NHS TAYSIDE

PHARMACEUTICAL CARE SERVICES PLAN

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EXECUTIVE SUMMARY

NHS Tayside provides health services to a population of approximately 405,721 people living throughout Angus, Dundee and Perth and Kinross. The local demographic profiles show that there are pockets of social disadvantage across the three localities, with the largest share in Dundee City. The populations of Angus and Perth and Kinross have larger proportions of middle-aged and older people and sections of their communities distributed through rural areas.

This Pharmaceutical Care Services Plan compares current pharmaceutical care service provision to an assessment of what services the population needs, taking local issues into account.

Existing Pharmaceutical Services

There are 92 contracted community pharmacies in Tayside. These are well distributed across the region and meet the access needs of the vast majority of the population. Locally agreed services have developed across the region according to the priorities of NHS Tayside and are described here.

Local Population Needs

The pharmaceutical needs of the population are considered under the headings of the 4 elements of the new Pharmacy contract.

Conclusions

- The distribution of pharmacy premises is sufficient to deliver pharmaceutical care services as required by the current pharmaceutical regulations and assessment of need. Work to develop systematic methods of needs assessment has commenced with colleagues and partners.
- There are a good range of services providing access to pharmaceutical care across Tayside for people with disabilities.
- Work to complete the implementation of the new Community Pharmacy Contract is progressing, including implementation of the final stages of the Chronic Medication Service. A patient experience programme has commenced to understand the views of people using the service. A programme of needs assessment has been commenced to better understand the care requirements of the population with long-term conditions.
- Work to deploy supplementary and independent community pharmacist prescribers to support the public health priorities of obesity and tobacco use has progressed and data on patient outcomes is promising.
- Work involving the multi-disciplinary team and patient representatives has begun to fully implement the UK Guidance on Drug Misuse and Dependence.
- The provision of smoking cessation from community pharmacy has been significantly strengthened, and the new HEAT 6 target has been successfully delivered up to end of 2012/2013. Work to improve patient outcomes with pharmacies should be continued.
- Work to strengthen the provision of sexual health services has commenced in Perth and Kinross, with the support of the NHS team members and the local authority. A
patient experience programme has commenced to understand the perceptions of young people using these services.

- Community pharmacy has successfully contributed to the delivery of immunisation of NHS Tayside staff with seasonal influenza and to the out-of-school part of the human papilloma virus (HPV) immunisation campaign.
Acknowledgements:

The following people are acknowledged as contributing to the development of this plan:

Carol Angus  Health Information Analyst
David Gill  Head of Pharmacy, Angus CHP
Monica Hunter  Lead Pharmacy Technician for Education and Training
Shirley Kelly  MacMillan Principal Pharmacist, Palliative Care
Jan Jones  Principal Pharmacist, Pharmacoeconomics
Brian McGregor  Prescribing Support Officer
Karen Melville  Principal Pharmacist, Substance misuse Services
Diane Robertson  Chair, Area Pharmaceutical Committee
Frances Rooney  Head of Medicines Governance
Kathryn Wood  Principal Pharmacist, Older People’s Services
Andrew Radley  Consultant in Public Health (Pharmacy)

Glossary:

Pharmaceutical Care Services (PCS) are defined either as:

Additional Core Services – These are required to be offered by all pharmacies that have arrangements with an NHS Board to provide PCS. The four additional core services are namely; the Minor Ailment Service (MAS); the Public Health Service (PHS); the Acute Medication Service (AMS); the Chronic Medication Service (CMS)

Services supported by National Procurement are implemented in situations where a national contract for the supply of medicines or appliances has been negotiated.

Locally negotiated services are locally negotiated arrangements that Boards enter into with pharmaceutical service providers to meet defined needs in local communities.
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1.0 INTRODUCTION

The Smoking, Health and Social Care (Scotland) Act 2005 contains the provisions which provide the regulations and directions to cover the new community pharmacy contract. From 1 April 2011, the NHS (Pharmaceutical Services) (Scotland) Amendment Regulations 2011, require NHS Boards to publish their Pharmaceutical Care Services Plan on their websites, reflecting the current provision of services in the Board area. A duty is placed on Boards to have regard to this plan when determining the outcome of new applications to join the pharmaceutical list. Applicants are required to provide evidence that an application be granted in order to secure adequate provision of services.

To comply with the new regulations, the Pharmaceutical Care Services Plan should provide a comprehensive picture of the range, nature and quality of pharmaceutical care provided within the area to accurately enable assessment of changes in service provision or patient needs.

The legislation will enable NHS Boards to provide Pharmaceutical Care Services (PCS) directly or by means of arrangements, which may include contract arrangements, with others according to which is most appropriate to meet local circumstances.

This version of the NHS Tayside PCS Plan does not include pharmaceutical care services provided by the managed pharmacy services. The plan instead focuses on contractor services, and the role that these services play in improving the health of the population.

This plan describes the breadth of NHS pharmaceutical care services available to the population of Tayside from the existing network of community pharmacies.

April 2013
1.1 Aims of Pharmaceutical Care Planning

The aim of the Pharmaceutical Care Service planning process is to assess local needs for community pharmaceutical services and identify where there is a gap in current provision so that services can be directly matched to needs. This PCS planning cycle is summarised below in Figure 1.

1.2 Principles of Pharmaceutical Care Needs Assessment

Pharmaceutical care needs assessment should:

- Be developed robustly in a transparent process and engage key stakeholders
- Describe services in terms of person, place and time
- Tackle historical inequalities in service provision and uptake
- Be responsive to new sources of information and data and to changing practice
- Support national developments and changes in service provision
- Be valid and reliable across the NHS Board area
- Follow a nationally agreed framework

**Figure 1: The Pharmaceutical Care Services Planning Cycle**

The core purpose of the PCS plan is the identification of unmet needs for pharmaceutical services. These needs should be considered in terms of person, place and time i.e. patient or social group; geographical community or location; time e.g. out of hours. These unmet needs will fall into two categories:

1. Additional pharmaceutical services
2. Locally negotiated services

A secondary function of the plan is to inform and engage members of the public, health professions and planners in the planning of pharmaceutical services.
2.0 DESCRIBING THE HEALTH OF THE POPULATION OF TAYSIDE

2.1 Population Profile

Tayside Population Estimate

From ISD’s mid-year population estimates as at June 30th 2011, NHS Tayside had a population of 405,721. Figure 2 displays NHS Tayside’s population by gender and age group. Although a smaller proportion of population is found at the lower and higher age ends of the range, it is these people who generally have a higher level of health needs.

Figure 2. Population of NHS Tayside by Age Group and Gender, as at June 30th 2011

Table 1 summarises the population profile of Tayside and its three local authority areas by gender and age group, as at June 30th, 2011. In the older age group, 65 and over, the male to female ratio becomes more apparent, with more females surviving in the older age groups.

Table 1. Population Profile of NHS Tayside, as at June 2011

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Gender</th>
<th>0-4</th>
<th>5-14</th>
<th>15-44</th>
<th>45-64</th>
<th>65-74</th>
<th>75-84</th>
<th>85+</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>11,162</td>
<td>21,558</td>
<td>76,363</td>
<td>53,447</td>
<td>19,257</td>
<td>11,427</td>
<td>3,482</td>
<td>196,696</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10,782</td>
<td>20,496</td>
<td>76,101</td>
<td>57,655</td>
<td>21,329</td>
<td>15,580</td>
<td>7,082</td>
<td>209,025</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21,944</td>
<td>42,054</td>
<td>152,464</td>
<td>111,102</td>
<td>40,586</td>
<td>27,007</td>
<td>10,564</td>
<td>405,721</td>
</tr>
<tr>
<td>Angus</td>
<td>Male</td>
<td>2,983</td>
<td>6,244</td>
<td>18,357</td>
<td>16,001</td>
<td>5,808</td>
<td>3,329</td>
<td>962</td>
<td>53,684</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3,010</td>
<td>5,922</td>
<td>18,358</td>
<td>17,016</td>
<td>6,283</td>
<td>4,439</td>
<td>1,918</td>
<td>56,946</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,993</td>
<td>12,166</td>
<td>36,715</td>
<td>33,017</td>
<td>12,091</td>
<td>7,768</td>
<td>2,880</td>
<td>110,630</td>
</tr>
<tr>
<td>Dundee City</td>
<td>Male</td>
<td>4,321</td>
<td>7,238</td>
<td>30,190</td>
<td>16,828</td>
<td>5,999</td>
<td>3,651</td>
<td>1,226</td>
<td>69,453</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4,104</td>
<td>6,915</td>
<td>31,486</td>
<td>18,969</td>
<td>6,761</td>
<td>5,463</td>
<td>2,492</td>
<td>76,117</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8,425</td>
<td>14,153</td>
<td>61,676</td>
<td>35,724</td>
<td>12,760</td>
<td>9,114</td>
<td>3,718</td>
<td>145,570</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>Male</td>
<td>3,862</td>
<td>8,074</td>
<td>27,801</td>
<td>20,607</td>
<td>7,453</td>
<td>4,454</td>
<td>1,294</td>
<td>73,545</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3,669</td>
<td>7,663</td>
<td>26,250</td>
<td>21,738</td>
<td>8,290</td>
<td>5,678</td>
<td>2,687</td>
<td>75,975</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7,531</td>
<td>15,737</td>
<td>54,051</td>
<td>42,345</td>
<td>15,743</td>
<td>10,132</td>
<td>3,981</td>
<td>149,520</td>
</tr>
</tbody>
</table>

