have started to improve both within Forth Valley (90%), and for Scotland as a whole (88%). Hopefully this will continue until the national target (95% for all primary immunisations) is achieved. The Health Protection Team run awareness seminars and provide one-to-one sessions for parents.

### New primary immunisation vaccines

On the 8 August 2004 the CMO announced new vaccines for the primary vaccination programme. While the diseases covered, and the schedule for the vaccines given during the primary vaccination programme will remain the same, the new vaccines will replace the older ones as described below. From 27 September 2004, the following changes will be made:

---


---

| Table 4.06 Annual Primary Immunisation Uptake Rates at 24 Months |
|---|---|---|---|---|---|---|---|---|---|
| Diphtheria | 98.1 | 98.1 | 98.2 | 97.8 | 98.4 | 97.4 | 97.6 | 97.5 | 97.4 | 97.6 |
| Tetanus | 98.1 | 98.1 | 98.2 | 98.4 | 97.6 | 97.4 | 97.6 | 97.6 | 97.3 | 97.6 |
| Pertussis | 97.2 | 97.5 | 97.4 | 97.4 | 98.0 | 97.2 | 97.5 | 97.3 | 96.8 | 97.2 |
| Polio | 98.1 | 98.1 | 98.1 | 97.6 | 98.5 | 93.2 | 88.5 | 87.8 | 86.8 | 86.8 |
| Hib | 97.9 | 98.0 | 98.1 | 97.0 | 95.5 | 92.7 | 93.7 | 95.6 | 96.3 | 96.3 |
| MMR | 93.9 | 95.2 | 90.6 | 90.8 | 88.6 | 92.7 | 93.2 | 88.5 | 87.8 | 86.8 |
| MenC | - | - | 95.5 | 95.5 | 95.5 | - | - | 93.7 | 95.6 | 96.3 |

Hib = *Haemophilus influenzae* type b;
MenC = *Neisseria meningitides* type C vaccine

Source: ISD  *Haemophilus influenzae* b
**Primary immunisation**
DTaP/IPV/Hib (diphtheria, tetanus, five component acellular pertussis, inactivated polio and haemophilus influenzae type b vaccine) (brand name: Pediacel) will be supplied for primary immunisation. It replaces the DTwP-Hib and OPV vaccines that are currently given.

**Pre-school boosting**
DTaP/IPV (low dose diphtheria, tetanus, five component acellular pertussis and inactivated polio vaccine) (brand name: Repevax) will be supplied for pre-school boosting. It replaces the DTaP and OPV vaccines that are currently given.

**Teenage boosting**
Td/IPV (low dose diphtheria, tetanus and inactivated polio vaccine) (brand name: Revaxis) will be supplied for teenage boosting. It replaces the Td and OPV vaccines that are currently given.

The rationale behind the change is as follows: Inactivated polio is being introduced because the likelihood of polio being introduced into the UK has significantly fallen. Hence the relatively safer inactivated vaccine, which does not contain a live virus, can now be used.

Acellular pertussis vaccine leads to fewer side effects compared to the previous whole cell vaccine and this new vaccine is as effective as the old one. In addition this new acellular vaccine is also thiomersal free.

In order to introduce these new vaccines and to ensure awareness across NHS Forth Valley, we will be running seminars, question and answer sheets and newsletters will be made available to all NHS staff and parents.

**Influenza and pneumococcal immunisation**
The influenza campaign in the winter of 2003/04 was successful, with an excellent uptake (76%) across Forth Valley in those aged 65 years and over. This was the highest uptake in Scotland (Scottish average of 72.5%).

Following advice from the Joint Committee on Vaccination and Immunisation (JCVI), the influenza immunisation policy for 2004/05 remains unchanged but there will be greater emphasis on the patients in the ‘at risk’ groups such as those with diabetes and chronic lung disease under 65 years.

However, this first year we are aiming at 60% uptake for ‘at risk’ groups under 65 years and will aim to achieve 70% in subsequent years.

**Blood Borne Viruses**
The term Blood Borne Virus (BBV) refers to three viruses: Hepatitis B (HBV), Hepatitis C (HCV) and Human Immunodeficiency Virus (HIV). All three are capable of causing severe disease and mortality.

**Incidence and prevalence of BBVs**
The number of people in Forth Valley infected with BBVs is increasing:

- Figures for HBV indicate a rise in detected cases from a yearly average of 11 new cases reported over 1997/98 to an average of 17.5 new cases over 2001/02.

- There are 688 reported cases of HCV antibody positive individuals in Forth Valley as of June 2002, more than 50% of these are below the age of 30 years. New cases are being identified at a rate of 85 a year.

- Figures for HIV infection show that at least 75 people are infected with HIV-1 in Forth Valley. The rate of new diagnoses has started to rise in recent years. Forth Valley currently has the eighth largest number of HIV-1 positive individuals among the 15 NHS Boards in Scotland, however Forth Valley also has the sixth highest number of individuals who acquired their infection through the use of injecting drugs.
We are developing ways to work closer with our council colleagues to further improve our ability to identify and respond to incidents

The current figures are likely to be a huge underestimate. It is thought that the prevalence of HCV in injecting drug users is 62%. If this is applied to the estimated 5,000 injecting drug users in Forth Valley then the suggestion is that the number of HCV cases may be in excess of 3,000.

The prisons in Forth Valley pose a particular challenge. There are currently around 1,270 inmates in the three prisons in Forth Valley. Of these approximately 950 are estimated to be HCV antibody positive, with a significant number of inmates positive for the other blood borne viruses.

Modes of transmission of BBV

The main modes of transmission are via sharing of drug injecting equipment, and via unprotected sexual intercourse. Other modes of transmission include mother to child spread, accidental occupational exposure and infected blood products.

While all members of the public are potentially at risk, some groups are at significantly higher risk of BBV infection:
- Injecting drug users
- Men who have sex with men
- Sex industry workers
- Prisoners
- Household and sexual contacts of people with BBV infection
- Certain occupations e.g. health care workers.

The following primary prevention actions reduce the risk of developing disease:
- Minimising sharing of injecting drug equipment
- Minimising unprotected sexual intercourse
- Maintaining the optimum screening and treatment procedures for blood and other blood/plasma products
- Reducing the risk of transmission from mother to child
- Reducing the risk of infection through other percutaneous routes, e.g. surgical procedures, tattoos.

Conclusion

This has been a relatively busy year for the Health Protection Team in Forth Valley. The number of notifications dipped slightly with chickenpox notifications again dominating the records. Campylobacter was the most common cause of diarrhoea causing illness notified, and there were single cases of typhoid and paratyphoid reminding us of the importance of travel medicine and good collaborative working with our partner agencies across Forth Valley.

To further improve our ability to identify and respond to incidents we are developing ways to work closer with our council colleagues who we rely on for mutual support in delivering a large number of services. Falkirk Council are leading on a district wide networked database which would allow the three Councils to provide the Health Protection Team with instant access to electronic copies of relevant information. Besides the time saved in sending the data, this would allow more intelligent interrogation of these data, and increase the early detection of cross Council outbreaks, while decreasing the likelihood of missed outbreaks.

These new ways of working and additional resources will stand us in good stead in the event of any unforeseen event, as well as in getting the day to day jobs done. However, I must thank the individual members of the Health Protection Team, as well as our colleagues in the three local Councils for their enthusiasm, competence, and team spirit, which has made dealing with the unexpected so much easier.

Author
Dr Henry Prempeh, Consultant in Public Health Medicine
CHAPTER 5

The challenges of primary healthcare: The picture from three General Practices

The vast majority of people’s contact with the NHS is with their GP, health visitors, practice nurses and other members of the primary care team. This chapter compares and contrasts the populations served by three diverse primary care teams in Forth Valley. These are a rural practice (Killin), a practice serving a deprived urban setting (Carron, in Falkirk) and the Airthrey Park practice working with the Stirling University student population. The comparison provides a snapshot of primary health care in Forth Valley and how practices can adapt to meet the needs of the communities in which they work.

The differences in communities
The needs of the populations can be very different. Patients in a very rural practice will have very different demands and expectations from those in an urban practice. A practice serving a university has unique and challenging demands.

Age structure of the practice populations
The populations are very different in terms of the number of patients registered with the practice and their age and social profile. For example, the Airthrey Park practice population is four times that of the Killin practice.
Looking further at the make up of each population it is clear that each local community is very different and one would expect practices to adapt services to their needs. In the following figures the Forth Valley population is shown in white for comparison. It was not possible to use the same x-axis scale for each figure because of the great contrast between the practices.

Carron has more children and a younger adult population than the Forth Valley average.

Killin has the greatest proportion of older people typical of many rural areas in Scotland.

Airthrey Park is unique in Forth Valley with a practice population dominated by 18-30 year olds.
The patterns of social deprivation
Social deprivation is a major determinant of poor health1. Deprivation may be: material in terms of an individual’s access to materials and resources, social in terms of roles, relationships and social contacts in society and multiple, when several forms of deprivation combine such as low income, poor housing, unemployment and educational under-attainment. Deprivation increases the demand on primary healthcare. The deprivation of the Carron practice population is greater than the average GP practice in Forth Valley and much greater than the Killin and the Airthrey Park practice populations. Deprivation scores are based on averages and pockets of extreme deprivation or affluence may exist in any practice.

Estimates of the need for primary healthcare
The Scottish Executive uses factors such as age, rurality and deprivation of populations that are known to increase need and demand for health services to determine the financial allocations for primary healthcare to NHS Boards. This is based on the Arbuthnott formula. It is effectively an estimate of ‘expected workload’ for that population. The formula is not at present used for allocation of resources at a practice level in Forth Valley.

When the ratios of actual list size to Arbuthnott-weighted list size are examined Airthrey Park stands out due to the ‘healthy’ age bracket, the lack of deprivation and non-rural location. The Carron practice’s higher social deprivation (increasing demand) is outweighed by a younger population (decreasing demand) and hence has the second lowest ratio of Forth Valley practices.

A picture of the three practices
It is clear that each practice should have developed its services and approaches differently to take account of the specific needs of their populations. The following brief outlines demonstrate this. The special needs of the Airthrey Park and Carron practice populations have, in fact, lead to the GPs choosing to provide innovative services within a different arrangement from most practices. They developed services based on the innovative Personal Medical Services (PMS) contract with the NHS Board rather than the long-standing and inflexible General Medical Services (GMS) contract. These practices have shown leadership and innovation in developing local population-driven health promoting and health care services. The following section describes the differing needs and distinctive approaches of the three practices.

The Surgery, Killin
The practice area covers Killin at the western end of Loch Tay, Crianlarich at the junction of the A85 and A82 from Glasgow, and Tyndrum where the road divides for Oban and Fort William. The area also includes the outlying areas of Ardeonaig on the south side of Loch Tay and Glen Lochay, which stretches for 10 miles up a single-track road north west of Killin. The practice area spans 40 square miles. The population at Lochearnhead, eight miles to the south of Killin over Glen Ogle has a choice of GP surgeries – Comrie, Callander or Killin. The area is the most northerly and remote rural aspect of Forth Valley and has a very low population density of 2.55 persons per km².

Killin is the natural ‘centre’ for the area with most of the main services including the GP surgery, shops, the library, residential care, sheltered accommodation and nursery provision. However the settlements are not close together and this can cause access problems. Accessing services in Stirling or even Callander can involve a whole day outing especially if dependent on public transport².

The population served by the practice
Just over 1,500 people are registered with the practice. Older people are a greater proportion than most Forth Valley practices. The actual population served by the practice is however substantially greater due to the presence of two hotels with a bed capacity of 400-500. This means that, particularly in the summer months, large numbers of tourists (often elderly) are served by the practice. The practice provides services to an average of 425 temporary residents annually.
The community is generally fairly affluent but there are clear pockets of rural deprivation and families and groups with social problems. There is relatively little unemployment. The unemployed tend to live in local public sector housing as it appears that while it is often possible to get a house, getting a local job is much harder.

Employment is characterised by a high number of part-time jobs, low pay seasonal work and high levels of self-employment. Unlike most of Forth Valley commuting is not a simple option. The public sector and tourism are the main employers. The development of information technology has also led to an increase in ‘teleworking’ with people working from their own homes. The hospitality industry is an important employer. Hotel workers are often transient, sometimes isolated and increasingly recruited from overseas. There are challenges in providing healthcare to this group.

Agriculture and forestry provide a smaller but important number of jobs. Rural practices such as Killin will see injuries and diseases unusual to urban practices. These include injury caused by animals, farm machinery and, in forestry workers, chain saws. Others include accidental injection with sheep vaccine, disease contracted from animals such as cryptosporidiosis, Orf, Brucellosis and other conditions. The practice sees a significant number of people with attached ticks or embedded fish hooks that require expert removal.

Local shops and services
Killin is relatively self-sufficient with Post Office, bank, petrol station and other services. There have been losses of a garage, small supermarket and hardware store.

Transport
Surprisingly for such a rural area some 23% of households have no car. Many further households do not have a second car thus additional household members are left without access to private transport for much of the working day. Public transport is limited and getting to Stirling and back by public transport in the same day from some areas can be very difficult.

Health services provided
The Killin surgery is the base for three doctors, three part-time nurses and a part-time healthcare assistant. The nurses are all qualified midwives and one also undertakes a health visitor role. There is no local dentist or optician. The GPs visit Crianlarich and Tyndrum on a weekly basis. Visits to Lochearnhead are made on demand.

The practice also provides services that would normally be provided in the Stirling or Falkirk hospitals for most Forth Valley practices. These include ‘near patient testing’ such as anti-coagulant monitoring tests and other blood tests provided using dedicated practice equipment. The GPs all carry heart defibrillators and will give ‘clot busting drugs’ as early as possible if a patient has a heart attack.

All GPs are members of the British Association of Medical Care Schemes and are trained and equipped to respond to incidents such as road accidents and other incidents leading to injury. One of the GPs is a full member of the Killin Mountain Rescue Team.

Outreach services from Forth Valley hospitals include chiropody (mobile van service) and physiotherapy (accessed in Callander). The area rehabilitation and care for the elderly teams visit and assess patients on request. The cognitive behaviour therapist and community psychiatric nurse from the community mental health team for the elderly will also visit. The community addictions and drug service provide outreach services including home alcohol detoxification with GP support. An optician visits once a year and this opportunity is well used by older people. Voluntary bodies also provide outreach. Examples include Strathcarron Hospice’s community based palliative care in conjunction with district nurses and GPs. Stirling and District Association for Mental Health also provides befriending services.

Children’s services
There are some 250 children with 70 under the age of five. The health visitor has built very good links with schools and nursery and has been very innovative in, for example, involving the nursery in key aspects of child health surveillance.