Source: NRS (formerly GRO(S)) Mid-Year Population Estimates, 2011
Tayside Population Projections

National Records Scotland (NRS - formerly GRO(S)) estimates that NHS Tayside will increase by 15.3% in population to 464,184 in 2035 *(based on 2010 population projection figures)*. Previous population projections in 2008 anticipated that within Tayside, Dundee City would show a decrease in population over the 25 year period 2008 - 2033, whilst the other local authority areas would see an increase in their populations. The 2010 figures however, predict that the populations of all three local authority areas will increase between 2010 and 2035 with Perth & Kinross estimated to have the largest increase (32.1%) in population by 2035.

In general, Tayside’s population is ageing, particularly with increases in the population aged 65 and over. While those aged 65 and over account for 19.1% of the 2010 population, this age group is anticipated to increase to representing 25.3% of the population in 2035. The 85+ band is expected to make the largest increase by 2035. The population of this age band is anticipated to increase by 141.5% in Tayside as a whole, 172.0% in Angus, 91.6% in Dundee City and 166.8% in Perth and Kinross.

Between 2010 and 2035, the 15-44 age group is expected to decrease in Angus and Dundee City and the 45-64 age group is expected to decrease in Angus and across Tayside as a whole. In addition, Angus and Dundee City are also projected to show decreased populations in the youngest age group (0-4yrs). Figure 3 summarises the projected percentage changes in the population by age group between 2010-2035.

*Figure 3. Projected Percentages in the Population by Age Group, 2010-2035*

In 2010, 51.6% of the population of Tayside aged 65 and over were female. By 2035, this percentage is projected to increase to 54.8%. This divergence may also be a factor to consider when planning service needs.

The age and gender structure of the populations for the three Tayside local authority areas are shown in Figure 4, comparing 2010 estimates with the 2035 projection figures.
Figure 4. The Population Profile of the Three Tayside Localities, Population Estimate 2010 & Projected Population 2035 (2010 based)

Figure 4.1. Angus Profile

Figure 4.2. Dundee Profile

Figure 4.3. Perth & Kinross Profile

Fig 4.1 - 4.3 Source: NRS (formally GRO(S)) Mid-Year Population Estimates (2010) & Population Projections (2035)
**Tayside Ethnic Population**

The 1991 and 2001 Census show that the non-white ethnic population in Tayside had increased by over 3,000 people to 7,495 during the ten-year period. The percentage of this population as a whole across Tayside rose, from 1.2% to 1.9%, over the same time period. The 2001 Census showed that over 70% of the ethnic minority population continued to be found in Dundee City.

The ethnic minority population increased significantly in all three Tayside local authority areas. Of the three areas during the 2001 Census, Dundee City held the highest proportion of minority ethnic groups within their population (3.7% of the Dundee population).

Table 2 summarises the 2001 census figures for Tayside’s minority ethnic groups, showing that Pakistani held the largest minority ethnic population within Tayside (0.5% of the Tayside population, 1,998 individuals), followed in proportion by both Indian and Chinese communities (0.3% of the Tayside population each, approximately 1,240 individuals) at the time of the census.

**Table 2. Tayside Minority Ethnic Populations (Census 2001)**

<table>
<thead>
<tr>
<th>Administrative Area</th>
<th>White</th>
<th>All Minority Groups</th>
<th>Indian</th>
<th>Pakistani</th>
<th>Other South Asian</th>
<th>Chinese</th>
<th>Black</th>
<th>Any Mixed Background</th>
<th>Other ethnic group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tayside (Pop=389,012)</td>
<td>381,517</td>
<td>7,495</td>
<td>1,244</td>
<td>1,998</td>
<td>818</td>
<td>1,243</td>
<td>582</td>
<td>882</td>
<td>728</td>
</tr>
<tr>
<td>Angus (Pop=108,400)</td>
<td>107,546</td>
<td>854</td>
<td>90</td>
<td>142</td>
<td>66</td>
<td>229</td>
<td>62</td>
<td>181</td>
<td>84</td>
</tr>
<tr>
<td>Dundee City (Pop=145,663)</td>
<td>140,330</td>
<td>5,333</td>
<td>1,023</td>
<td>1,723</td>
<td>649</td>
<td>699</td>
<td>383</td>
<td>395</td>
<td>461</td>
</tr>
<tr>
<td>Perth &amp; Kinross (Pop=134,948)</td>
<td>133,641</td>
<td>1,308</td>
<td>131</td>
<td>133</td>
<td>103</td>
<td>315</td>
<td>137</td>
<td>306</td>
<td>183</td>
</tr>
</tbody>
</table>

Source: Census 2001 - “Sex and Age by Ethnic Group”

Notes: Includes the 2001 Census categories of:

- **i.** White Scottish, Other White British, White Irish and Other White
- **ii.** Bangladeshi and Other South Asian
- **iii.** Caribbean, African, Black Scottish or Other Black

The non-white ethnic population across Tayside’s three local authority areas in 2001 numbered:

**Angus**
- 854 individuals (11.4% of the Tayside minority ethnic population)
- Both “Any Mixed Background” and Chinese population groups formed the largest minority ethnic population (each representing 0.2% of the Angus population).

**Dundee City**
- 5,333 individuals (71.1% of Tayside minority ethnic population)
- The Pakistani community formed the largest minority ethnic group (1.2% of the Dundee population, 1,723 individuals)
Perth & Kinross

- 1,308 individuals (17.5% of Tayside minority ethnic population)
- Both the “Any Mixed Background” and Chinese population groups formed the largest minority ethnic group (each representing 0.2% of the Perth & Kinross population).

2.2 Deprivation within Tayside

Health and deprivation are linked on various levels. People from deprived areas have higher incidence and prevalence of all the major diseases, have higher mortality rates and show higher rates of health damaging behaviours, such as smoking and poor nutrition.

Patterns of higher access to primary care but lower access to secondary care tend to be demonstrated by those living in deprived areas. Access to screening is lower and there is higher likelihood of late presentation with disease among people in deprived areas.

Scottish Index of Multiple Deprivation (SIMD)

The Scottish Index of Multiple Deprivation (SIMD) is the Scottish Government’s official tool as an area-based measure of deprivation, identifying small areas of multiple deprivation across Scotland in a comparative manner, incorporating several different aspects of deprivation and combining into a single index. By identifying small areas where there are concentrations of multiple deprivation, the SIMD can be used to target policies and resources at the places with greatest need.

The SIMD categorises Scotland into 6,505 small areas (data zones), each containing around 350 households (average 800 people living in each). The Index provides a relative ranking for each data zone, from 1 (most deprived) to 6,505 (least deprived), resulting in a comprehensive picture of relative area deprivation across Scotland. It is important to remember that the SIMD identifies deprived areas and not deprived individuals, so not everyone living in a deprived area is deprived, and not all deprived people live in deprived areas.

The SIMD measure, is regularly updated, with the most currently available measure being SIMD 2012¹.

Analysis of the SIMD tends to focus on the 15% most deprived however other cut offs, e.g. 5% or 20% most deprived may be more appropriate for particular policies or uses of the SIMD. While the SIMD ranks cannot be averaged or aggregated to give scores for larger areas than data zones, the SIMD can be utilised to view at the National- and Local- Share of deprived data zones.

The ‘Local Share’ is the proportion of an area’s data zones that fall into the 15% most deprived in Scotland. This measure is not influenced by the size of an area and so picks out areas with concentrations of deprived data zones whether these areas are big or small. ²

¹ A National Statistics Publication for Scotland, 18 December 2012
² Local Share Example: An area consists of 300 data zones, 30 data zones fall into the 15% most deprived category, and the local share is 10% (30/300).
The ‘National Share’ is the proportion of the most deprived data zones in Scotland that are found in a particular area e.g. local authority. The 15% most deprived in Scotland that fall in a particular Local Authority area. This measure is heavily influenced by the size of an area since bigger areas will have more data zones and so are more likely to have more data zones in the 15% most deprived than smaller areas.\(^3\)

The SIMD 2012 shows that multiple deprivation in Scotland has become less concentrated over time. The areas identified as multiply deprived by SIMD 2012 are similar to those identified by previous editions of the Index (SIMD 2009 v2, 2006, 2004). Of the 976 data zones in the 15% most deprived in SIMD 2012, 77% were also in the 15% most deprived in all the previous editions of the Index. Of the data zones appearing in the 15% most deprived in SIMD 2012, only 5.1% have never appeared in this category before.

Table 3 summarises the SIMD 2012 for Tayside’s three local authorities\(^4\). The table shows that Dundee City has the largest proportion of data zones in every deprived category, both in terms of Local and National Share compared with its other Tayside counterparts.

### Table 3. SIMD 2012: Local and National Share of Data Zones in the Most Deprived 5%, 10%, 15% & 20% by Local Authority Area

<table>
<thead>
<tr>
<th>Level of Deprivation</th>
<th>Data</th>
<th>Angus</th>
<th>Dundee City</th>
<th>Perth &amp; Kinross</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% Most Deprived</td>
<td>No. of Data zones</td>
<td>0</td>
<td>19</td>
<td>2</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Local Share (%)</td>
<td>0.0</td>
<td>10.6</td>
<td>1.1</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>National Share (%)</td>
<td>0.0</td>
<td>5.8</td>
<td>0.6</td>
<td>100.0</td>
</tr>
<tr>
<td>10% Most Deprived</td>
<td>No. of Data zones</td>
<td>2</td>
<td>36</td>
<td>2</td>
<td>651</td>
</tr>
<tr>
<td></td>
<td>Local Share (%)</td>
<td>1.4</td>
<td>20.1</td>
<td>1.1</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>National Share (%)</td>
<td>0.3</td>
<td>5.5</td>
<td>0.3</td>
<td>100.0</td>
</tr>
<tr>
<td>15% Most Deprived</td>
<td>No. of Data zones</td>
<td>3</td>
<td>55</td>
<td>6</td>
<td>976</td>
</tr>
<tr>
<td></td>
<td>Local Share (%)</td>
<td>2.1</td>
<td>30.7</td>
<td>3.4</td>
<td>15.0</td>
</tr>
<tr>
<td></td>
<td>National Share (%)</td>
<td>0.3</td>
<td>5.6</td>
<td>0.6</td>
<td>100.0</td>
</tr>
<tr>
<td>20% Most Deprived</td>
<td>No. of Data zones</td>
<td>9</td>
<td>69</td>
<td>11</td>
<td>1301</td>
</tr>
<tr>
<td></td>
<td>Local Share (%)</td>
<td>6.3</td>
<td>38.5</td>
<td>6.3</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>National Share (%)</td>
<td>0.7</td>
<td>5.3</td>
<td>0.8</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Number of Data Zones</strong></td>
<td><strong>142</strong></td>
<td><strong>179</strong></td>
<td><strong>175</strong></td>
<td><strong>6,505</strong></td>
</tr>
</tbody>
</table>

*Source: SIMD 2012, Tables 2.1a-2.1d & Table 2.2a-2.2d, Scottish Government Website*

**Notes:**

i. ‘Local Share’ is the proportion of an area’s data zones that fall into the 15% most deprived in Scotland.

ii. ‘National Share’ is the proportion of the most deprived data zones in Scotland that are found in a particular area e.g. local authority.

**Local Authority National Shares:** 57.0% of Scotland’s 15% most deprived (976) data zones are located in five local authorities: Glasgow (29.6%), North Lanarkshire (10.2%), Fife (5.9%), Dundee (5.6%; 55 data zones), and Edinburgh (5.5%). These five local authorities contain 37% of Scotland’s population.

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\(^3\) National Share Example: 976 data zones are in the 15% most deprived areas in Scotland. If an area was built up of 300 data zones and 30 of its data zones were in the 15% most deprived, then its national share would be 3% (30/976).

\(^4\) Community Health Partnership (CHP) values available for the most deprived 15%. All numbers and local/national share percentages are the same for the three Tayside administrative areas as at local authority level (Table 3).
In SIMD 2012, 3 (0.3%) of the 976 data zones in the 15% most deprived data zones in Scotland were found in Angus. A further 6 (0.6%) data zones were found in Perth & Kinross in terms of National Share\(^5\).

**Local Authority Local Shares:** The five local authorities with the largest local share of Scotland’s 15% most deprived data zones are Glasgow (41.6%), Inverclyde (40.0%), Dundee (30.7%; 55 data zones), West Dunbartonshire (26.3%), and North Ayrshire (25.7%). These are the same five local authorities as in SIMD 2009.

In SIMD 2012, 3 (2.1%) of Angus’s 142 data zones were found in the 15% most deprived data zones in Scotland, in comparison 6 (3.4%) of Perth & Kinross’s 175 data zones were found in the 15% most deprived data zones in Scotland.

**Health Boards:** Tayside Health Board had 64 data zones in the 15% most deprived, 12.9% of the Local Share and 6.6% of the National Share. This can be compared with the Scottish Health Board, ‘Greater Glasgow & Clyde’ with the largest proportion of their data zones in the 15% most deprived in both Local and National Shares of 30.1% and 45.4% respectively.

**Most Deprived:** The most deprived data zone in Angus in the overall SIMD 2012 was S01000626, found in the Intermediate Zone of ‘Arbroath Warddykes’. With a rank of 509, it is amongst the 10% most deprived areas in Scotland.

Amongst the 5% most deprived areas in Scotland are the two most deprived data zones in each of Dundee City and Perth & Kinross. In the overall SIMD 2012, the most deprived data zone in Dundee City was S01001253 (Intermediate Zone - Whitfield), a rank of 54, while in Perth & Kinross the most deprived data zone was S01005075 (Intermediate Zone - Muirton), with a rank of 137.

**SIMD Health Domain:** The health domain within SIMD identifies areas with a higher than expected level of ill-health or mortality for the age-sex profile of the population using a set list of indicators\(^6\).

The indicators used are the same as for SIMD 2009, however there has been a change to the methodology for three of the health indicators, SIMD 2012 now uses continuous inpatient stays (CISs) to count the total number of stays in NHS hospitals. As a result of the change, caution should be used when interpreting change between the SIMD 2009 and SIMD 2012 health domains, as they are not directly comparable.

Table 4 summarises the Local and National Shares of SIMD 2012 for the distribution of the 15% most deprived data zones in the health domain for Tayside three local authority areas.