Influenza vaccination
The practice has taken a community-based approach to this. Working with the local branch of Women’s Rural Institute and MacMillan Cancer Care the practice set up coffee mornings for flu vaccination. These were held in community halls in Crianlarich and Killin. With this approach the practice held very successful social events and helped to achieve a 76.4% vaccination rate in the over 65s in 2004, one of the highest rates in all of Forth Valley, as well as raising money for good causes.
Development of ambulance services

The nationally negotiated new GP contract has led to fundamental changes to many rural communities in Scotland. All rural communities had become accustomed to the local GPs providing an out of hours service. This however had become more and more unsustainable and small rural practices had been increasingly losing their established GP(s) and were failing to recruit. The impact in Forth Valley of the new out of hours arrangements will be greatest on the population served by the Killin practice. There has been much joint work with the community, the local practice and the NHS Board to address the change. What has been clear is that while the number of emergencies out of hours are small in a practice of this size the people in the area need to be assured that their needs will be met out of hours when required.

The local ambulance service will be substantially strengthened. There will be more local ambulance paramedics and single manned ambulances will be phased out. Ambulance paramedics will be locally available over the 24-hour period. The medical equipment and communications equipment will be continually updated. Ambulance paramedics are able to provide core pre-hospital treatment such as the administration of clot-busting drugs, defibrillation, management of acute asthmatic attack and other life saving treatments. They are now being trained for a further extended role in areas such as supporting palliative care.

Other active issues

The practice regularly seeks feedback and ideas from patients using suggestion cards and more formal surveys. Examples of issues highlighted by patients is the need for accessibility to GP services for commuters who leave early and get back late. Another problem is the difficulty in obtaining outreach services such as meals on wheels, night sitters or Macmillan nurses for specific patients. This can be due to the difficulty or perceived difficulty of access at times to these communities in the winter. At times hospital admission is the only viable option for patients living on their own.

The Airthrey Park Medical Centre

The Airthrey Park Medical Centre at Stirling University serves a unique population with needs that are very different from other Forth Valley practices. Some 85% of patients are current or ex-university students and staff. 60% live on campus with the remainder living in University or private accommodation elsewhere in the Stirling area. The other 15% are local patients living within the catchment area.

The uniqueness of the population means there are very different social and health needs from the average practice population. The students form an often vulnerable population with little or no parental or family support. As young people they are rapidly gaining independence but are subject to peer pressure, money and relationship problems. These factors can lead to mental health problems such as anxiety and depression, stress-related illness, eating disorders, drug and alcohol addiction, deliberate self-harm and psychosis. Peer pressure can also make students vulnerable to unhealthy lifestyles such as smoking, recreational drug use, alcohol abuse, and unprotected sex with resulting sexually transmitted diseases and unwanted pregnancy.

The substantial number of overseas students (approximately 8%) and families creates challenges. Overseas students have particular needs and expectations. These can combine with language and cultural barriers and the loss of usual family and community networks to create an isolated student group within the University. The provision of a satisfactory service to this group requires patience, time, experience and sensitivity.

Only 0.3% of the patient population are older people (over 65 years). The practice/community nurse provides specialist services for the small number of elderly and disabled people. She also provides support for disabled students through initial assessment on arrival and throughout the period of their degree course.

Health services provided

In 1990 the practice was a two doctor partnership with 2,000 patients. This had increased to 6,500 by 2001 and to 7,500 in 2004. Currently this is a three GP partnership with one salaried GP, two practice nurses and one health visitor.
The Airthrey Park practice has unique challenges in clinical record management due to the annual mass registration of new patients at the start of the academic year and new patients constantly registering throughout the year. These peaks and troughs of work are a challenge and the needs of new students with specific health needs must be identified early.

The Primary Care Team has developed innovative services tailored to the unique needs of students, staff and their families. They have used a Personal Medical Services contract with the NHS Board, free from the limitations of the inflexible GMS contract, to develop innovative services to meet the needs of the student population. The primary care team also felt that this was an opportunity to focus more on the quality of services provided than the emphasis on numbers and throughput of the GMS contract.

In developing the PMS contract the practice carried out a health needs assessment in conjunction with the NHS Forth Valley Public Health department. This included a questionnaire survey of the student population. The aim of the survey was to ensure that the right services were offered to the right people at the right time. The main findings were:

**The need for more access to core GP services**
The practice now offers two evening surgeries per week offering appointments up to 8:30pm

**Mental health services**
Needs highlighted by the practice relating to mental health of students include isolation, adjustment to leaving home, financial pressures, drugs and alcohol, eating disorders, peer pressure and risk of suicide.

The practice response has been to increase the number of dedicated counselling appointments and develop closer links with two visiting consultant psychiatrists. The practice also funds twice weekly clinical psychologist and behavioural nurse psychotherapy sessions. The waiting time for clinical psychology for university students had been nine months but following PMS the waiting time was reduced to three months. The waiting time is now increasing due to high level of need in the student population.

**Sexual health services**
Needs highlighted by the practice relating to sexual health of students include the risk of sexually transmitted infection and unwanted pregnancies. There was also a need to provide support in the development of positive personal relationships. The needs assessment showed a strong wish by students for such services.

The practice response has been to develop twice daily sexual health clinics with male and female doctors. The new sexual health services include screening for sexually transmitted infections, relationship discussion and responding to sexuality orientation problems.

The services are holistic and include current partner notification. There are daily nurse-led emergency contraception appointments with a doctor available for advice. The practice also engages in outreach work with lesbian, gay, bisexual and transgender groups.

**Complementary medicine services**
Many patients are knowledgeable and request treatment outwith the conventional medicine regime. Three GPs now offer complementary medicine including homeopathy, acupuncture and hypnotherapy. An osteopathy practitioner also offers services within the Medical Centre.

**Sports medicine services**
Many students are actively involved in sports. The needs assessment showed that many students wanted a minor injury service. The practice now contracts a recognised expert in sports medicine for one session a week. This doctor works in closely with the existing extensive practice physiotherapy service that offers fast tracking for acute injuries.

**Health Promotion services**
The practice has appointed a health promotion advisor to co-ordinate all health promotion activities with the Practice. It has a contract for additional dietetic clinics.

**Summary**
The Airthrey Park team has developed responsive services through a PMS contract to meet the unique needs of the student population. The practice has listened to those it serves and set up innovative services tailored to their particular needs. This has increased the access to and use of services and in turn has improved the morale of all the members of the primary care team.
The Carron Medical Centre, Bainsford

The practice lies in the Falkirk Council area and serves a mixed urban population with new build owner-occupier housing in areas such as Newcarron, alongside older public sector housing in Bainsford, Langlees and Carronshore. Falkirk town is the natural centre for the area with its high street and shopping mall facilities. Falkirk & District Royal Infirmary is five minutes drive time away from the practice area.

The area was originally home to heavy industry such as mining and iron works. These large employers have now closed or shrunk. The closure of the Wrangler clothing factory had led to more unemployment. Other local employers are Falkirk Council, the Grangemouth petrochemical plant, the ASDA Distribution Centre adjacent to the M9, a call centre in Larbert, and NHS Forth Valley.

The locality is a designated Social Inclusion Partnership (SIP) area. Falkirk Council has invested significant resources to upgrade the physical environment around some of the older schemes. The practice shares geographical boundaries with practices in Falkirk and Stenhousemuir.

The population served by the practice

The practice population has been increasing every year since 2000 (14% in the last year) in response to the new housing in the immediate area surrounding the surgery. The population (currently 2,617) has a young age profile and high levels of deprivation. This is expressed in multiple social problems including high rates of drug addition, domestic abuse and smoking (currently running at 38%). There are significant levels of mental ill-health and coronary heart disease in the population.

Health services provided

The practice building was purpose built in 1997 next to a large Co-op supermarket in the Carron Centre. The facilities are already stretched due to an increasing number of patients, expansion of services and the increased numbers of primary care staff operating from the centre. Extensive free parking is available at the Carron Centre which is also a hub for local bus services. The adjacent Co-op has a NHS prescribing pharmacy.

The practice has developed its own website which describes all the available services. There are also Practice Newsletters issued quarterly. The practice is a training practice for GP Registrars marking the high level of clinical and managerial quality required for approval of training status by the Royal College of General Practitioners.

The practice team includes two GPs, GP registrar, practice manager, clinical receptionist, three receptionists, practice nurse, two part-time district nurses, two part-time health visitors and a nursing assistant.

A ‘Care Model’ approach at the practice has enabled patients to have the confidence to self-care and led to the development of a new skill mix of the health care team in areas such as the piloting of nurse-led acute illness consultations.

The clinical receptionist is an innovative post and the work includes taking blood samples, recording blood pressure, sterilising clinical equipment, recording electrocardiograms (ECGs), urine analysis and pregnancy testing.

The practice operates a 12-minute and 15-30 minute consultation time for GP and nurse appointments respectively. The practice provides dedicated clinics for patients with chronic diseases including hypertension (high blood pressure), asthma, lung disease, stroke, epilepsy, heart disease and diabetes. There are also ante-natal and family planning clinics. The practice also provides cervical screening, childhood vaccinations and child health surveillance. The practice also works closely with the Forth Valley Community Addiction and Drugs Service (CADS) to provide shared-care for a significant number of drug users.
Working with a community to identify their needs is a pre-requisite to the creation of patient centred and appropriate services

Carron became a Personal Medical Services (PMS) contracted practice a number of years ago. This has enabled a number of developments such as expansion of appointment times, funding for a female doctor and a new nurse counselling service for anxiety and depression. Recent service developments included two sessions weekly from a community psychiatric nurse, minor surgery, one-to-one 12 week smoking cessation courses, a weight control service and a teenage health service.

The practice clinical management is underpinned by strong information technology. This has enabled a wide range of audits to be performed in the last two years including diabetes, asthma, workload, significant event analysis, coronary heart disease, hypothyroidism and clinical records. Chronic disease management approach is already mainstreamed into practice activity and the practice will be able to respond rapidly to the required computerisation of clinical and practice management activity for the new GP contract.

Future issues for the practice include the need to expand, to improve access for the disabled, a desire to achieve a Quality Practice Gold Standard Award and the GP Principal intends to achieve Fellowship of the Royal College of General Practitioners by peer assessment.

The practice has identified the need for: teenage health clinics, screening for sexually transmitted disease, an adult disability/rheumatoid arthritis clinic, a drug monitoring service and follow-up of a further range of chronic diseases. The practice is also working to better integrate services with Carron Social Services and the local integrated community schools. They also highlight the increasing challenge of working with other services to manage loneliness and social isolation in the community.

Learning points from the three Practices

Working with a community to identify their needs is a pre-requisite to the creation of patient centred and appropriate services. These brief pictures of three very different practices demonstrate how this approach has been taken in their delivery of primary care. Key lessons are the value of simple population-based approaches in assessing need, recognition that practice populations may have very different needs, and the value of PMS contracts.

Recommendations

We would encourage all practices to use simple health-needs assessments to identify the needs of their practice populations. The new Community Health Partnerships of primary healthcare and Councils provide a great opportunity to see the social and health needs of communities from a single viewpoint.
Contributors to Killin section:
Dr David Syme, GP partner at Killin Practice
Dr Chris Holden, GP partner at Killin Practice
Dr Ankie De Laat, GP partner at Killin Practice
Dr Elaine Turner, GP at Killin Practice
Mrs Dee Melia, District Nurse/Midwife
Dr Malcolm McWhirter, Director of Public Health

Contributors to Airthrey Park Medical Centre section:
Dr Rani Balendra, Consultant in Public Health Medicine
Dr Neil Hamlet, Specialist Registrar in Public Health
Dr Aileen Doherty, GP partner at Airthrey Park
Dr Caroline J.C. Renwick, GP partner at Airthrey Park
Dr Gregor Murdoch, GP partner at Airthrey Park
Dr Aileen Doherty, GP partner at Airthrey Park
Mr John Ross, Business and Development Manager at Airthrey Park
Dr Aileen Holliday, Health Effectiveness Co-ordinator, Public Health

Contributors to Carron Medical Centre section:
Dr Neil Hamlet, Specialist Registrar in Public Health
Dr Gordon Muircroft, GP at Carron Medical Centre
Dr Aileen Holliday, Health Effectiveness Coordinator, Public Health

References:
http://www.fv.scot.nhs.uk/nhsfv/sites/GPs/NorthWestStirling/V2535/index.html
http://www.fv.scot.nhs.uk/nhsfv/sites/GPs/Falkirk/V2565/index.html
http://www.show.scot.nhs.uk/nhsfv/sites/GPs/Falkirk/V2565/cmchome.htm
http://www.fv.scot.nhs.uk/nhsfv/sites/GPs/Stirling/V2555/index.html

CHAPTER 6

Action against tobacco

Smoking is the largest single cause of preventable death and disability in the UK. The evidence is also mounting for the significant effects that tobacco smoke has on non-smokers as well as smokers. Smoking in Scotland accounts for more than 13,000 needless deaths and costs NHS Scotland an estimated £200 million each year. The need for action is clear.

Tobacco - the stark facts

About 1.2 million Scottish adults smoke. By the age of 16, some 25% of girls and 16% of boys are already smoking. Smoking rates in Scotland are much higher than in England and Wales and smoking rates for women are among the worst in Europe.

What we know about smoking in Forth Valley

Smoking in young people

A recent national survey of smoking in secondary school pupils showed the following results for Forth Valley.

<table>
<thead>
<tr>
<th>Area</th>
<th>Age 13</th>
<th>Average no. of cigarettes smoked per week</th>
<th>Age 15</th>
<th>Average no. of cigarettes smoked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forth Valley</td>
<td>10%</td>
<td>30</td>
<td>19%</td>
<td>45</td>
</tr>
<tr>
<td>Falkirk</td>
<td>10%</td>
<td>36</td>
<td>20%</td>
<td>53</td>
</tr>
<tr>
<td>Stirling</td>
<td>8%</td>
<td>21</td>
<td>19%</td>
<td>36</td>
</tr>
<tr>
<td>Clackmannanshire</td>
<td>13%</td>
<td>27</td>
<td>18%</td>
<td>49</td>
</tr>
</tbody>
</table>

Smoking in pregnancy

One quarter of Forth Valley women smoke in pregnancy with potentially serious consequences for their babies. Smoking rates are highest among single mothers with over 60% beginning their pregnancy as smokers.

Table 6.02 shows the percentage of pregnant women smoking in Forth Valley (2000/02) by deprivation category.

Smoking in adults in Forth Valley

Some key facts on smoking in Forth Valley are:

- 33% of 16-74 years old smoke (modelled data from NHS Health Scotland)
- 22% of 16-74 year olds are ex-smokers
- About 1,000 current and ex-smokers die every year from smoking related diseases
- About 8,200 smokers in Forth Valley need to quit to reduce the proportion of smokers from 33% to the 29% Scottish Executive target for the year 2010

Smoking, social class and deprivation

Those in the unskilled manual social groups are much more likely to smoke than professional groups. People living in deprived areas are more than twice as likely to smoke compared with those in the most affluent areas (Figure 6.1)
When the smoking prevalence map (Figure 6.1) is seen in conjunction with Figure 6.2, of social deprivation in Forth Valley, it is obvious that smoking prevalence increases with social deprivation.