**Table 4. Local and National Share of Data Zones in the 15% Most Deprived on the Health Domain in SIMD 2012, for Tayside’s Local Authorities**

\(^5\) Local Authority Analysis Summaries SIMD 2012 – Angus, Dundee City and Perth & Kinross – includes National and Local Share figures (also see Table 2.3 Main Summary Report)

\(^6\) a. Standardised Mortality Ratio b. Hospital episodes related to alcohol use c. Hospital episodes related to drug use d. Comparative Illness Factor e. Emergency admissions to hospital f. Proportion of population being prescribed drugs for anxiety, depression or psychosis g. Proportion of live singleton births of low birth weight
<table>
<thead>
<tr>
<th>Tayside Local Authority</th>
<th>National Share</th>
<th>Local Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Data Zones</td>
<td>No. Data Zones</td>
</tr>
<tr>
<td>Angus</td>
<td>976 (Scotland)</td>
<td>1</td>
</tr>
<tr>
<td>Dundee City</td>
<td>35</td>
<td>3.6</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Source: SIMD 2012 – Local Authority Individual Reports, Scottish Government Website

**Dundee Health Domain**

*National Share*: In the health domain in SIMD 2012, 35 (3.6%) of the 976 data zones in the 15% most deprived data zones in Scotland were found in Dundee City, compared to 38 (3.9%) in 2009, 43 (4.4%) in 2006 and 54 (5.5%) in 2004.

*Local Share*: In the health domain in SIMD 2012, 35 (19.6%) of Dundee City’s 179 data zones were found in the 15% most deprived data zones in Scotland, compared to 38 (21.2%) in 2009, 43 (24%) in 2006 and 54 (30.2%) in 2004.

The most health deprived data zone in Dundee City in SIMD 2012 is S01001200, found in the Intermediate Zone of ‘Linlathen and Midcraigie’, ranked as 128, it is amongst the 5% most health deprived areas in Scotland.

**Perth & Kinross Health Domain**

*National Share*: In the health domain in SIMD 2012, 8 (0.8%) of the 976 data zones in the 15% most deprived data zones in Scotland were found in Perth & Kinross, compared to 6 (0.6%) in 2009, 8 (0.8%) in 2006 and 4 (0.4%) in 2004.

*Local Share*: In the health domain in SIMD 2012, 8 (4.6%) of Perth & Kinross’s 175 data zones were found in the 15% most deprived data zones in Scotland, compared to 6 (3.4%) in 2009, 8 (4.6%) in 2006 and 4 (2.3%) in 2004.

The most health deprived data zone in Perth & Kinross in SIMD 2012 is S01005075, found in the Intermediate Zone of ‘Muirton’ and ranked as 201, it is amongst the 5% most health deprived areas in Scotland.

**SIMD 2012: Tayside Population Estimates as at June, 2011**

Figures 5.1, 5.2 and 5.3 show the population structure of each Tayside CHP by SIMD 2012 quintile. The charts demonstrate that the Dundee has the largest deprived population across Tayside’s three local authority areas.
Figure 5. Tayside Population Estimates 2011 (as at June 30th) by SIMD 2012 Quintile

Figure 5.1. Angus Population Estimates by SIMD 2012 Quintile (as at June 2011)

Figure 5.2. Dundee Population Estimates by SIMD 2012 Quintile (as at June 2011)

Figure 5.3. Perth & Kinross Population Estimates by SIMD 2012 Quintile (as at June 2011)

Fig 5.1 - 5.3 Source: NRS (GRO(S)) - Small Area Population Estimates (2011) & SIMD 2012 -
2.3 Population Profile of Non-UK Nationals Living in Tayside

National Insurance Number (NINo) Allocations to Adult Overseas Nationals entering the UK statistics, produced by the Department for Work and Pensions (DWP) Statistics are based on adult overseas (non-UK) nationals registering for a new National Insurance number for the purposes of work, benefits or tax credits by local authority and provide an indication of the number of new arrivals coming to work in Tayside in a particular year.

The NINo data in Table 5 displays the number of non-UK nationals currently within Tayside. In 2011/12, the majority were located in Perth & Kinross with 51.4% of this population residing in this area, in comparison to Dundee City (25.9%) and Angus (22.7%).

As Table 5 displays there have been year-on-year fluctuations over the last five years. However, overall between 2007/08 and 2011/12, the number of NINo registrations in Angus has increased by 34.9% and 10.5% across Perth & Kinross, while Dundee City figures have shown a 24.1% decrease in the number of non-UK nationals within the local area.

Table 5. NINo Registrations (Thousands) by Non-UK Nationals within Tayside, by Year

<table>
<thead>
<tr>
<th>Administrative Area</th>
<th>Year of Registration (Number – Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>0.86</td>
</tr>
<tr>
<td>Dundee City</td>
<td>1.74</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>2.37</td>
</tr>
</tbody>
</table>

Source: Department of Work and Pensions - “National Insurance Number Allocations to Adult Overseas Nationals entering the UK”

Notes:

i. Numbers are rounded and thus totals may not sum
ii. Numbers are based on 100% data from the National Insurance Recording System (NIRS)
iii. Local authority counts are based on the most recently recorded address of the NINo recipient

The 2011/12 number of Tayside local authority overseas national adults by nationality is displayed in Table 6, showing that the majority of non-UK nationals within Tayside are from Poland (25.7% of the total non-UK nationals in Tayside\(^7\)).

Table 6 also displays the variation between the three Tayside local authority areas in terms of country of origin of their non-UK Nationals. Within both Perth & Kinross and Dundee City, the majority of their non-UK nationals were from Poland (30.9% and 23.5% of their total non-UK nationals respectively). In comparison within Angus, the Polish population represented only 16.4% of their non-UK nationals present; the majority was from Bulgaria (25% of the Angus non-UK national population).

\(^7\) Collective total of Tayside’s three local authority areas. A Tayside figure is not available from DWP.
Table 6. Tayside Local Authorities: NIINo Registrations to Adult Overseas Nationals entering the UK (Thousands) in 2011/12 by Top 5 Most Common Nationality

<table>
<thead>
<tr>
<th>Tayside Local Authority Areas</th>
<th>Angus</th>
<th>Dundee City</th>
<th>Perth &amp; Kinross</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationality</td>
<td>Number (Thousands)</td>
<td>Nationality</td>
<td>Number (Thousands)</td>
</tr>
<tr>
<td>All Overseas</td>
<td>1.16</td>
<td>All Overseas</td>
<td>1.32</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.29</td>
<td>Poland</td>
<td>0.31</td>
</tr>
<tr>
<td>Rep of Lithuania</td>
<td>0.22</td>
<td>India</td>
<td>0.08</td>
</tr>
<tr>
<td>Poland</td>
<td>0.19</td>
<td>China Peoples Rep</td>
<td>0.07</td>
</tr>
<tr>
<td>Romania</td>
<td>0.15</td>
<td>Pakistan</td>
<td>0.06</td>
</tr>
<tr>
<td>Rep of Latvia</td>
<td>0.11</td>
<td>Rep of Ireland</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rep of Latvia</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain</td>
<td>0.06</td>
</tr>
</tbody>
</table>


Notes:
1. Figures are rounded to the nearest ten and displayed in thousands.
2. Financial Year of Registration Date: Registration date is derived from the date at which a NIINo is maintained on the National Insurance Recording & Pay As You Earn System, (1 Apr - 31 Mar).
3. Figures reflect the best estimate of an overseas national's locality at the time of registering for a NIINo. A very small proportion of NIINo registrations are to overseas nationals registering whilst abroad.
4. Nationality In instances where a nationality cannot be aggregated to at least 0.01 Thousand, these small cases become components of 'Others & Unknown' but retain their original 'World Area of Origin' derivation.

2.4 Tayside Rurality

The ‘Scottish Government Urban Rural Classification’ provides a standard definition of rural areas across Scotland. The 6 and 8-fold urban rural classifications are intended to provide a consistent way of defining urban and rural areas across Scotland.

The classification is updated every two years to incorporate the most recent Small Area Population Estimates (SAPE) and accessibility based on drive time analysis to differentiate between accessible and remote areas in Scotland. This classification method is consistent with the Government’s core definition of rurality which defines settlements of 3,000 or less people to be rural. It also classifies areas as remote based on drive times from settlements of 10,000 or more people.

Both the 6- and 8- fold classification systems distinguish between urban, rural and remote areas across Scotland. The 8-fold extends the classification to distinguish between remote and very remote areas with two additional categories and classifies remote areas on drive times of 30 and 60 minutes.
Tables 7.1 and 7.2 summarise both the 6- and 8-fold categorisation definitions.

**Table 7.1 The 6-Fold Classification System for Remote and Rural Areas within Scotland**

<table>
<thead>
<tr>
<th>6-Fold Scottish Government Urban Rural Classification</th>
<th>Settlements of over 125,000 people.</th>
<th>Settlements of 10,000 to 125,000 people.</th>
<th>Settlements of between 3,000 and 10,000 people and within 30 minutes drive of a settlement of 10,000 or more.</th>
<th>Settlements of between 3,000 and 10,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.</th>
<th>Settlements of less than 3,000 people and within 30 minutes drive of a settlement of 10,000 or more.</th>
<th>Settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Large Urban Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Other Urban Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Accessible Small Towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Remote Small Towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Accessible Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Remote Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 7.2 The 8-Fold Classification System for Remote and Rural Areas within Scotland**

<table>
<thead>
<tr>
<th>8-Fold Scottish Government Urban Rural Classification</th>
<th>Settlements of over 125,000 people.</th>
<th>Settlements of 10,000 to 125,000 people.</th>
<th>Settlements of between 3,000 and 10,000 people and within 30 minutes drive of a settlement of 10,000 or more.</th>
<th>Settlements of between 3,000 and 10,000 people and with a drive time of between 30 and 60 minutes to a settlement of 10,000 or more.</th>
<th>Settlements of between 3,000 and 10,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more.</th>
<th>Settlements of less than 3,000 people and within 30 minutes drive of a settlement of 10,000 or more.</th>
<th>Settlements of less than 3,000 people and with a drive time of between 30 and 60 minutes to a settlement of 10,000 or more.</th>
<th>Settlements of less than 3,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Large Urban Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Other Urban Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Accessible Small Towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Remote Small Towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Very Remote Small Towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Accessible Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Remote Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Very Remote Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The Remote Small Towns and Remote Rural categories in the 8-fold classification should not be confused with the similarly labelled categories in the 6-fold classification.

Tables 8.1 & 8.2 show the percentage of the population classed as urban, rural and remote for Tayside and its three local authorities with Scottish comparisons for the period 2011/12.

**Table 8.1 Percentage of Population in each Urban Rural Classification by 6-Fold Urban Rural Classification and Area of Residence, 2011-12**

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Large Urban Areas</th>
<th>Other Urban Areas</th>
<th>Accessible Small Towns</th>
<th>Remote Small Towns</th>
<th>Accessible Rural</th>
<th>Remote Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>39.1</td>
<td>30.4</td>
<td>8.7</td>
<td>3.7</td>
<td>11.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Tayside</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angus</td>
<td>7.8</td>
<td>52.9</td>
<td>11.6</td>
<td>0.0</td>
<td>27.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Dundee</td>
<td>99.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Table 8.2 Percentage of Population in each Urban Rural Classification by 8-Fold Urban Rural Classification and Area of Residence, 2011-12

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Large Urban Areas</th>
<th>Other Urban Areas</th>
<th>Accessible Small Towns</th>
<th>Remote Small Towns</th>
<th>Accessible Rural</th>
<th>Remote Rural</th>
<th>Very Remote Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>39.1</td>
<td>30.4</td>
<td>8.7</td>
<td>2.4</td>
<td>1.2</td>
<td>11.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Tayside</td>
<td>38.3</td>
<td>25.9</td>
<td>6.8</td>
<td>4.0</td>
<td>0.0</td>
<td>20.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Angus</td>
<td>7.8</td>
<td>52.9</td>
<td>11.6</td>
<td>0.0</td>
<td>0.0</td>
<td>27.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Dundee</td>
<td>99.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>1.2</td>
<td>31.0</td>
<td>9.7</td>
<td>11.0</td>
<td>0.0</td>
<td>34.0</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Source: Scottish Government Urban Rural Classification 2011-12

Across Tayside during 2011/12, the majority of the population (38.3%) resided within ‘large urban areas’ with a further 25.9% living within ‘other urban areas’. In comparison, 5.1% of the Tayside population was living in ‘remote rural areas’, with a further 20.0% residing in ‘accessible rural areas’.

Within Dundee 99.5% of the population were classified as living in ‘large urban areas’, while across Angus the majority of the population (52.9%) resided within ‘other urban areas’. In comparison, in Perth & Kinross the majority of the population comprised of a combination of both those living in ‘Other Urban Areas’ and ‘Accessible Rural’, accounting for 31.0% and 34.0% of the Perth & Kinross population respectively.

2.5 Tayside Homelessness

Under the Homeless Persons legislation, housing authorities have statutory duties to assist those who are homeless or threatened with homelessness, which include providing accommodation in certain circumstances. Local authorities are required to assess each application.

Despite minor year-on-year fluctuations, the number of applications under the Homeless Persons legislation for assistance to the local authorities within Tayside over the last five years has shown a decline, as displayed in Table 9. Between 2011/12 and the previous year, both Dundee City and Perth & Kinross have showed a considerable decrease in the number of applications, -15.8% and -13.4% respectively.

Table 9. Number of Applications Under the Homeless Persons Legislation by Tayside Local Authority, 2007/08 – 2011/12

<table>
<thead>
<tr>
<th>Local Authority Area</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>1,238</td>
<td>1,139</td>
<td>1,162</td>
<td>1,186</td>
<td>1,181</td>
</tr>
<tr>
<td>Dundee City</td>
<td>2,418</td>
<td>2,578</td>
<td>2,290</td>
<td>1,914</td>
<td>1,611</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>1,222</td>
<td>1,096</td>
<td>1,030</td>
<td>1,128</td>
<td>977</td>
</tr>
</tbody>
</table>

Source: Scottish Government, (Operation of the Homeless Persons Legislation in Scotland: 2011-12, Table 1b)

For the quarter ending 31 March 2012, the number of ‘all’ households in temporary accommodation was very similar to those of the previous year in terms of both ‘all’ households and ‘households with children’, as summarised in Table 10.
Table 10. Households in Temporary Accommodation by Tayside Local Authority for the Quarters ending 31 March 2011 and 31 March 2012

<table>
<thead>
<tr>
<th>Local Authority Area</th>
<th>Quarter Ending</th>
<th>Households in temporary accommodation</th>
<th>Households with children in temporary accommodation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percentage of all households</td>
</tr>
<tr>
<td>Angus</td>
<td>31-Mar-11</td>
<td>115</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>31-Mar-12</td>
<td>122</td>
<td>0.24</td>
</tr>
<tr>
<td>Dundee City</td>
<td>31-Mar-11</td>
<td>319</td>
<td>0.46</td>
</tr>
<tr>
<td></td>
<td>31-Mar-12</td>
<td>311</td>
<td>0.44</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>31-Mar-11</td>
<td>396</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>31-Mar-12</td>
<td>411</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Source: Scottish Government, (Operation of the Homeless Persons Legislation in Scotland: 2011-12 Table 13 and 2010-11 Table 37)

The number of households, including those with children or pregnant women, in different types of temporary accommodation is displayed in Table 11. For all three Tayside local authority areas there was very little difference in the distribution across the different types of temporary accommodation over the last year, between the quarter ending March 2011 and 2012 for ‘all’ households and those households ‘with children and pregnant women’.

However, most notably within Perth & Kinross, was the reduction in those numbers housed in ‘Bed & Breakfasts’. Previously Perth & Kinross was among those Scottish local authority areas with the highest number of households in such accommodation. In the quarter ending March 2012, there were none recorded in this category.

Table 11. Households in Temporary Accommodation by Accommodation Type and Tayside Local Authority for the Quarters Ending March 2011 and 2012

<table>
<thead>
<tr>
<th>Local Authority Area</th>
<th>Quarter Ending 31 March 2011</th>
<th>Quarter Ending 31 March 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social Sector $^1$</td>
<td>Hostel</td>
</tr>
<tr>
<td>Angus</td>
<td>115</td>
<td>-</td>
</tr>
<tr>
<td>Dundee City</td>
<td>171</td>
<td>137</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>184</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: Scottish Government, (Operation of the Homeless Persons Legislation in Scotland: 2011-12 Table 14 and 2010-11 Table 38)

Notes
i. Includes local authority and housing association stock.
ii. The category ‘other’ includes mainly private landlords. Accommodation in ’other’ category includes property leased by the local authority to provide temporary accommodation for homeless applicants.
Homelessness and Health
(Source: Public Health Intelligence Officer)

Homeless people are more likely to have unmet health needs (Scottish Executive. 2000) and there is evidence of high rates of ill health; chronic disease; disability; mental health problems and drug and alcohol problems. Many homeless people do not perceive health needs as important and tend to access health services only when in crisis.