**Figure 6.1  Adult Smoking Prevalence in Forth Valley by Postcode Sector**

Estimated prevalence rates are based on combined data from 1995/1998 Scottish Household Surveys, so should reflect the position at the end of the 1990s. Source: Collaborative study between University of Portsmouth, NHS Health Scotland, and ASH Scotland. Please note, smoking prevalence rates are unavailable for part-sectors shaded white.

**Figure 6.2  Carstairs Deprivation Categories for Postcode Sectors in Forth Valley**

Note: Depcats based on information from 1991 Census.
Tobacco and the widening health gap between the rich and poor
The highest smoking rates are found in the areas of greatest poverty.
Two-thirds of the difference in the risk of death in middle age between the affluent and the poor is attributable to tobacco.
The major costs of smoking are carried by those who can least afford it in Forth Valley.

The Impact of Tobacco on the Health of our Nation
The facts:
Smoking is the single biggest cause of preventable early death in Forth Valley.
Smoking is the single biggest cause of ill health in adults in Forth Valley.
One in two of us who still smoke will die from a smoking-related disease.
One in five deaths today in Scotland is due to people smoking.
The cost of smoking to Scottish society is estimated at £650 million every year.

Development of Tobacco Control Policies
International regulations, such as the World Health Organisation (WHO) Framework Convention on Tobacco Control and EU Directives, play a role in developing tobacco control policies. The UK Parliament in the White Paper 'Smoking Kills' highlighted the need to provide more support for children and young people, disadvantaged adults and pregnant women.

The Scottish Executive response included:
- The Scottish Cancer Plan (2001)
- Improving Health in Scotland - the Challenge (2003)
- A Breath of Fresh Air for Scotland: The Challenge - Tobacco Control Action Plan
- Consulted on regulation of Smoking in Public Places.

The government policy priorities include increasing the price of tobacco, restricting smoking in public places, stopping sales of tobacco to children, banning advertising of tobacco, and providing effective smoking cessation services to those who want to stop.

Working in partnership to tackle smoking
The Forth Valley Tobacco Action Group (TAG), acting for the NHS, Councils and other partners, is working actively on tobacco control. The group link resources and initiatives to reduce the harm caused by tobacco on health and wellbeing. The TAG is presently working to integrate and develop smoking cessation services across NHS Forth Valley and other agencies. An exciting possibility is an expanded Forth Valley wide smoking cessation service that everyone in the community and all workplaces can access.

Examples of action on smoking

Smoking cessation services in Forth Valley
Following the publication of the 'Smoking Kills' in 1999 NHS Forth Valley acted on the Government’s recommendations by appointing a smoking cessation co-ordinator and developing new services aimed at the young, pregnant women and those on low incomes. The smoking cessation co-ordinator established one-day training courses on smoking cessation and motivational interviewing. GPs, health visitors, district nurses, midwives, school nurses, pharmacists, prison officers, community workers and others attended. General practitioners, public health nurses, hospitals and community pharmacists now offer smoking cessation services in a variety of settings across Forth Valley.

Drop-in smoking cessation clinics
Existing smoking cessation services were extended and developed by providing three out-of-hours evening self referral drop-in clinics. They were sited in the three Council areas in Forth Valley and were aimed at current smokers on low incomes, living in areas of deprivation, who required a more flexible informal service to support them. The clinics were easy to access located in health centres close to areas of deprivation. 770 people attended the service in its first year. Nearly 70% had stopped smoking at four weeks and almost 30% were still not smoking at six months.
‘Smokebusters’ in primary schools
Smokebusters was launched in 1987 and has been shown to delay the onset of smoking among primary school pupils. It includes a high-quality teaching pack, pupil incentives, and targeted drama work. The uptake of the programme in schools is extremely encouraging. 28 Falkirk, 24 Stirling, and 13 Clackmannanshire schools have smokebusters programmes. Interactive drama is used to provide more intensive support in primary schools in areas known to have a high adult smoking prevalence. Drama encourages reflection and aims to build self-esteem and confidence in young people to help them resist pressures to smoke. Currently three primary schools have participated in drama projects with a further 30 classes likely to take part in 2004/05.

Smokefree classes in secondary schools
Smoking rises dramatically between the ages of 13 and 15 years. The Smokefree Class initiative includes key approaches already shown to be successful in other countries. Pupils voluntarily contract to join the programme and an element of competition exists within and between participating classes. The peer influence of pupils is used in a positive way. Smoking status is measured in an accurate way using carbon monoxide monitors.

1,000 second-year pupils from three schools in Forth Valley participated in smokefree classes lasting six months in each school. At the end of this time none of the young people taking part had started to smoke. This result is encouraging and suggests that smokefree classes can help second year pupils not to start smoking. Five further secondary schools in Forth Valley are now participating in the programme and with the active support of NHS Forth Valley Health Promotion services, it is hoped that a further eight schools will participate in 2004/05.

Smoking cessation in hospital
Those working in clinical practice see beyond the statistics and see first hand the effect tobacco smoking has on individuals and families, such as patients dying young from lung cancer, respiratory failure and coronary heart disease. Currently within Forth Valley patients attending Falkirk & District Royal Infirmary have access to a hospital based smoking cessation programme.

Structured programmes of smoking cessation in hospital can make a big difference in helping patients in hospital to stop smoking and stay non-smoking. A combination of drugs such as nicotine replacement therapy and active personal support is clinically and cost effective. Stopping smoking can improve lung function, decrease the risk of developing heart disease, chronic bronchitis, lung and other cancers. Stopping smoking can be one of the most effective clinical treatments and the structured smoking cessation programme available locally has been of great benefit to patients. The service was initially developed at Falkirk & District Royal Infirmary and it is hoped to roll out the service to Stirling Royal Infirmary in the coming year.

Both Stirling Royal Infirmary and Falkirk & District Royal Infirmary have been smoke free since April 2003. Smoking cessation advice is available to staff within their workplace.

Smoking in pregnancy
Pregnant women who smoke are a priority for smoking cessation as smoking harms the unborn child. Midwives and other NHS staff work actively to encourage women to give up smoking during their pregnancy. The smoking status of women at 12 weeks (booking visit) and 32 weeks is recorded. Midwives, trained in smoking cessation, can support these patients in hospital and in antenatal clinics in the community. A multi-disciplinary approach includes health visitors and general practitioners who provide ongoing support.

The role of community pharmacists
Community pharmacies provide accessible health services to many people who would not normally attend their local general practice or hospital. They are healthcare professionals who should be part of any integrated smoking cessation strategy. All community pharmacists can provide brief intervention, on an opportunistic basis, in their day-to-day contacts with the public visiting local pharmacies. Pharmacists who have received motivational counselling training can provide a higher level of intervention.

Community pharmacists in Forth Valley with this expertise are leading a pilot Big Lottery funded programme. They will mainly focus on young people, but will be able to support others who may not have been in contact with other services, such as pregnant women and young mothers. The service will be an initial 20-30 minute session with follow-up at weekly intervals for the first four weeks, at eight
and 12 weeks and again at six months. NRT or Zyban will be provided at weekly intervals for the first four weeks and then every four weeks. Treatment would normally be expected to last 10 to 12 weeks. Smoking status will be monitored using carbon monoxide monitors. The agreed quit plan, all interventions and smoking status will be recorded to enable evaluation of the service.

**Council action**

All three Councils work actively to reduce smoking and the ill-health it causes. The publication ‘Tobacco at Work’ jointly produced by COSLA, NHS Scotland and ASH Scotland provides a template for action. The Joint Health Improvement Plans (JHIPS) for Clackmannanshire, Falkirk and Stirling highlight the importance of partnership action to reduce smoking. In Clackmannanshire Council, all public buildings are non-smoking. In addition a formal smoking policy is being finalised and plans are progressing to train smoking cessation counsellors to assist those wishing to quit. Falkirk Council has had a no-smoking policy since January 2002. This policy provides a robust smoking cessation service for staff who can be also referred to the NHS drop-in clinic in Camelon. Stirling Council has endorsed their Tobacco Policy, which will support the requirements for Stirling’s bid to become a World Health Organisation Healthy City in 2005.

**Passive smoking**

There is increasing evidence of the health risks of second hand tobacco smoke. Immediate effects include eye irritation, headache, cough, sore throat, dizziness and nausea. Adults and children with asthma can experience a decline in lung function. In the long-term passive smokers have increased risk of heart disease and lung cancer. Children with smokers at home have an increased risk of respiratory illness, middle ear infection and possible cardiovascular and behavioural problems.

National action in Scotland to limit passive smoking has this year included:

- A national advertising campaign on dangers of second hand smoke
- A Scottish Executive consultation on smoking in public places
- Action to support Scottish employers to introduce effective smoking policies
- Encouragement of NHS Boards and Councils to review smoking policies

The smoking in Public Places National Consultation was launched by Tom McCabe, Deputy Minister for Health and Community on behalf of the Scottish Executive. The Scottish Executive has stimulated debate and sought comments on questions relating to the introduction of legislation to regulate environmental tobacco smoke. NHS Forth Valley actively contributed to the debate by attending local consultations. NHS Forth Valley, Stirling Council and Clackmannanshire Councils have actively responded in a joint letter supporting the development of legislation on smoking in public places.

Authors
Dr Rani Balendra, Consultant in Public Health Medicine, Forth Valley NHS Board
Dr Neil Hamlet, Specialist Registrar in Public Health, Forth Valley NHS Board
Kate Johnston, Smoking Cessation Co-ordinator, Forth Valley NHS Board
Susan Bishop, Clinical Pharmacist, Primary Care Operating Division
Gillian Bruce, Smoking Cessation Specialist Nurse, Falkirk & District Royal Infirmary
Infections associated with healthcare (HAI) are both a hospital and a community problem. Only 20% of health service contacts take place in acute hospitals. The average hospital stay in 2003/04 in Forth Valley was four days. Most minor procedures are done in clinics, day-care wards and health centres or GP practices. Despite reduced admission times, national prevalence studies show that one in ten patients in the UK acquire an infection during a hospital admission.

In 2003 the Scottish Executive set up a special task force led by the Chief Medical Officer to look at how levels of HAI could be reduced. The group identified 28 different projects and initiatives, ranging from hospital design to handwashing.

NHS Scotland is reviewing decontamination of surgical instrumentation, national cleaning standards and the training of staff at every level. It is a challenging time to be working in infection control, and Forth Valley is actively contributing to local, national and international research and standard setting.

Initiatives in Forth Valley

The acute hospitals in Falkirk & Stirling have introduced Scottish Centre for Infection & Environmental Health (SCIEH) enhanced surgical wound infection surveillance programmes and appointed a lead administrator to collate the information. At present elective total hip and knee replacements are being surveyed for post-operative infection. Bacteraemia (overwhelming bacterial infection) caused by Staphylococcus aureus organisms are also being monitored. Both Methicillin resistant (MRSA) and Methicillin sensitive (MSSA) strains are being reviewed. Methicillin is a type of penicillin and gives healthcare workers and prescribers local information about antibiotic resistance patterns. The data is analysed and discussed with the surgical teams to identify improvements to reduce the number of wounds that become infected after operation. Anonymised information is also returned to SCIEH who review national trends. Statistics relating to wound infections and organisms identified in healthcare settings inform the Scottish Executive in planning new initiatives and funding research.

Forth Valley has an antimicrobial prescribing formulary written jointly by doctors, pharmacists and microbiologists. The formulary makes recommendations for prescribers. This is an especially helpful reference tool for staff to prescribe the appropriate antibiotics for different conditions and when to seek advice from the microbiologist or a specialist consultant. Conditions such as respiratory tuberculosis require intensive treatment with a combination of antibiotics that require careful monitoring over a long time period e.g. six months to more than a year.

Prevention

Many common infections are viral and self-limiting. Patients usually recover with rest. ‘No prescription’ prescriptions are now used by GPs who advise patients to use painkillers, take plenty of fluids and to come back if they do not get better in a set period of time. At a Royal College of Physicians of Edinburgh seminar in 2003 it was noted that even ‘simple’ viral coughs take three to four weeks for symptoms to completely resolve, and that giving antibiotics did not reduce recovery time. The public can access information about many conditions through traditional routes such as their GP, health visitor, Local Health Council services, directly through the Internet or NHS 24.

Management

Outbreaks of viral infections in busy hospitals can be extremely difficult to manage. Viral infections can be introduced by people coming into the wards when not well and spreading infections such as coughs and gastro-intestinal (diarrhoea & vomiting) illness. Education of visitors about preventing the spread of infection in this way is an important but sensitive issue.
Education of visitors about preventing the spread of infection is an important but sensitive issue

NHS Forth Valley has produced leaflets on gastrointestinal infection for GPs and infection control staff to distribute. In the winter of 2003/04 several outbreaks of ‘Norovirus’ previously called ‘winter vomiting disease’, among patients and staff resulted in wards having to be ‘isolated’ and closed to admissions.

Audit
Infection Control Teams regularly undertake clinical audits in the surgical theatres, wards and clinics in Forth Valley to identify potential and actual problems. This is especially important when outbreaks of infectious illness occur, new instrument handling techniques are introduced or when wards are being physically adapted for a new purpose. In the last year Women & Children’s Services were centralised at Stirling Royal Infirmary and the infection control nurses played a vital role in planning the new clinic areas.

Audits of non-clinical services include domestic cleaning, decontamination of equipment and facilities and waste disposal (including disposal of ‘sharps’). Results are reported back to relevant managers and action plans agreed.

Design
The design of facilities and choice of fittings can play a major role in compliance. A wash hand basin in the correct place will remind staff and visitors to wash their hands. New and complex equipment for healthcare must be ‘fit for purpose’ wherever it is used – a patient’s own home or an operating theatre. Re-useable items must be capable of being cleaned and disinfected. EU legislation requires that healthcare products be clearly marked as single use, single patient use or multiple use.

Infection Control practitioners are playing an active role in the planning teams designing the outline brief for the new acute hospital facilities.

Primary Care services
Primary Care has different but related healthcare associated infection. A review of decontamination of equipment used in podiatry, dental and general medical practices and clinics is currently in progress. The need to provide a flexible, timely and customer friendly service, whilst also protecting staff and patients from blood borne viruses and vCJD (variant Creutzfeldt-Jacob Disease) can be challenging. Changes in practices include the greater use of disposable items, purchase of extra equipment to allow for longer turn around times during decontamination and sending reusable equipment for processing at the Area Sterilisation & Disinfection Unit on the Falkirk & District Royal Infirmary site.

Enhanced primary care nursing services, including greater community nurse prescribing of simple medications has improved treatment of minor infections such as headlice. A Public Health Nurse for Schools, based in Alloa set up a parent support group for families wanting information about headlice. This group underwent training and child protection clearance in order to educate and assist fellow parents.

NHS Forth Valley has contributed actively to the national infection control programmes such as the ‘Cleanliness Champions’. The Scottish Executive HAI Task Force has recently introduced mandatory induction sessions and annual updates for all NHS staff. These are welcome and will emphasise the need to constantly review and improve clinical care to maintain competencies.

The independent sector
Healthcare is not only delivered in the NHS and there has also been considerable work related to HAI in non-NHS organisations. Other such facilities include independent care homes, a private hospital, an independent hospice with day care, and private clinics for dental, chiropody and alcohol detoxification.

Forth Valley has a community Infection Control Key Worker Link scheme. This is led by the Public Health Infection Control Nurse (ICN) who works with independent organisations as well as local prisons, Councils and voluntary care agencies. Strathcarron Hospice has also identified infection control link nurses to participate in the ‘Cleanliness Champions’ training. Abbey Kings Park Hospital sponsored their Theatre Manager to attend Dundee University to become a fully trained ICN specialist.
Joint working

Regular multi-agency training is an important part of the infection control programme. Joint NHS Fife and NHS Forth Valley Infection Control Study days for community and independent sector staff have been organised by the two Public Health ICNs. In September 2003 the venue was in Stirling and September 2004 in Dunfermline. 103 delegates participated in the 2004 event and heard 15 speakers present a variety of infection control related topics. An associated exhibition attracted eight sponsors from commercial and voluntary sectors.

The Public Health ICN has contributed to the Scottish Executive Tannahill Group preparing Infection Control standards for the independent adult care sector. This complements close work with the Care Commission team based in Stirling. NHS Forth Valley shares many infection control and communicable disease policies, guidelines and information leaflets with partner services. Local and national internet HAI sites are being developed this year to allow users to access advice and download information directly.

ICNs from Forth Valley Acute & Primary Care Operating Divisions have contributed to NHS QIS national working parties and the HAI Task Force Communications group.

Recommendations

Recognising that prevention of healthcare associated infection is a cradle to grave challenge:

1. The special needs of particular groups within Forth Valley need to be reviewed to plan pro-actively. There are an increasing number of extremely vulnerable people in the general population including: premature babies, frail elderly, those with chronic ill health and immunocompromised individuals.

2. Partnership working with the communities, voluntary and statutory agencies will continue to be essential to ensure that HAI is ‘everyone’s business’.

3. Hand washing must be ‘the norm’ and everyone from healthcare staff to patients and their visitors must work together to break the chain of infection.

4. HAI must remain a high priority on the NHS Forth Valley health improvement agenda with commitment to improving outcomes through improved surveillance, prevention of illness and prompt management of identified or suspected outbreaks.

Author
Sarah Murdoch, Public Health Infection Control Nurse
**CHAPTER 8**

**Local Food for Local People**

Local people and local food producers have a great opportunity to increase access to fresh local produce.

**The challenge**
Eating used to be a simple issue, food was grown and eaten locally. Now it is part of a complicated global web of producers, processors, packagers, transporters, advertisers and retailers. We all have to eat and so have a stake in where our food comes from and how it is produced.

The food we buy often travels thousands of miles, yet on our doorstep we have fresh, great tasting produce that’s good for us, our environment, economy and our communities.

**What is local food?**
Local food is food that is grown, harvested and traded all in one area. Often it is produced by sustainable methods such as low-input or organic farming.

Obviously not all food is available locally and locally grown produce is only available on a seasonal basis. The concept of local food is not about restricting access to overseas products that cannot be grown in the UK but about buying local wherever possible or from the nearest available source.

Sourcing food from the most practical, closest source can bring many health, social, environmental and health benefits.

**What are the benefits of local food?**

**Capturing the goodness**

**Health benefits include:**
- Improved access to fresh, affordable food
- Improved nutrient levels due to less transporting and storage of food
- Less processed food containing fewer additives
- A greater sense of choice, understanding and responsibility for diet by creating a link with food production
- Increased physical activity and mental well-being through participation in community food projects.

**Growing better communities**

**Social benefits include:**
- Increased confidence and pride in local communities
- Breaking down of social and geographic barriers
- Increased local ownership and participation in food activities
- Opportunities for employment.

**Food that doesn’t cost the earth**

**Environmental benefits include:**
- Less pollution by reducing food miles, i.e. the distance our food sometimes has to travel
- Less need for convenience packaging leading to less waste
- Increased diversity of local landscapes and wildlife
- Less additives being used through less intensive farming methods.
Keep your money where your mouth is

Economic benefits include:

- Keeping money in the local economy
- Making sure ‘added value’ goes to the producer
- Supporting small businesses and community enterprises
- Developing new markets for food, i.e. tourism.

The local food sector offers different ways of doing things; bringing producers and consumers closer together. Here in Forth Valley as in several other parts of the country local food links projects are demonstrating the benefits of local food.

**Forth Valley Food Links (FVFL)**

Forth Valley Food Links is a partnership project working with individuals, communities and local food producers to increase access to fresh local produce, i.e. local food for local people.

FVFL aims to encourage more fruit and vegetable production and to channel more of what is currently produced in the area (including beef, lamb, etc) to supply local markets and projects.

**Increasing the demand for local food**

A variety of community food projects have been developed by committed local residents and groups to improve access to fresh, healthy produce for local communities. They include allotments, box schemes, community cafes, farmers markets and fruit barras.
Customers are happy to receive a variety of produce and often request recipes for the less common varieties.

School Allotments
Forth Valley schools have a variety of school growing schemes ranging from apple orchards to vegetable plots and planters. Practical ‘hands on’ experience of growing fruit and veg gives children a good understanding of the basics of farming and food issues. These schemes form part of the ‘whole school, whole day’ approach to nutrition including school meals, healthy tuckshops and breakfast clubs encouraging young people to make healthier food choices.

Box Schemes
At its simplest a box scheme means that each week customers receive a box of fresh vegetables for an agreed price. Three box schemes have been identified in Forth Valley – these include Bellfield Organics (Fife), Grow Wild (Edinburgh) and Slammanan Producers Co-op (Falkirk) which has been inactive for the last 12 months but is likely to re-start. They source as much local ‘in season’ produce as possible.

Customers are happy to receive a variety of produce and often request recipes for the less common varieties.

There is clearly a market for more local production and supply of staple salad, field veg and fruit.

Fruit Barras
Fruit Barras are the equivalent of basic fruit and vegetable food co-operatives. They operate on a membership basis using a pre-order scheme where local people can order fresh fruit and veg. There are seven active fruit barras in Forth Valley.

One example is Cornton Fruit Barra which addresses the limited access to fresh fruit and veg in the Cornton area of Stirling. Located within Cornton Community Centre, it is operated by members of Cornton Parents Association, with produce supplied by a local fruit & veg retailer.

Some communities have little or no access to fresh, affordable seasonal food. Local food schemes like these can help.

Creating a healthy local food economy needs everyone to participate.

Farmers’ Markets
A farmers market is one way in which farmers, growers or producers from a defined local area are present in person to sell their own produce direct to the public. All products sold should have been grown, reared, caught, brewed, pickled, baked, smoked or processed by the stallholder.

Falkirk and Stirling both have monthly markets which have a real potential to raise the profile of local food issues. At these markets many of the stallholders are from outwith Forth Valley. There is scope for additional local producers to participate. FVFL is currently compiling a Local Food Directory of those farmers and growers who are supplying local markets and outlets.
10 ways for the consumer to get local food back on our plates

1. Shop locally and ask for local produce. Local food can make shops distinctive.
2. Visit your local farmers’ markets and try out the delicious produce on offer.
3. Buy direct – seek out farm shops and direct suppliers.
4. Cook a meal made with local produce once a week.
5. Support your village or community market.
6. Ask your local council to provide local food in your schools, hospitals and canteens.
7. Join a vegetable box scheme and get fresh fruit and vegetables delivered to your door.
8. Nothing tastes better than fruit and vegetables straight from the garden. Fresh herbs or salad leaves don’t need much space and you can grow them whether you’ve got a window box, a back garden or an allotment.
9. Make sure your voice is heard – join an organisation such as the Soil Association and Henry Doubleday Research Association which support local food.
10. Check out the local food opportunities in Forth Valley – visit the FVFL website www.fvfl.org.uk

Conclusion
Locally sourced food offers a number of benefits, including healthier diets, local markets for local producers, less food miles as well as a better understanding between producers and consumers. These two ends of the food chain have become separated and need to be reconnected. We can then be sure of our food and let the producers know what we want. It’s time for some local solutions.

Author
Janey Brown, Chief Community Dietitian

Did you know?
Often our food travels the world just to reach our plates. It travels by ship, truck, train and plane, burning precious fossil fuels and releasing carbon dioxide into the atmosphere. Carbon dioxide is a greenhouse gas that contributes to global warming.

Each year we spend around £470 on packaging – that’s about 1/6 of our average household food budget. Some of it can be recycled but most ends up in landfill sites.

It is estimated that every £ we spend on local produce makes twice as much income for the local economy as the same amount spent in a typical supermarket.
Trends and challenges in oral health in Forth Valley

Oral health has been defined as "The standard of health of oral and related tissues without active disease. The state should enable the individual to eat, speak and socialise without discomfort or embarrassment, and contribute to general well-being".

Although oral health as measured by the level of dental caries (tooth decay) has improved markedly in the last three decades it is still the most prevalent disease affecting our children, and a significant problem in adults.

Dental caries trends in children

In the 20 years between 1973 and 1993 levels of dental caries among children in the UK fell dramatically. However since a marked decline in tooth decay in five-year-old children in the first 10 years there has been little further reduction at this age since 1983. There is evidence from local surveys that the mean number of decayed, missing and filled teeth (dmft) at five years has started to rise again (Figure 9.1). Tooth extraction is the main cause of missing teeth in five-year-olds and tooth extraction remains the single most common reason for Scottish children receiving a general anaesthetic.

Looking at the proportion of five-year-old children with no obvious dental decay, Scotland does not compare well with other Western European nations. In the Netherlands for example, 70% of five-year-old children have no obvious dental decay compared with just 45% in Scotland and 45.5% in the Forth Valley. This figure means that meeting the Scottish Executive Health Department (SEHD) target of 60% of five-year-olds free of dental caries by 2010 remains a challenge.

Most of the improvements in dental health in recent years have occurred in children from the more advantaged sections in society, with the brunt of dental disease continuing to be borne by children from more deprived backgrounds. This is illustrated in Figure 9.2, which shows the proportion of children free of obvious dental decay, by deprivation category. It is worth noting that the proportion of disease free children level in the lowest DEPCA area is better than anticipated. This is likely to be due to the impact of the local nursery toothbrushing programme which has been running in Forth Valley targeting more deprived areas.
Dental caries trends in adults
Studies of adult oral health have been carried out in Scotland since 1972\(^3\) the latest being in 1998\(^4\). These studies show that Scotland has poorer oral health than average for the United Kingdom.

Since 1972 the proportion of the population with no natural teeth has fallen from 44% to 18% in 1998. Data from the latest Forth Valley Adult Health and Lifestyle Survey\(^5\) showed similar figures locally, with 18% of adults in Clackmannan and Falkirk and 13% in Stirling having no teeth.

As with children there are inequalities of oral health in adults with 52% of those from the less affluent areas (DEPCA T 6) requiring a partial or full denture compared with 30% in DEPCA T 1 areas.

The SEHD intends that by 2010 more than 95% of 45-54 year olds should have some natural teeth. Figure 9.3 shows that among those aged 35-44 (who will be 45-54 in 2008) 4% have already lost all their natural teeth. This means that no more than 1% of this cohort can lose all their teeth over the next ten years if the target is to be met; another challenge.

Impact of dental disease
While knowledge of the extent of dental disease gives one indication of the extent of dental problems it does not necessarily reflect the problems people experience from their teeth. In recent years an Oral Health Impact Profile (OHIP) has been developed\(^6\) which aims to provide a measure of self-reported dysfunction, discomfort and disability arising from oral conditions. Figure 9.4 shows the impact of seven dimensions that make up the OHIP. It can be seen that over a third of the Scottish population with teeth reported being affected by dental pain occasionally or more often in the preceding 12 months.

Impacting oral health
The main oral diseases: dental caries, gum disease and oral cancer are all preventable. Consequently adopting a preventive and health promoting approach to oral health would be beneficial and has the potential to address health inequalities. Contemporary approaches to health promotion take a common risk factor approach, acknowledging that many diseases and unwanted conditions have common predisposing risk factors. In the context of oral health, poor diet (including low rates of breastfeeding) and smoking are examples of behaviours which impact on oral health as well as general health.

Toothbrushing with a fluoride toothpaste twice a day is an effective preventive method\(^7\) that individuals can adopt, yet only 68% of children have clean teeth and 22% of adults only clean their teeth once a day. Evidence shows that adjusting the level of fluoride of the water supply could be expected to increase the proportion of children free of dental decay by about 15% (i.e. from 45% to 60% in Forth Valley)\(^8\), it would also bring improvement in adults.

Dental services in Forth Valley
General dental practitioners provide the vast majority of dental care within the Forth Valley. Currently there
Dental diseases are wholly preventable

are 110 dentists on the NHS list in Forth Valley, although not all are providing NHS dentistry on a full-time basis. This represents a ratio of one dentist to 2,539 people, which is better than the ratio for Scotland as a whole (1:2,703) but poorer than many other countries (Table 9.01).

<table>
<thead>
<tr>
<th>Dentist / Population ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
</tr>
<tr>
<td>1:2703</td>
</tr>
<tr>
<td>Forth Valley</td>
</tr>
<tr>
<td>1:2539</td>
</tr>
<tr>
<td>England</td>
</tr>
<tr>
<td>1:2508</td>
</tr>
<tr>
<td>UK</td>
</tr>
<tr>
<td>1:2100</td>
</tr>
<tr>
<td>USA</td>
</tr>
<tr>
<td>1:1810</td>
</tr>
<tr>
<td>Norway</td>
</tr>
<tr>
<td>1:1100</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>1:700</td>
</tr>
</tbody>
</table>

Since 2000 there has been a slight increase in the numbers of registered adult patients, from 101,803 to 108,988, while the numbers of children registered with a dentist have remained fairly static at around 42,928. This represents 69% of the child population and 50% of adults.9

There is increasing difficulty in gaining access to NHS dental services both locally and nationally. The reasons for this are complex but in part are due to dentists deciding to provide less treatment under the NHS and in part to a shortage in the available workforce. In addition the heightened awareness of the problem has resulted in an increase in demand.