In Dundee, focus groups with homeless people identified stigma, unhelpful staff attitudes, difficulties accessing support from health and social work services, the need for health information, poor standards of support in hostels and lack of care management and care planning. Of 347 questionnaires sent to mainstream health services and specialist homeless services, 177 (51%) were returned. Approximately one third of health service staff were not at all aware of how to access support from housing (32%), social work (39%) and health services (34%) for homeless people. Access to services was rated as difficult; 69% said it was difficult to access counselling services, 68% physiotherapy services and 59% mental health services. Eighty four percent of respondents strongly agreed or agreed that there was a need for a dedicated health team for homeless people. (Walkden et al 2004.)

2.6 The Health Status of Tayside's Population

2.6(a) Life Expectancy & Healthy Life Expectancy

‘Life Expectancy’ (LE) is an estimate of how many years the average person might be expected to live, commonly based on life expectancy at birth, which is the average number of years a newborn infant can expect to live if current mortality rates continue to apply.

In comparison, ‘Healthy Life Expectancy’ (HLE) is an estimate of how many years they might live in good health. The difference between HLE and LE indicate the length of time people can expect to spend in poor health.

Between males and females and among different geographical and socio-economic groups, there can be considerable variations in LE and HLE. The figures for both should be viewed as providing a general indication of LE and HLE estimates over time, rather than precise and robust figures.

While both LE and HLE at birth have been improving in Scotland in recent years, they are lower than in the UK as a whole.

The gap between LE and HLE at birth (the period expected to be spent in ‘not good’ health during the average lifetime) has also tended to increase in Scotland over recent years, while fairly constant for females between 1980 and 2008, it has tended to increase for males over this period.

Life Expectancy

Life expectancy at birth is a common measure of mortality, useful in comparing the ‘health’ of one country to another. The expectation of life at birth in Scotland has
improved greatly over the last 30 years and improvements in life expectancy at birth are projected to continue, rising to 80.9 years for men and 85.1 years for women by 2035.

While both Scottish male and female life expectancy has continued to increase to 75.8 years for males and 80.4 years for females (2008-2010 based), it remains below the UK average of 78.2 years and 82.3 years respectively, meaning the Scottish population can expect to live shorter lives than the rest of the UK by approximately 2 years.

For this period the Scottish estimates are also lower when compared with the UK constituent countries. Males in England, Wales and Northern Ireland have a life expectancy of 78.6 years, 77.6 years and 77.1 years respectively. Females in England, Wales and Northern Ireland have a life expectancy of 82.6 years, 81.8 years and 81.5 years respectively (2008-2010 based).

In addition, Scotland is also lower when compared with the life expectancy at birth of the European Union (EU)

The current life expectancy at birth for Tayside residents is 76.8 years for males and 80.7 years for females (2008-2010 based). These figures are slightly higher than the Scottish life expectancy estimates for both genders, but remain lower than other nations. Figure 6 summarises the life expectancy for Tayside males and females by local authority, compared with those of Scotland.

**Figure 6. Life Expectancy at Birth (in Years) by Area of Residence, 2008-2010 based**

There are variations in life expectancy across Tayside’s local authority areas:
- Males in both Angus and Perth & Kinross have higher life expectancies than the Scottish average.

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8 EU (European Union – 27 countries)
- Females in Perth & Kinross have a life expectancy of 2 years longer than the Scottish average.
- Dundee males are expected to live 5.2 years less than those in Perth and Kinross, and a corresponding difference of 3.1 years in females.
- Within each local Tayside area, there is a relative inequality of life expectancy between men and women. This is common across the developed world and the causes are not fully understood.

Figures from 2005-2009 showed that there were variations in life expectancy across Intermediate Geographies within each local authority area.

**Angus Local Authority:** Male life expectancy ranging from 70.3 years (Arbroath Harbour) to 80.6 years (Forfar East), a difference of 10.3 years. Life expectancy for females ranging from 74.6 years (Brechin East) to 85.9 years (Monifieth West), a difference of 11.3 years.

**Dundee City Local Authority:** Male life expectancy ranging from 65.8 years (Kirktown) to 85.6 years (West Pitkerro), a difference of 19.8 years. Life expectancy for females ranging from 73.8 years (The Glens) to 85.8 years (Balgay), a difference of 12 years.

**Perth & Kinross Local Authority:** Male life expectancy ranging from 71.6 years (Central, North & South Inch) to 81.9 years (Western Edge), a difference of 10.3 years. Life expectancy for females ranging from 77.7 years (Central, North & South Inch) to 84.0 years (Burghmuir & Oakbank and Milnathort & Crook of Devon), a difference of 6.3 years.

Life expectancy measures address nothing regarding the quality of life. Taking health status into account allows a measure of quality to be added to the length of life and gives an estimate of healthy life expectancy.

**Healthy Life Expectancy**

Whereas life expectancy is an estimate of how many years a person might be expected to live, ‘healthy life expectancy’ is defined as an estimate of how many years they might live in a good or ‘healthy’ state. The difference in years between both ‘healthy life expectancy’ and ‘life expectancy’ indicates the length of time people can expect to spend in poor health.

Healthy life expectancy reflects the excess burden of ill health experienced by disadvantaged populations better. Area based inequalities are wider for healthy life expectancy than for total life expectancy. Those from disadvantaged populations spend a lower proportion of their lives in good health and a longer period in poor health. (Wood et al 2006). In general, areas with the highest life expectancy also tend to have the highest proportions of these years in good health.

Table 12 shows healthy life expectancy for Scotland, Tayside and its three local authority areas, for 1999-2003. This is the latest period for which there is available data.

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9 If a small area has a low LE at birth, there may be particular reasons for this. For example, the area may include nursing homes, hostels or other long-term care establishments which may serve people with poorer than average health and lower LE, and many of these people may have come from other parts of Scotland. (SCOTPHO – Sept 2012)
Table 12. Healthy Life Expectancy at Birth by Area of Residence (1999-2003 Based)

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Males (at Birth)</th>
<th>Females (at Birth)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life Expectancy (LE)</td>
<td>Healthy Life Expectancy (HLE)</td>
</tr>
<tr>
<td>Scotland</td>
<td>73.3</td>
<td>66.3</td>
</tr>
<tr>
<td>Tayside NHS Board</td>
<td>74.1</td>
<td>68.1</td>
</tr>
<tr>
<td>Angus CHP</td>
<td>74.9</td>
<td>69.4</td>
</tr>
<tr>
<td>Dundee City CHP</td>
<td>71.8</td>
<td>64.6</td>
</tr>
<tr>
<td>Perth &amp; Kinross CHP</td>
<td>75.9</td>
<td>70.8</td>
</tr>
</tbody>
</table>

Source: ScotPHO, Healthy Life Expectancy, 1999-2003

The Scottish males healthy life expectancy is 66.3 years, while females is 70.2 years (1999-2003 based), with 7.0 years and 8.5 years respectively spent in ‘not healthy’ health. In comparison Tayside’s population are estimated to live slightly longer with a male healthy life expectancy of 68.1 years, and the female counterpart’s healthy life expectancy of 71.8 years. Tayside residents are expected to spend 6.0 years and 7.4 years respectively in ‘not healthy’ health during their life.

Across all Scottish health boards (HBs), ‘Orkney’ and ‘Borders’ HB have the highest male healthy life expectancy (70.4 years), with ‘Greater Glasgow and Clyde’ the lowest (62.2 years). ‘Orkney’ and ‘Shetland’ HBs had the shortest periods expected to be spent in ‘not healthy’ health with 5.0 years estimated. By contrast, the highest figure was within ‘Greater Glasgow and Clyde’ HB at 8.7 years.

A similar geographical pattern was observed within females. ‘Orkney’ HB had the highest female healthy life expectancy (76.1 years) and ‘Greater Glasgow and Clyde’ HB the lowest (66.9 years). For the period expected to be spent in ‘not healthy’ health ranged from 5.5 years in ‘Orkney’ HB to 10.5 years in ‘Greater Glasgow and Clyde’ HB.