In addition to general dental practitioners there are a small number of salaried dental practitioners, the majority of whom work within the Community Dental Services (CDS). They provide specialist general anaesthetic services and dental services to a range of children and adults with special dental requirements. The CDS is also responsible for conducting dental epidemiology fieldwork and oral health promotion services. During the year 2002/03 the CDS provided 5,202 courses of treatment (2,818 for children and 2,384 for adults).

A salaried practitioner works at Orchard House to provide routine dental care to patients in a specific postal area and the NHS Board has recently had approval for an additional practitioner to help ease the current problems in access to NHS dental services in Stirling.

Emergency dental services

Dentists provide emergency service for their registered patients but have no requirement to provide emergency care for unregistered patients. As a result of this the NHS Board with local dentists established a Dental Advice Line (DAL) which operates evenings and weekends from Falkirk & District Royal Infirmary. The DAL will treat both registered and unregistered patients if required.

There has been a 43% increase in demand for this service over the past 12 months, with about 80 patients a week contacting the service. A review of the service is nearing completion, which will recommend increasing capacity of the current service.

The future of Primary Care dental services

The current dental contract for NHS dentists is a UK-wide contract. This is due to cease from April 2005 when a new system is planned to come into operation in England and Wales. In Scotland the SEHD undertook a consultation on ‘Modernising NHS Dental Services’ which closed in April 2004, and a response is anticipated before the end of 2004.

Summary

Dental diseases are wholly preventable, yet despite an increase in the numbers of dentists locally a significant proportion of children are still suffering from dental decay with only 45.5% free of dental disease at five years of age.

Locally toothbrushing programmes are having an impact but there is room for an increase in both the effectiveness of cleaning and the numbers of people brushing twice a day with fluoride toothpaste. Evidence shows that water fluoridation does improve dental health but it remains an emotive issue.

The recent SEHD consultation provides an opportunity to redesign the current treatment based NHS dental service and provide a preventive based model. However compared to many other countries Scotland has fewer dentists per head of population. One option to address this could involve a greater use of skill mix to deliver the service. While the consultation provides an opportunity it also presents a challenge to the Scottish Executive, NHS Boards and the dental profession to work together to deliver what should be an achievable goal of improving oral health.

Author

Derek Richards, Consultant in Dental Public Health
References

1. Forth Valley Oral and Dental Health Strategy, 1999-2004


9. www.isdscotland.org/dental

Public health has its origins in the mid-nineteenth century with efforts to improve the appalling sanitary conditions and life expectancy of the poor in Britain’s cities. From the outset it has been a multi-disciplinary, multi-agency effort, with some of the greatest improvements in health being realised by improved sanitation and living conditions rather than by the efforts of health professionals.

Nursing’s contribution dates back to the time of Florence Nightingale, a great public health campaigner. Health visiting, midwifery and school nursing in particular have an entirely public health origin, having developed in response to appalling life expectancy in the late 19th and early 20th Centuries.

Over the past century this important role has become diluted as health services have focussed on individual health care and on measuring and recording activity. The White Paper ‘Towards a Healthier Scotland’1 recognised this change and called for a review of the role of health visitors, school nurses and practice nurses. ‘Nursing for Health’2 published in 2001 heralded a renewed recognition of the vital public health role of health visitors and school nurses and proposed that these roles be combined under a new title Public Health Nursing. This chapter gives some examples of the many exciting local public health initiatives underway across Forth Valley which are led by public health nurses.

**Community mothers’ initiative**

This fixed term project supports breastfeeding within the Stirling area. Mothers are given information antenatally and if they wish will be introduced to a volunteer who visits them before the birth, visits them in hospital and gives them support when they come home. Volunteers are all women who have breastfed successfully themselves and can give that extra support that is sometimes needed. There is also a breastfeeding support group held every Friday in Stirling which mums can then attend. This informal drop in also provides peer support.

**Falkirk youth drop-in clinics**

During consultation with pupils from Falkirk High School interest was expressed in a dedicated service for young people which they could access at venues and times convenient to them.

A range of professionals from partner agencies was convened and agreed to establish a dedicated drop in healthcare service for young people in satellite bases across the Falkirk area. The service would use a health and well being approach to identify innovative ways to take account of young people’s health and social care needs.

Weekly drop-in clinics staffed by at least two staff from primary care, community education or health promotion are now run at Dawson Internet Café, Falkirk College and Tamfourhill Community Centre. The clinics cover a huge range of issues but the main focus is on areas identified as Scottish health priorities. These include unwanted pregnancies, poor diet, smoking, alcohol and drug use, accidents and psychological issues.

Key partners in this project have been NHS Forth Valley, Falkirk High School, Falkirk Community Education Department, Dawson Internet Café, Falkirk and District Association of Mental Health and Connect Youth Falkirk. Funding was provided by a grant of £13,000 from Falkirk Council Social Inclusion Partnership Unit and around £7,000 of in-kind funding from partners.

The youth drop-in clinics have been accessed by around 1,200 young people and as a result staff are able to spend more time discussing these important issues with young people.
The connection between health and the dwellings of people is one of the most important that exists

Florence Nightingale.

Alloa money & benefits advice project - Cheque it out!
The relationship between income and health is well established. The higher one's income the better one's health. Billions of pounds in benefit go unclaimed in the UK each year. Evidence suggests that older people are more likely to be living in poverty and not claiming their full entitlement of welfare benefits.

This mini pilot based on the findings and evidence of the highly successful Greater Easterhouse Money Advice Project was set up over seven weeks within Alloa. It used a nurse administered attendance allowance screening tool to maximise the income of the older people in their care.

The main aims were to contribute to reducing health inequalities and achieving social justice by alleviating poverty and debt problems. This was done by providing Health Centre based access to money and welfare benefits advice, assistance with welfare benefits and debt counselling for individuals that are unable to access alternative support. In addition the project aimed to increase awareness amongst primary care health professionals of the effects of poverty on health, who may be at risk of poverty and debt problems and the range of local agencies who can provide money and benefits information and advice.

This mini pilot involved a health visitor and district nurse opportunistically completing a simple sheet which identified older people likely to meet the criteria for attendance allowance for clients over 65 years of age. This has resulted in 67 referrals to the Citizen’s Advice Bureau Project Worker with 24 financial awards made to date, amounting to a total of £66,793.

A Training Needs Analysis had identified that Primary Care Staff within Alloa Health Centre had no previous training or awareness raising and low levels of confidence on money/benefits advice and did not have a good insight and understanding of current money/benefits issues. Following this, several staff training/update sessions were provided by the Citizen’s Advice Bureau Project Worker.

This Project was funded by the South and East Alloa Social Inclusion Partnership. Key partners include Forth Valley NHS Board (Health Promotion Dept), North Forth Valley Local Health Care Co-operative (LHCC) and Clackmannanshire Citizen’s Advice Bureau.

This project was successful in demonstrating that primary care nurses can support people to take up benefit entitlement. This pilot work was carried out during routine contact with clients and shows that nurses can access hard to reach elderly people and play a key role in tackling health inequalities.

This partnership approach enables complementary skills and resources to be used for the benefit of local people and provides an opportunity for partners to contribute to the wider Health Improvement Agenda.

Mellow parenting programme
This was a three year multi-disciplinary project in Grangemouth, one of the Community School pilot areas. Mellow parenting is an evaluated programme which has been shown to be effective in engaging hard-to-reach families, helping them to make changes in their relationships with their children. The governing body for training and developments is the Association for Child Psychology and Psychiatry in Scotland. Families attend one day a week for 14 weeks.

Dedicated and trained crèche staff are employed to care for the children, allowing facilitators and parents to come together in a non judgmental setting and discuss issues they perceive as being unique to them. Individuals get to know one another very well, this builds trust and friendships amongst parents and good working relationships between parents and Mellow Parenting team members.

Preparation for the course involves home visits and arranging to make video recordings which are then used during the 14 weeks when discussing strategies for behavioral management techniques. After the 14-week programme follow up sessions are arranged to provide on going support. This intensive multi-disciplinary team programme has shown positive outcomes providing help and on going support to each family who has been involved.
Falkirk 'Baby Blues' – postnatal depression support group

Postnatal depression (PND) is common in Forth Valley, although the incidence of reporting varies widely. PND has the potential to affect all family members, can have a long-standing effect on the bonding between mother and child and the cognitive development of the baby. Recognising this problem, two health visitors established a new initiative, the Baby Blues Group.

A community-based approach was used to establish a peer support group for women suffering from PND. Referrals were accepted from all health care professionals for women with an Edinburgh postnatal depression score of 10 or above. Two ten-week community-based programmes to support women with postnatal depression were delivered. Crèche facilities were provided for children whilst women were attending the support group. The aim of the group was to alleviate symptoms of isolation and improve quality of life, and to provide professional support from community psychiatric nurses, health visitors, medical staff and peer group support as appropriate.

The activities covered included an explanation of PND and its symptoms, practical parenting, relaxation techniques, stress, anxiety and panic attack strategies, yoga, sexual function and relaxation techniques, looking after yourself, financial issues, nurturing and bonding, peer support and positive play. The intervention was evaluated and a formal report prepared.

67% of women attending were on antidepressant medication and Edinburgh PND scores ranged from 12 – 23.

Women's expectations on joining the group were as follows:

- Regain sense of humour
- Reduce guilt feelings
- Mutual understanding
- Stop 'blowing things' out of proportion
- Pamper themselves
- No baby talk all the time
- Improve personal relationships.

There were significant common themes in women's perceived problems, these included:

- How to deal with paranoia
- How to deal with criticism
- Improving body image
- How to love themselves
- How to deal with constant anxiety
- Sexual dysfunction.

Evaluation of women's experience of the groups revealed:

- 83% of participants felt the relaxation had proved useful
- 100% of participants had reduced PND scores at the end of the programme.
- 50% liked the thoughts and feelings diary process
- 100% reported improvement in mood.
- 100% felt they were coping better with their depression
- 100% recommended attending another support group or would recommend the support group to others
- 100% reported that they would have been unable to attend without the crèche provided.

The peer support group proved to be cost effective, led to the establishment of unique friendships of women, and was very positively evaluated by participants.

Participants have continued to meet as a voluntary support group, with the second group of participants now joining the first to continue their peer support network.
Alloa pregnant teenagers drop-in

Teenage pregnancy is a major problem in Scotland. Early pregnancy increases risks of poverty, social exclusion and health problems such as pre-term labour and infant mortality. The Director of Public Health’s Annual Report in 2001 showed that Clackmannanshire has a significantly higher proportion of teenage mothers in comparison with the Scottish average. This information was confirmed by local health visitors and the community midwife.

A multi-agency teenage drop-in was proposed to address the needs of this socially excluded group. Local teenage mothers were also consulted and confirmed the need for such a service. It was decided that a weekly drop-in could be held at Alloa Family Centre which has bright accommodation and is centrally located. Once a teenage mother has had her baby, she can attend the ‘Baby Talkgroup’ at the Family Centre. This provides continuity of support for the mothers and stimulation for their babies.

A community midwife is available at the drop-in to provide routine antenatal care and information on pregnancy and child birth. Health visitors and public health nurses are also available to provide practical support and advice on a range of topics. Mothers can attend on their own or with family members or friends. It is hoped that the teenage mothers will form friendships and be supportive of each other.

The service will be shaped by the clients and will develop in accordance with their needs and parenting interests. The mothers are free to talk about concerns they have about their pregnancy, health, parenting skills or other issues. Information and practical demonstrations as well as guest speakers are available on various topics. These will include relaxation and parentcraft, benefits and housing. It is hoped that the drop-in will help these young mothers to gain increased self worth and confidence in becoming parents.

Peer support head lice action group

Head lice still remains a problem in many primary schools not just in Forth Valley but across the UK. A primary school in Clackmannanshire recently arranged for the Public Health Nurse to give a talk on head lice to parents. Following the talk, a small group remained for further discussion and it soon became apparent that further action was required in dealing with head lice, as it remains an emotive issue.

Working in partnership with the Home School Liaison Officer, the Public Health Nurse encouraged a small group of enthusiastic mothers to form an action group against head lice. Training was given over several sessions using the Forth Valley head lice training pack, this included combing, identification of live lice and nits as well as treatments. The mothers have also undergone a Scottish Criminal Records Check, as they will be working with children. Money from New Community School funds was used for this. A logo was devised to give ownership to the initiative (B.A.L.L. Banchor against Live Lice!) and an explanatory leaflet has also been designed and distributed for parents.

Concerned parent to contact Home School Liaison Officer regarding suspicion of lice /treatment failure or lack of knowledge on how to treat.

Liaison Officer contacts member of action group (with parental permission).

Group member arranges with parent to see the child either in school with the parent or to visit their home.

Child seen and appropriate action taken.

Group members can help with education, detection, wet combing and actual treatment of head lice. Using this support/action group to tackle the issue of head lice it is hoped to give parents and carers information, education and the confidence and experience to detect and treat head lice. This will ultimately reduce the number of children and families with ongoing head lice problems. The service is confidential and all participants are aware of this. This head lice initiative is already proving successful and it is hoped that other areas in Forth Valley will wish to adopt this initiative.
In conclusion
Public health nurses bring together community involvement and knowledge of local populations with their personal, clinical training in the health and illness experiences of individuals and families. The introduction of family health assessments and revisions to the child health screening programme are freeing health visitors from more traditional roles to undertake innovative public health initiatives in the community.

References

Further Reading
Being Well - Doing Well A framework for health promoting schools in Scotland.

Author
Graham Foster, Consultant in Public Health

With acknowledgements for contributions from:-
Marion Murray, Health Visitor
Ali Mitchell, Senior Health Promotion Officer
Grace Christie, Public Health Practitioner
Sylvia Lynn, Public Health Nurse - Schools
Julie Sturrock, Health Visitor
Marilyn Gardiner, Health Visitor
Gillian Hendriksen, Public Health Nurse
Margaret Smilie, School Nurse
Shona Penman, School Nurse
CHAPTER 11
Prescription Medicines and Health in Forth Valley

Key Message:
- Medicines are a vital component of healthcare
- Money spent on medicines needs to be balanced against other healthcare priorities
- Medicines can harm as well as benefit individuals
- Everyone needs to ensure best value from money spent on medicines

The importance of prescription medicines
Medicines are a vital component in the treatment and prevention of many diseases and account for around 17% of total expenditure on healthcare in Forth Valley. Medicines are, of course, only one element of healthcare e.g. nonsteroidal anti-inflammatory agents such as ibuprofen are used in managing arthritis but physiotherapy, aids for daily living and sometimes surgery are also required. Drug treatment is often only a part of the effective treatment of disease.

The cost of medicines
About £53 million is spent on prescribed therapy in Forth Valley each year mainly in primary care.

The total annual expenditure of NHS Forth Valley is around £310 million

Expenditure on drugs continues to rise each year averaging about 11.5% over the last four years. This increase in spending is seen throughout Scotland.