Of Tayside’s three Community Health Partnerships (CHPs) both genders within Perth & Kinross CHP have the highest healthy life expectancy, 70.8 years for males and 74.2 years for females, each with the shortest period expected to be spent in ‘not healthy’ health (5.1 years and 6.2 years respectively). Dundee City CHP has the longest period of ‘not healthy’ health of Tayside’s three CHPs, with 7.2 years for males and 9.2 years for females (healthy life expectancy of 64.6 years and 68.8 years respectively).

Of all Scottish CHPs, ‘Perth & Kinross’, ‘East Dunbartonshire’ and ‘Aberdeenshire’ have the highest male healthy life expectancy (70.8 years), compared with the lowest in ‘East

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10 Scottish statistics are often published at intermediate zones, ‘healthy life expectancy’ is not estimated for such small areas due to the severe instability of the very small numbers that would be used to calculate the proportion of Census respondents with ‘healthy’ health in each age group.
Glasgow’ (56.0 years). For female HLE across Scotland, 76.1 years in ‘Orkney’ CHP was the highest healthy life expectancy, compared with 61.5 years in ‘East Glasgow’.\(^{11}\)

### 2.6(b) Mortality (All Causes)

Crude death rates per 1,000 population are used to compare death rates across Scotland, Tayside and its three local authority areas between 2007 and 2011. As is shown in Figure 7, Tayside and its three local authority areas have in general a higher crude death rate (all ages) than Scotland year-on-year, however there is one exception. Perth & Kinross in 2008, 2010 and 2011 displayed a slightly lower death rate than the Scottish figure; 10.7 (Scotland – 10.8), 9.8 (Scotland – 10.3) and 10.0 (Scotland – 10.2) per 1,000 population (all ages) respectively.

In addition, since 2008 Tayside (collectively) has shown a slight decline in the rate of deaths from 11.5 per 1,000 population (all ages) to 10.8 in 2011. While Angus and Perth & Kinross have shown year-on-year fluctuations over the last five years, Dundee City is the only Tayside local authority to display a steady decline in its crude death rate from 12.2 in 2008 to 11.4 per 1,000 population (all ages) in 2011.

**Figure 7. Crude Death Rates (All Causes) per 1,000 Population, 2007-2011**

![Graph showing crude death rates (All Causes) per 1,000 Population, 2007-2011](image)

Source: NRS (Formerly GRO(S)) Vital Events Death Summary Table 1.3, 2008-2011

Table 13 summarises the crude death rates comparing Scotland and Tayside for deaths by age band in 2011, as is expected death rates increase with age. In all age groups of 45 years and above, Tayside death rates were lower than the Scottish figures; in addition there was very little difference between the younger age group rates at the two geographical levels.

With the exception of age bands 45-64 years\(^{12}\) and 85+ years\(^{13}\), Perth & Kinross had the lowest crude death rate in all other age groups, not only of the three Tayside local

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\(^{11}\) Males – ‘Orkney’, ‘Shetland’ & ‘Aberdeenshire’ CHPs had the shortest period expected to be spent in ‘not healthy’ health of 5.0 years. ‘East Glasgow’ had the longest (11.2 years).

\(^{12}\) Females – ‘Orkney’ CHP had the shortest period expected to be spent in ‘not healthy’ health (5.5 years). ‘East Glasgow’ CHP had the longest (14.0 years).

\(^{13}\) Angus held the lowest rate for those aged 45-64 years (2011).

\(^{13}\) Dundee held the lowest crude rate for those aged 85+ years, (2011).
authorities, but also displayed lower rates in all age bands compared with the equivalent Scottish rates in 2011.

In comparison for this year, Dundee City had the highest crude death rate of the three Tayside local authorities, in all age bands, with the exception of 85+ years. In this elderly age band, Dundee City had the lowest crude death rate of the Tayside local authorities (129.4 per 1,000 population, compared with 149.7 in Angus and 142.2 in Perth & Kinross) and lower than the Scottish death rate for this elderly group, a rate of 149.7 per 1,000 population. In addition, Dundee City was the only Tayside local authority to consistently have higher crude death rates for all age bands below 85+ years compared with Scottish rates.

Table 13. Crude Death Rates per 1,000 Population by Age Band, 2011

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-4</td>
</tr>
<tr>
<td>Scotland</td>
<td>0.9</td>
</tr>
<tr>
<td>Tayside</td>
<td>1.0</td>
</tr>
<tr>
<td>Angus</td>
<td>1.0</td>
</tr>
<tr>
<td>Dundee City</td>
<td>1.3</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: NHS (Formerly GRO(S)) Vital Events Death Table 5.2, 2011 and Mid-Year Population Estimates, June 30 2011

In 2011, as in previous years both cancer and heart disease are the major causes of death across Tayside residents. Deaths from ‘Diseases of the Circulatory System’ (I00-I99), accounted for 31.3% (1,368 individuals) of the 4,370 Tayside resident deaths during 2011, with ‘Neoplasms’ (C00-D48) accounting for a further 27.1% (1,185 individuals) of the deaths.

These proportions should be considered with the next most common cause of death during 2011, that of ‘Diseases of the Respiratory System’ (J00-J99) representing 12.3% (539 individuals) of Tayside deaths within this year, all further causes of death accounted for less than 10% each of Tayside resident deaths during 2011.

This section of the Pharmaceutical Care Services Plan gives an overview of the impact of these two priority diseases across Tayside and also for priority risk-taking behaviours, where community pharmacy has a significant role to play.

2.6(c) Malignant Neoplasms (Cancer)

It is estimated that 1 in 3 people in Scotland will develop some form of cancer. Before the age of 65 years, approximately 1 in 9 males and 1 in 7 females will develop a cancer. In comparison, having survived to age 65 without cancer, the risk of getting cancer after reaching 65 years of age increases to 1 in 3 for males and 1 in 4 for females.

In 2010 there were 14,036 males and 15,413 females diagnosed with cancer in Scotland. The number of cancers diagnosed in Scotland has increased over the last

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14 Of the 1,368 ‘Circulatory System’ deaths, 47.2% (646) were from ‘Ischaemic Heart Disease’ (I20-I25)
15 Of the 1,185 ‘Neoplasms’ deaths, 98.6% (1,165) were from ‘Malignant Neoplasms’ (C00-C97)
16 Cancer incidence data for 2011/12 is provisional and subject to change in future analyses
10 years from 26,169 cases in 2000 to 29,449 in 2010, representing a change in crude rate per 100,000 person-years at risk from 516.9 in 2000 to 563.9 in 2010. The EASR (age-standardised incidence rate per 100,000 person-years at risk [European standard population]) increased from 421.7 to 422.4 over the decade.

Across Scotland, within the last decade to 2010, the overall age-standardised incidence rates have fallen in males (3% decrease) and increased significantly in females (8% increase). For males, the most common cancers are prostate, lung and colorectal cancers, collectively accounting for 52% of cancers in men. For females, the most common cancers are breast, lung and colorectal cancers, accounting for 56% of cancer in women.

In Tayside, in 2010 there were 1,050 male incidences of (all) cancers and 1,210 female, a Tayside total of 2,260 incidences, representing a crude rate of 561.3 per 100,000 person-years at risk in 2010, demonstrating a small increase from the crude rate of 558.9 per 100,000 person-years at risk in 2000. The Tayside EASR (age-standardised incidence rate per 100,000 person-years at risk [European standard population]) decreased from 412.8 to 377.8 over the decade.

Figure 8 displays the cancer incidence rates between 2000 and 2010, and displays the year-on-year fluctuations over the last decade and the general higher male incidence rate (EASR). However in the last three years, the male cancer rate has been decreasing and in 2010 was slightly lower than the Tayside female cancer rate and much lower than the Scottish (EASR) rates during this period.