Why is spend increasing?
There are a number of reasons:
- therapeutic advances
- the rising costs of new drugs
- an older population and higher prevalence of disease (around half of all NHS prescriptions are prescribed for older people), as currently people over 60 make up 21% of the population of Forth Valley, but this is expected to rise to 26% by 2018
- the desire to ensure the high standards of care recommended by national guidance
- increased patient expectation.
An example of a group of medicines which have contributed to increased spending is statins. These lower raised levels of cholesterol in the blood stream and have proven beneficial effects in the prevention and treatment of heart disease. The spending on statins has steadily increased and they now account for 9% of the drug bill in Forth Valley.

Spending on new medicines
Because new medicines are continually being developed, the NHS must consider value for money, together with areas of prescribing where costs can be reduced. Medicine developments need to be considered alongside costs of other services and programmes. Each year approximately £650,000 is spent on the prescribing of new drugs. Before a new medicine is licensed it is subject to extensive clinical review to ensure its safety and effectiveness but it does not need to be any more effective than existing therapies to receive a licence.

Introducing new medicines
The NHS must provide according to need. Concern about inequity of provision, or ‘postcode prescribing’ prompted the establishment of the Scottish Medicine Consortium, which acts as an independent organisation, to assess the cost effectiveness of new therapies before recommending their place in therapy. At a local level clinicians and managers review these recommendations and determine how these can best be implemented in Forth Valley.

Last year 86 new drugs were reviewed in Forth Valley including five unique therapies for life threatening conditions, such as a new treatment of chronic myeloid leukaemia called Imatinib. Others were alternatives to existing therapy and the increased cost had to be balanced against their perceived benefit e.g. Tenofovir for HIV/AIDS, or only used within strict protocols designed by clinicians to ensure appropriate use e.g. Insulin Glargine in diabetes. About a quarter of the new drugs were not recommended for use due to insufficient evidence of their cost effectiveness or value.

The table below shows the financial implications of the examples mentioned above.

<table>
<thead>
<tr>
<th>New Drug</th>
<th>Cost per patient per annum</th>
<th>Estimated number of patients in FV</th>
<th>Incremental annual cost of adopting use in FV*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imatinib (SMC 26)</td>
<td>£17,500</td>
<td>12</td>
<td>£160,000</td>
</tr>
<tr>
<td>Tenofovir (SMC 03)</td>
<td>£3,060</td>
<td>9</td>
<td>£7,000</td>
</tr>
<tr>
<td>Insulin Glargine (SMC 11)</td>
<td>£300</td>
<td>187</td>
<td>£23,000</td>
</tr>
</tbody>
</table>

*Incremental costs above existing therapy
SMC = Scottish Medicine Consortium

Information on prescribing
Clinicians and managers work together to ensure best practice in medicine use across hospital and primary care. This is helped by good information systems on expenditure together with good clinical information on patient outcomes. However, NHS Scotland is still some way from being in a position to routinely link prescribing to patient information in a way that would allow easy clinical audit, monitoring of the quality of prescribing and strong evidence that added money for new drugs leads to better patient outcomes.

Getting best value for money
There are responsibilities on all of us to make the best use of money spent on medicines, as illustrated by the following range of initiatives:

NHS Forth Valley Formulary
An area formulary providing guidance for clinicians regarding preferred choice of therapy was introduced in Forth Valley in 2003. This is reviewed regularly to ensure that the most cost-effective medicines are included.

Reviewing patients’ medicines
Regular review of patients’ treatment by either their GP, consultant or pharmacist ensures that individual patients are receiving the most benefit from their medicines. In addition education of patients as part of this process results in better patient understanding of the purpose of each medicine.
Prescribing by a range of professionals
As prescribing rights are being extended to other professionals medical, nursing or pharmacy staff may prescribe. Evidence suggests that benefits include fewer hospital admissions, identification of drug related problems, more appropriate prescribing, improved patient outcomes and reduction in medicine costs.

GMS contract
The new General Medical Services (GMS) contract between NHS Forth Valley and general practices has been in place since April 2004. It provides a further opportunity to ensure effective prescribing with a broader, quality-based performance framework focussing on maintaining health rather than just treatment of illness. A number of the quality indicators are likely to have an impact on prescribing with increasing costs at both national and local level e.g. aspirin, beta-blockers and ACE inhibitors in coronary heart disease.

National strategy and new pharmaceutical contract
The Scottish Health Plan, ‘Our National Health’, is committed to improving the way repeat medication is provided. The potential role of pharmacists has been highlighted in the national pharmacy strategy and the new pharmacy contract shortly to be introduced.

Over-the-counter medicines
Nationally there has been unprecedented political support for making more medicines available without prescription to increase access to medicines and give patients greater control of their treatment. The recent Wanless report on resourcing the NHS ‘Securing Our Future Health - Taking a Long-Term View’ looked to a future in which “people increasingly take responsibility for their own health and well-being”. For example, from this summer Simvastatin 10mg (a statin) was made available without prescription at community pharmacies for patients at moderate risk of heart attack or stroke whereas under present guidelines only patients at higher risk are eligible for NHS supply.

Side effects - the other cost of medicines
Medicines can have unexpected and unwanted side effects. Up to 6.5% of all hospital admissions are related to Adverse Drug Reactions (ADRs), costing the NHS in the UK £466m and may be responsible for the death of 1 in 650 patients admitted. Using the fairly loose definition of success of ‘any benefit’, cholinesterase inhibitors (drugs used to try to limit the progression of dementia) helped one patient for every 12 treated but caused side effects bad enough to force discontinuation of the drug in one in every 16 treated.

Wasted medicines
Individuals too have a responsibility for their own health and ensuring money spent on medicines is not wasted. In Forth Valley almost 6,000 kilograms of unwanted medicines were destroyed in 2003. This approximates to a value of £1.2m.

About half of the medicines prescribed for people with chronic conditions are not taken. Evidence suggests that this is based on a considered decision made by patients, rather than just ‘forgetfulness’. This varies with disease. Only 12% of patients on asthma medication compared to 59% of patients with hypertension remain on therapy for a full 12 months. Moving towards shared decision making between patients and healthcare professionals benefits patients understanding about medicines, increases patient satisfaction and leads to some increase in medication adherence.

Over-the-counter medicines
Nationally there has been unprecedented political support for making more medicines available without prescription to increase access to medicines and give patients greater control of their treatment. The recent Wanless report on resourcing the NHS ‘Securing Our Future Health - Taking a Long-Term View’ looked to a future in which “people increasingly take responsibility for their own health and well-being”. For example, from this summer Simvastatin 10mg (a statin) was made available without prescription at community pharmacies for patients at moderate risk of heart attack or stroke whereas under present guidelines only patients at higher risk are eligible for NHS supply.

Side effects - the other cost of medicines
Medicines can have unexpected and unwanted side effects. Up to 6.5% of all hospital admissions are related to Adverse Drug Reactions (ADRs), costing the NHS in the UK £466m and may be responsible for the death of 1 in 650 patients admitted. Using the fairly loose definition of success of ‘any benefit’, cholinesterase inhibitors (drugs used to try to limit the progression of dementia) helped one patient for every 12 treated but caused side effects bad enough to force discontinuation of the drug in one in every 16 treated.

Wasted medicines
Individuals too have a responsibility for their own health and ensuring money spent on medicines is not wasted. In Forth Valley almost 6,000 kilograms of unwanted medicines were destroyed in 2003. This approximates to a value of £1.2m.

About half of the medicines prescribed for people with chronic conditions are not taken. Evidence suggests that this is based on a considered decision made by patients, rather than just ‘forgetfulness’. This varies with disease. Only 12% of patients on asthma medication compared to 59% of patients with hypertension remain on therapy for a full 12 months. Moving towards shared decision making between patients and healthcare professionals benefits patients understanding about medicines, increases patient satisfaction and leads to some increase in medication adherence.
The following table illustrates how the issue of wasted medicines is being tackled in Forth Valley:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>It has been routine practice for patients’ own medicines to be destroyed on admission to hospital</td>
<td>Measures are in place to use patients’ own medicines during their hospital admission to reduce waste, empower patients, facilitate self-administration and improve the availability of medicines at discharge</td>
</tr>
<tr>
<td>Lack of public awareness of wasted medicines</td>
<td>Information leaflets have been produced to encourage public to request only medicines that they require in order to reduce waste. Patients are encouraged to ask for advice from their pharmacist or doctor about any medicines they no longer take. When admitted to hospital they are now asked to bring any medicines which they are currently taking</td>
</tr>
<tr>
<td>Longer term reduction in prescriptions</td>
<td>It is anticipated that encouraging people to take responsibility for leading a healthier lifestyle by taking more exercise, eating a healthy diet, drinking sensibly and stopping smoking will lead to less need for prescription drugs.</td>
</tr>
</tbody>
</table>

**Summary**

Across Forth Valley we have made substantial efforts to ensure that the large amounts of money spent on prescribed medicines provide an effective means of delivering health improvement to our population but there remains much to be done to respond to the ever increasing demand for medicines.

Getting best value from new medicines is important in tackling disease and improving health, but we must always question their value relative to other forms of treatment and rehabilitation. Clinicians and patients working together can achieve much more benefit from the some £53 million spent on prescribed drugs in Forth Valley every year.

**Authors**

Dr Oliver Harding, Consultant in Public Health
References

1. Additional Chapter on Drugs, Costs Book 2003, Information and Statistics Division, NHS Scotland


   Crown Copyright, London


5. Securing Our Future Health: Taking a Long-Term View Final Report Derek Wanless April 2002
   http://www.hm-treasury.gov.uk/Consultations_and_Legislation/wanless/consult_wanless_final.cfm


10. Weiss M and Britten N. What is concordance
   Pharmaceutical Journal 271:493 2003


CHAPTER 12
What is Domestic Abuse?

Domestic abuse can be perpetrated by partners or ex-partners and can include physical abuse and sexual abuse (acts which degrade and humiliate women, including rape). Domestic abuse also includes mental and emotional abuse such as threats, verbal abuse, racial abuse, withholding money and controlling behaviours such as isolating the victim from family and friends.

It is overwhelmingly women and children who experience domestic abuse and men who are the perpetrators (Figure 12.1). The National Strategy 2000 states that “The existence of violence against men is not denied, nor is the existence of violence in same sex relationships, nor other forms of abuse, but domestic abuse requires a response which takes account of the gender specific elements and the broader gender inequalities which women face.” Domestic abuse also affects children living in the victim’s home and there are links between domestic abuse and all forms of child abuse.

Research on domestic abuse against men in Scotland for the Scottish Executive in 2001/02 showed far fewer male than female victims of domestic abuse in Scotland. Male victims’ experiences of domestic abuse are not completely dissimilar to women’s. Indeed, there are some men who experience prolonged and damaging forms of abuse from partners. But, in general, male victims experience abuse that is less frequent and less severe than that experienced by female victims.

The report further concluded that there was little need for a new agency whose specific remit is to support male victims of domestic abuse in Scotland.

What are the facts about domestic abuse?
- Central Scotland Police Domestic Abuse Unit dealt with 2,190 referrals between January 2003 and March 2004.
- In the UK two women are murdered every week as a result of domestic abuse.
- In the ten years prior to 1999 54% of female murder victims aged between 16 and 69 were killed by a partner. The figure for males was 8%.
- 25% of all reported violent crime is related to domestic abuse.
- One in four women experience domestic abuse at some point in their lives. It is the most common form of crime against women in the UK.
- Many abusers will pursue their ex-partners for many years across the country.
- Many abusers deliberately exploit contact arrangements with children to further control and harass their partners/ex-partners.
- Women of different ages, ethnicity, class, sexuality, culture, religion, mental and physical ability, experience domestic abuse. There is no typical abused woman: similarly, there is no typical abusive man.
- Men who are perpetrators of abuse will make excuses, seek to blame the woman, not take responsibility for their actions or deny the abuse or seek to minimise it.
- Domestic abuse usually begins early on in the relationship – it is particularly common during pregnancy, escalating in frequency and intensity over time. Women often endure abuse for several years before being able to leave. This, together with low prosecution and recording rates, can make domestic abuse a largely invisible crime which knows no social and economic boundary.
Research from Scottish Women’s Aid found that:

- 70% of men who abuse their wives also physically abuse their children.
- 90% of children are in the same room or the next room during attacks on their mother.
- One third of children attempt to intervene directly or by diverting attention to themselves.
- Inquires into child deaths in the UK indicate a context of domestic abuse in a large proportion of cases where children have died as a result of physical abuse.

The response to domestic abuse in Forth Valley

Domestic abuse is recognised as a public health issue and within the Forth Valley area three local multi-agency partnerships, or forums, meet with the aim of improving service provision and raising awareness locally. NHS Forth Valley has representatives on these partnerships and supports local initiatives.

The Scottish Executive, along with NHS Forth Valley, Stirling, Clackmannanshire and Falkirk Councils and Central Scotland Police have, since 2000, funded a training initiative to provide relevant multi-agency training. To date 2000 professionals from a wide range of disciplines have participated in this training, which aims to improve the provision of relevant services and promote partnership working.

Guidelines for health care workers in NHS Scotland

In 2003, the Scottish Executive published Guidelines for Health Care Workers in NHS Scotland. This document recognises that a multi-agency response is the most effective way of addressing domestic abuse as it ensures a coherent and cohesive approach based on the needs of people experiencing domestic abuse and their dependants. It also enables resources to be targeted. Forth Valley NHS Board is implementing these guidelines. A seminar is planned for March 2005 to raise awareness amongst all health professionals.

The guidelines emphasise the link between child abuse and domestic abuse. Since February 2004, midwives in the Forth Valley area have been looking at the interrelated issues of domestic abuse and child protection, in recognition of the significant overlap between these two areas. Midwives are encouraged to ask women routine questions during pregnancy about domestic abuse, and to offer support including referral to local specialist agencies.

Good practice emphasises the need for widely available public information. NHS Forth Valley have produced information stickers to be placed in public lavatories with relevant information for women experiencing abuse.

Partnership with Central Scotland Police

Partnership working and the link between public health and community safety is recognised. A police officer from Central Scotland Police Community Safety Policy Unit is seconded to the Public Health Directorate as Health Service Liaison Officer. The role has served as a conduit between the health and police service to promote partnership working.

The Health Service Liaison Officer is an active member of several groups which are working to improve the services, support and care being offered to victims of domestic abuse in Forth Valley.

At a national level, domestic abuse awareness training is carried out at the Scottish Police College for both probationer police constables and for specialists who deal with domestic abuse cases. Locally, Stirling Women’s Aid provides awareness training to probationer police constables at Central Scotland Police Headquarters. Multi-agency domestic abuse awareness training is also available to police officers.

Public campaigns and future developments

Good practice emphasises the need for widely available public information. The Domestic Abuse Training Co-ordinators have produced pocket sized information cards with relevant information and contact numbers, and are currently planning the production of information in other formats for women whose first language is not English.
Domestic abuse affects the health, social development, education and general well being of children and young people. It is a concern for all public agencies, and communities have a collective responsibility to challenge and take action on domestic abuse. Women experiencing domestic abuse must be taken seriously and consideration for their safety given at all stages. Preventative strategies and policies for working with abused women and children need to be developed.

Authors
Dr Rani Balendra, Consultant in Public Health Medicine
Allyson Blair, Police Health Service Liaison Officer
Nina Torbett, Senior Health Promotion Officer
Liz Watson, Domestic Abuse Trainer

References
1. National Strategy to Address Domestic Abuse in Scotland, Scottish Executive, 2000
3. Hitting Home, 1997, HMIC
5. www.domesticviolencedat.org


CHAPTER 13

The Tullibody Healthy Living Initiative

Tullibody is situated in Clackmannanshire to the east of Forth Valley in the foothills of the Ochils. This was once an area with three major industries; breweries, mines and woollen mills. These industries have all gone and Tullibody is now an area of economic inactivity with high unemployment. Tullibody has been designated a priority area by the East of Scotland European Partnership which manages and implements the European Regional Development Fund.

The Clackmannanshire Council area is the eighth most deprived Council area out of 32 Council areas in Scotland. Tullibody falls within the 10% most deprived electoral wards in Scotland (six wards within Forth Valley fall into this category) and experiences poorer health than other areas within Clackmannanshire. It is vital that the Council, NHS Forth Valley and other partners give priority to improving the life circumstances and health of the people living in the community of Tullibody.

Within Clackmannanshire Tullibody has

- the highest levels of unemployment and economic inactivity
- the highest rate of limiting long term illness
- a higher rate of coronary heart disease than Clackmannshire and Forth Valley
- the highest uptake of free school meals and footwear and clothing grants.

Figure 13.1 shows how Tullibody compares with the Scottish average for a number of indicators

![Spine graph for postcode sector FK10 2 (Tullibody & Alloa West)](image)

<table>
<thead>
<tr>
<th>Area</th>
<th>Indicator</th>
<th>Number</th>
<th>Measure</th>
<th>Rate/%</th>
<th>Time period</th>
<th>-/0/+</th>
<th>+/ -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Demographics</td>
<td>In-pensioners in previous year</td>
<td>781</td>
<td>5.3</td>
<td>%</td>
<td>2001</td>
<td>-35</td>
<td>-10</td>
</tr>
<tr>
<td></td>
<td>In-pensioners in previous year</td>
<td>618</td>
<td>4.7</td>
<td>%</td>
<td>2001</td>
<td>-15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sickness absence in previous year</td>
<td>88</td>
<td>14.6</td>
<td>%</td>
<td>2000</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lone births per thousand babies</td>
<td>29</td>
<td>7.8</td>
<td>%</td>
<td>2000</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult unemployment to over 16 years</td>
<td>1210</td>
<td>14.9</td>
<td>%</td>
<td>2000</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Function</td>
<td>Attendance for hospital outpatient consultaions</td>
<td>545</td>
<td>17.6</td>
<td>%</td>
<td>1999</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attendance at G.P. consultation</td>
<td>710</td>
<td>23.9</td>
<td>%</td>
<td>2000</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-assessed health classified as &quot;poor&quot;</td>
<td>1811</td>
<td>17.2</td>
<td>%</td>
<td>2001</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Related in-patients/total hospital admissions</td>
<td>152</td>
<td>9.6</td>
<td>%</td>
<td>1999-2001</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total smokers</td>
<td>1490</td>
<td>16.6</td>
<td>%</td>
<td>2001</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smoking-attitudes survey</td>
<td>1160</td>
<td>38.3</td>
<td>%</td>
<td>2007</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sickness absence for galvanises</td>
<td>114</td>
<td>13.1</td>
<td>%</td>
<td>2000-2001</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Offsickness absence in previous year</td>
<td>981</td>
<td>23.4</td>
<td>%</td>
<td>2000-2001</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deaths in weekly for total mortalities</td>
<td>191</td>
<td>22.8</td>
<td>%</td>
<td>2007</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Life expectancy for total mortality</td>
<td>7881</td>
<td>83.2</td>
<td>yr</td>
<td>2001</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infant mortality</td>
<td>1797</td>
<td>18.3</td>
<td>%</td>
<td>2001</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social grade E</td>
<td>919</td>
<td>29.3</td>
<td>%</td>
<td>2001</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent of unemployed males</td>
<td>1351</td>
<td>16.6</td>
<td>%</td>
<td>2001</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployed females</td>
<td>297</td>
<td>3.7</td>
<td>%</td>
<td>2001</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployed males</td>
<td>355</td>
<td>4.4</td>
<td>%</td>
<td>2001</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployment to over 16 years</td>
<td>797</td>
<td>11.3</td>
<td>%</td>
<td>2000</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average weekly income</td>
<td>349</td>
<td>349</td>
<td>£</td>
<td>2001</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average gross monthly income</td>
<td>2153</td>
<td>14.9</td>
<td>%</td>
<td>2002</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average net weekly income</td>
<td>2153</td>
<td>14.1</td>
<td>%</td>
<td>2002</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>
| Notes:        | 1. The graph shows the measure (e.g. crude rate, percentage) expressed as a percentage below or above the Scottish measure, but using a range from a minimum of -70% to a maximum of +70% only. This is calculated as the area 'measure' minus the Scottish measure divided by the Scottish measure multiplied by 100.
|               | 2. Average annual numbers and rates                                        |        |         |        |                                                 |         |        |
|               | 3. Social Grade A: Higher & intermediate managerial/administrative/professional occupations; Social Grade E: on state benefit, unemployed, lowest grade workers
|               | 4. Employee numbers based on location of business, not residence area of employees
| Key:          | - crude rate per 100 population                                            |        |         |        |                                                 |         |        |
|               | + crude rate per 100 population                                            |        |         |        |                                                 |         |        |
|               | — crude rate per 1000 population                                           |        |         |        |                                                 |         |        |
|               | 1. Soc. Grade A: Higher & intermediate occupations                         |        |         |        |                                                 |         |        |
|               | 2. Social Grade E: on state benefit, unemployed, lowest grade workers      |        |         |        |                                                 |         |        |
| Source:       | © NHS Health Scotland, 2004                                               |        |         |        |                                                 |         |        |

Crown copyright material is reproduced with the permission of the Controller of HMSO and the Office of the Queen’s Printer for Scotland.
The Tullibody Healthy Living Initiative

The Tullibody Healthy Living Initiative was set up in 2003 with funding from the New Opportunities Fund (NOF) now known as the Big Lottery Fund. £904,000 was allocated for the five years of the Initiative. Partner agencies, such as the NHS and Council have also committed resources such as staff time and involvement in programmes to the project.

The co-ordinator for the initiative came into post early in June 2003. The Tullibody Healthy Living Centre is now based in premises at Tron Court, the main shopping and social area within the area. This ensures that most of the local people, many of who have no transport, can easily reach the project. The centre at Tron Count has encouraged public and other services to use this resource to promote their services to those in the community who may otherwise be difficult to reach. The Centre provides and supports a comprehensive range of activities encompassing a holistic and broad concept of health. The centre works with existing services to extend their availability to all sections of the local community. The project has a particular focus on those who are at greatest risk of being excluded from mainstream society and public services. All those working in the centre aim to promote health in its widest sense through economic, leisure, advice, family support and health promotion activities.

The anticipated benefits to the Tullibody population include:

- improvement in positive health
- improvement in income though employment and higher educational attainment
- further strengthening Tullibody as a cohesive positive community
- improvements to the physical environment in Tullibody
- A better quality of life for young people and adults.

Statutory, voluntary and community agencies and individuals have worked to develop the initiative. Partners include the NCH Tullibody Family Project, Tullibody Credit Union Limited, Clackmannanshire Leisure, Delphwood Residents Association, Central Scotland Police, Clackmannanshire Volunteer Development Agency, NHS Forth Valley and Banchory Primary School Parent Teacher Association.

Consulting with the people in Tullibody

At a very early stage the Initiative asked local people about their concerns and their wishes for the project. Examples included the need for more activities for children and young people in Tullibody. Young people highlighted the cost of public transport to travel to leisure activities in nearby Alloa while others were concerned about sexual health issues. Some adults were worried about the impact of a new road bypass.

Tullibody Healthy Living Initiative offers the following range of activities and services

- arts activities
- outdoor recreation
- sports development
- health promotion
- healthy eating
- complementary therapies
- substance misuse support
- parenting groups
- support for children and their families
- training opportunities
- childcare training
- debt and money advice
- youth drop in
- advice on physical and mental health

Local people recognise that the healthy living initiative includes a wide range of services and support identified as needed by them through the earlier consultation. The consultation process is ongoing and people will continue to be able to identify what they feel the local needs are and how these are being addressed.
Some examples of the work of the Healthy Living Centre

Art Projects
The centre ran an Art Deco Project at Tullibody Family Centre with funding from a range of partners including Clackmannanshire Council and the Tullibody Healthy Living Initiative. A group of nine young people worked with local artist Karen Strang over eight weeks to explore and examine the Art Deco style, popular in the early 1920’s. The group visited the Lighthouse in Glasgow and its Rennie Mackintosh Education Centre so that the group could inspect a range of styles. The group worked on a stained glass Art Deco design exhibited at the Victoria and Albert Museum.

In a subsequent art class called ‘Inside Outside’ ten local women used art to represent their life in Tullibody. This class was very successful in promoting community development and raising self-esteem. Comments from this group of women included:

"I really enjoyed my time at the art class"

"I find this very relaxing, which I need with having two children............"

"I started the group thinking I’m no good at art now I know different"

"I have had a ball and I’m sad that it’s come to an end...."

"The art teacher is a wonderful person and has a wonderful way of encouraging us and has given even the quietest of people a confidence boost."

Promoting sexual health
There are proposals to offer outreach clinics run by Caledonia Youth within THLC. Caledonia Youth is a sexual health service tailored specifically for the needs of young people and is based in Falkirk. Young people will have confidential access to health professionals for advice on sexual health such as pregnancy testing, contraceptive advice, emergency contraception, chlamydia testing and counselling. Separately the NHS Forth Valley sexual health team, through its barbers shop condom scheme, supply barbers shop in Tullibody with around 800 condoms per month and Tullibody Health Centre at Tron Court with around 150 condoms per month.

‘New Approaches’ to employment
‘New Approaches’ is an employment and training support project based in the community which helps unemployed people return to work by offering a range of advice, information and personal support. It also helps employers in Forth Valley to recruit staff. Within Tullibody by May 2004 the project had:

• helped to secure specific job training for eight people
• helped four people with training and employment costs
• secured employment for 11 people.

In addition unemployed adults have access to computer facilities in the THLC premises which enables them in their training and to find employment.

Fruit Barras
Fruit Barras are based on fruit and vegetable food cooperatives. They operate on a membership basis using a pre-order scheme where local people can order fresh fruit and vegetables. Preparations for the Tullibody Fruit Barra scheme are now complete. Two community volunteers will be supported by the THLI co-ordinator to develop and promote the scheme to its full potential. The Community Food Initiative has awarded £500 to help set up this scheme.

Access to computers
The Scottish Executive awarded The Tullibody Healthy Living Centre (THLC) two computer packages with two years free internet access for community use funded by the Public Internet Access Point Scheme (PIAPS). The computers are available for use by the community and it is hoped that this will give local residents an increased awareness of other services and activities available via the Healthy Living Initiative. Several children use the computers after school for homework and games.
The Tullibody allotment scheme

Two adult volunteers are hoping to develop a local allotment scheme. Young people have also volunteered. Allotment schemes provide a sense of pride and ownership that improves mental well being and adds the health benefits of eating freshly grown local produce.

Increasing awareness of cancer through health promotion

Forty pensioners attended an awareness raising session on early symptoms of bowel cancer given by members of the Bowel Cancer Awareness Project team.

Summary

The funding and development of the Tullibody Healthy Living Initiative is the result of much work and efforts by individuals and organisations committed to improving the health of the people of Tullibody. The Initiative will continue to run many projects and activities designed to promote health and increase opportunities for local people. The community involvement has been very successful. It not only provides advice on leading healthy lifestyles but also provides support for children and their families and for the unemployed. It is a hub where individuals and groups can come together and receive community support for individuals and groups in need. The project has fostered a sense of pride and belonging and is growing in strength and community ownership.

Authors

Marjory Sutherland, Tullibody Healthy Living Centre Co-ordinator
Dr Aileen Holliday, Health Effectiveness Co-ordinator, NHS Forth Valley
# Appendix 1

## Directorate of Public Health Staff at September 2004

### PUBLIC HEALTH

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department/Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Malcolm McWhiter</td>
<td>Director of Public Health/Chief Administrative Medical Officer</td>
<td></td>
</tr>
<tr>
<td>Dr Rani Balendra</td>
<td>Consultant in Public Health Medicine (Screening and Health Promotion)</td>
<td></td>
</tr>
<tr>
<td>Dr Graham Foster</td>
<td>Consultant in Public Health Medicine (Acute Services and Child Health)</td>
<td></td>
</tr>
<tr>
<td>Dr Oliver Harding</td>
<td>Consultant in Public Health Medicine (Community and Priority Services)</td>
<td></td>
</tr>
<tr>
<td>Dr Henry Prempah</td>
<td>Consultant in Public Health Medicine (Communicable Diseases, Environmental Health and Emergency Planning)</td>
<td></td>
</tr>
<tr>
<td>Dr Neil Hamlet</td>
<td>Specialist Registrar in Public Health Medicine</td>
<td></td>
</tr>
<tr>
<td>Mr Derek Richards</td>
<td>Consultant in Dental Public Health (p/t)</td>
<td></td>
</tr>
<tr>
<td>Dr Warren Luke</td>
<td>Medical Assessor for Housing (Sessional)</td>
<td></td>
</tr>
<tr>
<td>Dr Ian MacGregor</td>
<td>Medical Assessor for Housing (Sessional)</td>
<td></td>
</tr>
<tr>
<td>Mrs Carole Morrison</td>
<td>Service Advisor/Acting Nurse Advisor</td>
<td></td>
</tr>
<tr>
<td>Mrs Sarah Murdoch</td>
<td>Public Health Infection Control Nurse</td>
<td></td>
</tr>
<tr>
<td>Ms Deidre Power</td>
<td>Health Protection Nurse</td>
<td></td>
</tr>
<tr>
<td>Mrs Elizabeth McGovem</td>
<td>Consultant in Pharmaceutical Public Health (joint post with Argyll and Clyde NHS Board)</td>
<td></td>
</tr>
<tr>
<td>Dr Aileen Holiday</td>
<td>Health Effectiveness Co-ordinator (p/t)</td>
<td></td>
</tr>
<tr>
<td>Dr Kain Balloch</td>
<td>Health Effectiveness and Ethics of Research Officer</td>
<td></td>
</tr>
<tr>
<td>Mr Ian Orr</td>
<td>Emergency Planning Officer</td>
<td></td>
</tr>
<tr>
<td>Mrs Allyson Blair</td>
<td>Health Service Liaison Officer (seconded from Central Scotland Police)</td>
<td></td>
</tr>
<tr>
<td>Ms Andrea Belgrave</td>
<td>Personal Assistant to Director of Public Health</td>
<td></td>
</tr>
<tr>
<td>Miss Anne Gregor</td>
<td>Secretary – Communicable Diseases and Environmental Health</td>
<td></td>
</tr>
<tr>
<td>Miss Lesley Anderson</td>
<td>Secretary – Health Effectiveness/Ethics of Research (p/t)</td>
<td></td>
</tr>
<tr>
<td>Mrs Charlotte Holland</td>
<td>Secretary – Public Health Infection Control (p/t)</td>
<td></td>
</tr>
<tr>
<td>Mrs Heather MacDonald</td>
<td>Secretary – Housing/Health Promotion &amp; Screening</td>
<td></td>
</tr>
<tr>
<td>Ms Hazel McMahon</td>
<td>Secretary – Emergency Planning Project (BCAP)* (p/t)</td>
<td></td>
</tr>
<tr>
<td>Mrs Valerie Redpath</td>
<td>Secretary – Priority and Acute Services</td>
<td></td>
</tr>
</tbody>
</table>

p/t = part time

### HEALTH PROMOTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department/Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucy Denvir</td>
<td>Health Promotion Manager</td>
<td></td>
</tr>
<tr>
<td>Kathleen Green</td>
<td>Personal Secretary</td>
<td></td>
</tr>
<tr>
<td>Jacqueline Rickard</td>
<td>Support Services Manager</td>
<td></td>
</tr>
<tr>
<td>Post Vacant</td>
<td>Senior Health Promotion Officer, Community</td>
<td></td>
</tr>
<tr>
<td>Elaine Hanton</td>
<td>Support Worker, Community &amp; Physical Activity &amp; Oral &amp; Dental Health &amp; NHS</td>
<td></td>
</tr>
<tr>
<td>Ann McLaughlin</td>
<td>Senior Health Promotion Officer, Education</td>
<td></td>
</tr>
<tr>
<td>Jude Grimshaw</td>
<td>Health Development Officer (Fallirk), Education</td>
<td></td>
</tr>
<tr>
<td>Elaine Lawlor</td>
<td>Health Development Officer (Stirling), Education</td>
<td></td>
</tr>
<tr>
<td>Ann McArthur</td>
<td>Health Development Officer (Clackmannianshire), Education</td>
<td></td>
</tr>
<tr>
<td>Denise Roberts</td>
<td>Support Worker, Education</td>
<td></td>
</tr>
<tr>
<td>Post Vacant</td>
<td>Senior Health Promotion Officer, NHS</td>
<td></td>
</tr>
<tr>
<td>Rhona Denham</td>
<td>Health Promotion Officer (p/t), NHS</td>
<td></td>
</tr>
<tr>
<td>Nina Torbett</td>
<td>Senior Health Promotion Officer, Workplace</td>
<td></td>
</tr>
<tr>
<td>Aileen Anderson</td>
<td>Health Promotion Officer, Workplace</td>
<td></td>
</tr>
<tr>
<td>Jacqui Ferguson</td>
<td>Scotland’s Health At Work (SHAW) Co-ordinator, Workplace</td>
<td></td>
</tr>
<tr>
<td>Kathleen Gilmour</td>
<td>Support Worker, Scotland’s Health At Work, Workplace (p/t)</td>
<td></td>
</tr>
<tr>
<td>Liz Watson</td>
<td>Domestic Abuse Training Co-ordinator (p/t)</td>
<td></td>
</tr>
<tr>
<td>Jill Smith</td>
<td>Domestic Abuse Training Co-ordinator (p/t)</td>
<td></td>
</tr>
<tr>
<td>Janet Moran</td>
<td>Support Worker, Domestic Abuse Training (p/t)</td>
<td></td>
</tr>
<tr>
<td>Kevin MacLennnan</td>
<td>Senior Health Promotion Officer, Health Information &amp; Resources Service (HIRS)</td>
<td></td>
</tr>
<tr>
<td>Sharon O’Neil</td>
<td>Resources Officer, (HIRS) (p/t)</td>
<td></td>
</tr>
<tr>
<td>Scott Findlay</td>
<td>Resources Officer, (HIRS)</td>
<td></td>
</tr>
<tr>
<td>Margaret Smith</td>
<td>Assistant Resources Officer, (HIRS) (p/t)</td>
<td></td>
</tr>
<tr>
<td>Post Vacant</td>
<td>Support Worker, (HIRS)</td>
<td></td>
</tr>
<tr>
<td>Tom Houston</td>
<td>Senior Health Promotion Officer, INTER-ACT</td>
<td></td>
</tr>
<tr>
<td>Mary Scott Watson</td>
<td>Education Officer, INTER-ACT</td>
<td></td>
</tr>
<tr>
<td>Shona Storer</td>
<td>Project Secretary (p/t)</td>
<td></td>
</tr>
<tr>
<td>Tina Evangelson</td>
<td>Senior Health Promotion Officer, Oral &amp; Dental Health (p/t)</td>
<td></td>
</tr>
<tr>
<td>Post Vacant</td>
<td>Health Promotion Officer, Physical Activity</td>
<td></td>
</tr>
<tr>
<td>Pamela Vannan</td>
<td>Senior Health Promotion Officer, Sexual Health</td>
<td></td>
</tr>
<tr>
<td>Joe Hamill</td>
<td>Health Promotion Officer, Sexual Health</td>
<td></td>
</tr>
<tr>
<td>Johanna Savage</td>
<td>Health Promotion Officer, Sexual Health</td>
<td></td>
</tr>
<tr>
<td>Kate Tedcastle</td>
<td>General Administrative Assistant, Sexual Health</td>
<td></td>
</tr>
<tr>
<td>Kate Johnstone</td>
<td>Smoking Cessation Co-ordinator (p/t)</td>
<td></td>
</tr>
<tr>
<td>Denise Roberts</td>
<td>Support Worker, Smoking Cessation</td>
<td></td>
</tr>
<tr>
<td>Theresa Martinus</td>
<td>Senior Health Promotion Officer, Substance Use</td>
<td></td>
</tr>
<tr>
<td>Post vacant</td>
<td>Health Promotion Officer, Substance Use</td>
<td></td>
</tr>
<tr>
<td>Post Vacant</td>
<td>Support Worker, Substance Use, (p/t)</td>
<td></td>
</tr>
<tr>
<td>Judith Morgan</td>
<td>Project Manager, Bowel Cancer Awareness Project (BCAP)* (p/t)</td>
<td></td>
</tr>
<tr>
<td>Trish Tougher</td>
<td>Project Manager, (BCAP)* (p/t)</td>
<td></td>
</tr>
<tr>
<td>Fidelma Guest</td>
<td>Project Officer, (BCAP)*</td>
<td></td>
</tr>
<tr>
<td>Elaine Cochrane</td>
<td>Project Officer, (BCAP)*</td>
<td></td>
</tr>
<tr>
<td>Winnie McCurry</td>
<td>Project Officer, (BCAP)*</td>
<td></td>
</tr>
<tr>
<td>Dr Alex Sanchez-Vivar</td>
<td>Medical Liaison Link, (BCAP)* (p/t)</td>
<td></td>
</tr>
<tr>
<td>Elizabeth Guthrie</td>
<td>Office Manager, (BCAP)*</td>
<td></td>
</tr>
<tr>
<td>Anne Hutcheson</td>
<td>Administrative Support, (BCAP)* (p/t)</td>
<td></td>
</tr>
<tr>
<td>Morag MacKellar</td>
<td>Public Health Nutritionist, Department of Nutrition &amp; Dietetics**</td>
<td></td>
</tr>
<tr>
<td>Janey Brown</td>
<td>Chief Community Dietitian, Department of Nutrition &amp; Dietetics** (p/t)</td>
<td></td>
</tr>
<tr>
<td>Lesley Hetherington</td>
<td>Community Dietitian, Department of Nutrition &amp; Dietetics** (p/t)</td>
<td></td>
</tr>
<tr>
<td>Anne Clarke</td>
<td>Community Dietitian, Department of Nutrition and Dietetics**</td>
<td></td>
</tr>
</tbody>
</table>

p/t = part time

*Bowel Cancer Awareness Project (BCAP) is a special project funded by the Big Lottery covering Forth Valley and Lanarkshire NHS Board areas.

**Not directly managed by Health Promotion Department
Appendix 2

Changes in General Practitioners in Forth Valley between September 2003 and September 2004

General Practitioners taking up post
- Dr George A Ruiz, The Richmond Practice, Health Centre, Dean Rd, Bo’ness
- Dr Nicola J Howland, 33 Bo’ness Road, Grangemouth
- Dr Theresa M Cannavina, 6 Park Street, Falkirk
- Dr David Wearden, The New Allan Park Practice, 19 Allan Park, Stirling
- Dr Matthias Schmautz, Health Centre, Killearn
- Dr Fergus R MacLean, Edenkiln Surgery, 12 Dumbrock Road, Blanefield
- Dr Fiona McAreevey, 10 Meeks Road, Falkirk
- Dr Philip Gaskell, Allan Park Medical Practice, 19 Allan Park, Stirling
- Dr Euan D A Hogarth, Grange Medical Group, Kersiebank Avenue, Grangemouth
- Dr Trudy L Foster, Viewfield Medical Centre, 3 Viewfield Place, Stirling
- Dr Carolyn M H Hogarth, 10 Meeks Road, Falkirk

General Practitioners leaving post
- Dr Allyson D Gawn,** 33 Bo’ness Road, Grangemouth
- Dr Nicola J Howland,** 6 Park Street, Falkirk
- Dr John H S Ainsworth,** The Clinic, Bank Street, Slamannan
- Dr Ellen Hoida,** 10 Meeks Road, Falkirk
- Dr Mary T Higgins,** The New Allan Park Medical Practice, 19 Allan Park, Stirling
- Dr Cheyta J McCall,** Rosemount, Health Centre, Dean Road, Bo’ness
- Dr David Wearden,** The New Allan Park Practice, 19 Allan Park, Stirling
- Dr Jason G Twinn,** Grange Medical Group, Kersiebank Avenue, Grangemouth
- Dr Ian R Richardson,* Health Centre, Firs Entry, Bannockburn
- Dr Euan D A Hogarth,* Health Centre, Park Drive, Stenhousemuir, Larbert
- Dr Jane H Martin,** Health Centre, Park Drive, Stenhousemuir, Larbert

* General Practitioners who have retired
** General Practitioners who have resigned

Changes in Consultants in Forth Valley between September 2003 and September 2004

FORTH VALLEY PRIMARY CARE OPERATING DIVISION

Consultants taking up post
- Dr Brian Timney
- Dr Chartres Prinlso
- Dr Wendy MacFarlane (locum)

Consultants leaving post
- Dr Manus Prabhu
- Dr Geraldine MacFlynn
- Dr Stuart Conway
- Dr Duncan McAree

FORTH VALLEY ACUTE HOSPITALS OPERATING DIVISION

FALKIRK & DISTRICT ROYAL INFIRMARY

Consultants taking up post
- Dr Joyce Leman
- Dr Hilary MacPherson
- Dr Christian Neumann

Consultants leaving post
- Dr Kenneth Grant
- Dr Margaret Macleod
- Dr Peter McSorley

STIRLING ROYAL INFIRMARY

Consultants taking up post
- Dr Fiona McIlveney
- Dr Clara Ekevall
- Mr Richard MacCallum
- Dr Michael Colvin
- Dr Jennifer Gillan
- Dr Chris Cairns

Consultants leaving post
- Dr Aloysius Michels
- Dr Anne McLellan
- Mr Gordon Mackay

Consultants taking up post
- Consultant Dermatologist
- Consultant Neurologist
- Consultant in Obstetrics & Gynaecology
- Consultant in Accident & Emergency
- Consultant Ophthalmologist
- Consultant Anaesthetist

Consultants leaving post
- Consultant in Obstetrics & Gynaecology
- Consultant in Neurology
- Consultant in Accident & Emergency
- Consultant Paediatrician
- Consultant Ophthalmologist
- Consultant Anaesthetist
Appendix 3

Acknowledgements

I gratefully acknowledge the support and assistance of:

The Chairman and members of the current Forth Valley NHS Board.

The Chief Executive and Executive Directors of Forth Valley NHS Board, Consultants and other staff in the Department of Public Health, Department of Health Promotion, the Information Services Team, and the Communications Team.

Susanne McLellan and Euan Headridge for their statistical analysis throughout the report.

Those who contributed to the chapters in this report: Rani Balendra, Henry Prempeh, Graham Foster, Oliver Harding, Allyson Blair, Euan Headridge, Corrine Gallagher, Kate Lancaster, Derek Richards, Liz Watson, Nina Torbett, Sarah Murdoch, Janey Brown, Elizabeth McGovern, Aileen Holliday, David Syme, Chris Holden, Ankie De Laat, Elaine Turner, Dee Melia, Neil Hamlet, Aileen Doherty, Caroline Renwick, Gregor Murdoch, John Ross, Gordon Muircroft, Kate Johnstone, Susan Bishop, Gillian Bruce, Marjory Sutherland and other colleagues. Thanks also to my colleagues who read the final draft.

Aileen Holliday who edited the chapters contained within this report.

Corrine Gallagher and Kate Lancaster for their support in the final proof reading and publication.

Information and Statistics Division,
Common Services Agency
Registrar General Scotland

Healthcare professionals in both the Primary Care Operating Division and Acute Operating Division.

The various other organisations and individuals who have provided valuable advice and feedback.

Further copies of this report are available free of charge from:
Andrene Belgrove,
Directorate of Public Health,
Forth Valley NHS Board,
33 Spittal Street,
Stirling,
FK8 1DX

Tel: 01786 457271

Email: andrene.belgrove@fvhb.scot.nhs.uk
It can also be accessed at our website:
http://www.show.scot.nhs.uk/nhsfv
Do you require the services of an interpreter?

If you do, please contact the Interpreting Service on
01382 431563
for assistance in any European language, Cantonese, Urdu or Punjabi.

An interpreter will be made available free of charge.

For more information on obtaining a copy of this document in large print or on tape, contact:

Communications Team
NHS Forth Valley
Tel 01786 457243

or find us on the internet at
www.show.scot.nhs.uk/nhsfv