Figure 8. Scottish & Tayside Trends in Cancer Incidence (All Ages), 2000 – 2010

Source: ISD – Cancer in Scotland/Scottish Cancer Registry (Incidence - Data Tables & Annual Report)

Notes:
1. Cancer - All malignant neoplasms excluding non-melanoma skin cancer (ICD-10 C00-C96 excluding C44 - C97 is not used by the Scottish Cancer Registry)
2. EASR: age-standardised incidence rate per 100,000 person-years at risk (European standard population)

In 2011, 15,375 people died from cancer (excluding non-melanoma skin cancers) in Scotland, a crude rate of 292.6 per 100,000 person-years at risk and an EASR (age-standardised incidence rate per 100,000 person-years at risk [European standard population]) of 199.6. These can be compared with those rates of a decade earlier in 2001, of 298.9 crude rate and 229.8 EASR.

\[17\] Non-melanoma skin cancers (of which there were 10,100 registered in 2010) are excluded from this analysis because the registration of this tumour is believed to be incomplete.
While the age-standardised rate of death due to cancer has decreased, the actual number of deaths due to cancer has increased (in 2001 there were 15,137 cancer deaths): this largely reflects an increase in older age groups within the population, and the fact that cancer is a relatively common disease among the elderly. In addition, over the last ten years, the overall age-standardised cancer (excluding non-melanoma skin cancers) mortality rates have fallen for both males and females, with a greater decrease observed in males than in females.

The cancers that account for the greatest number of deaths in Scotland are cancers of the lung (the majority of deaths in both genders), colorectal, breast and prostate.

In 2011 there were 1,165 Tayside resident cancer deaths (excluding C44 – Other malignant neoplasms of skin), 608 males & 557 females, representing a crude rate of 287.1 per 100,000 person-years at risk in 2011, demonstrating a small decrease from the crude rate of 314.9 per 100,000 person-years at risk in 2001. The Tayside EASR (age-standardised mortality rate per 100,000 person-years at risk [European standard population]) decreased from 216.4 to 173.9 over the decade.

Figure 9 displays the cancer mortality rates between 2001 and 2011, and demonstrates that despite year-on-year fluctuations, there is an overall downward trend in the cancer EASR mortality rate during this period. This reduction in mortality is true for both genders, more so for the Tayside male population.

Figure 9. Scottish & Tayside Trends in Cancer Mortality (All Ages), 2001 - 2011

Source: ISD – Cancer in Scotland/Scottish Cancer Registry (Incidence - Data Tables & Annual Report)

Notes:

i. Cancer - All malignant neoplasms excluding non-melanoma skin cancer (ICD-10 C00-C97 excluding C44)
ii. EASR: age-standardised incidence rate per 100,000 person-years at risk (European standard population)

Across Tayside resident deaths in 2011 ‘Malignant Neoplasms’ (C00-C97) accounted for 26.7% of all deaths (all ages). Of Tayside’s three local authority areas, Malignant Neoplasms accounted for 26.4% in Angus; 27.7% in Dundee City and 25.8% in Perth & Kinross, with slightly more male than female deaths at all geographical levels.
During 2011 of all cancer deaths (C00-C97), as in previous years, ‘Malignant Neoplasm of Trachea, Bronchus and Lung’ (C33-C34) displayed the greatest number of Tayside resident deaths, accounting for 24.1% of cancer (C00-C97) deaths. Of the 281 ‘Lung Cancer’ deaths in 2011, there were slightly more male than female deaths (53.0% compared with 47.0%).

In terms of other cancer types ‘Malignant Neoplasm of Prostate’ (C61) accounted for a further 7.4% (87 males) of all cancer deaths, followed by ‘Malignant Neoplasm of Lymphoid, Haematopoietic and Related Tissue’ (C81-C96) representing 6.9% (81 persons) of all cancer deaths and ‘Malignant Neoplasm of Breast’ (C50) accounting for an additional 6.5% (76 females) during 2011 for Tayside residents.

2.6(d) Coronary Heart Disease

Coronary Heart Disease (or Ischaemic Heart Disease, I20-I25) is a preventable disease which kills around 8,000 people in Scotland each year. The disease is caused when the heart's blood vessels (coronary arteries) become narrowed or blocked and cannot supply enough blood to the heart, potentially causing heart attacks, chest pain or angina.

The treatment of Coronary Heart Disease (CHD) is a national clinical priority for NHS Scotland. Prevalence of the associated risk factors such as smoking, poor diet and physical inactivity is high and around 7.5% of men and 4.9% of women are living with CHD.

The Scottish age-sex standardised hospital discharge rate for CHD decreased from 729.8 per 100,000 population in 2010/11 to 705.7 in 2011/12. Tayside CHD hospital discharges followed the same downward trend during this period, from 622.1 to 600.2 per 100,000 population.

Of Tayside’s three local authority areas, Perth & Kinross CHP was the exception. While both Angus and Dundee CHPs displayed a reduction in hospital discharge rates for CHD (2010/11 - 2011/12 Angus 597.3 – 539.1; Dundee 720.3-661.6 per 100,000 population), Perth & Kinross increased from a rate of 556.9 per 100,000 population to 598.5 in 2011/12. (All age-sex standardised hospital discharge rates)

The Scottish incidence rate for CHD has been in overall decline over the last decade, decreasing by 28.9% from 379.7 per 100,000 population (standardised rate) in 2002/03 to 270.0 in 2011/12, in comparison the Tayside incidence rate for CHD has also been in overall decline over the same period, decreasing by 32.3% from 357.5 per 100,000 (standardised rate) in 2002/03 to 242.1 in 2011/12. Figure 10 summarises the standardised incidence rates of CHD for Tayside compared with Scotland (all ages).

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18 CHD discharge and incidence data for 2011/12 is provisional and subject to change in future analyses
19 7,636 CHD deaths in 2011
20 Source: Scottish Health Survey 2011
21 Incidence is the number of new cases of a condition, presented here as the number of people with a first hospital admission for heart disease (or death from heart disease without a prior admission)
As displayed in Figure 10, Tayside has over the last decade, continually displayed CHD incidence rates lower than the Scottish equivalent. Both at the Scottish and Tayside level CHD incidence rates are consistently higher for males than females across all age groups.

Incidence is known to increase sharply with age. The Scottish rate for CHD for under 75s in 2011/12 was 202.6 per 100,000 population while the over 75s rate was 1,887.4 per 100,000 population (standardised rate). Similarly in Tayside under 75s CHD standardised rate was 184.0 per 100,000 population compared with a rate of 1635.8 per 100,000 population for those aged 75+ years.

The Scottish incidence standardised rate for acute myocardial infarctions (AMI or heart attacks, ICD10 I21-I22) decreased by 27.0% from 202.3 per 100,000 in 2002/03 to 147.7 in 2007/08. However, the rate then increased to 164.7 per 100,000 between 2007/08 and 2011/12. A similar trend was observed across Tayside, AMI incidence, decreasing in rate by 46.4% between 2002/03 and 2007/08 from 207.6 to 111.3 per 100,000 population, then fluctuating, yet increasing to the current rate of 135.6 per 100,000 population in 2011/12. The recent increase is likely to be due to the change in the clinical definition of AMI, which is now diagnosed using more sensitive troponin tests. However despite this increase in recent years, the AMI incidence rate has overall in the last decade shown a decline in the incidence rate.
CHD, has been one of the leading causes of death in Scotland for many years, often attributed to high rates of smoking, poor diet and deprivation. In 2011 across Tayside resident deaths CHD accounted for 14.8% of all deaths (all ages) and 47.2% of all ‘Diseases of the Circulatory System’. Of Tayside’s three local authority areas, CHD accounted for 13.8% in Angus; 14.5% in Dundee City and 15.9% in Perth & Kinross, with more male than female deaths at all geographical levels.

The Scottish age-sex standardised mortality rate for CHD has decreased steadily over the last 10 years, falling from 162.3 per 100,000 population in 2002 to 92.2 per 100,000 population in 2011, an overall reduction of 43.2% and a fall of 8.1% in the last year.

Across Tayside the CHD age-sex standardised mortality rate, despite very minor fluctuations in the last five years, has also displayed a general decline the last decade. Decreasing in the last 10 years by 45.4%, from 163.0 per 100,000 population in 2002 to 88.9 per 100,000 population in 2011, a 7.5% reduction in age-sex standardised mortality rate within the last year.

The 2011 Tayside CHD mortality rate of 88.9 per 100,000 population can be compared in terms of the variability observed between NHS Board areas. Of the mainland Health Boards, NHS Greater Glasgow and Clyde had the highest standardised mortality rate in 2011 (101.6 per 100,000 population) and NHS Dumfries & Galloway the lowest rate (67.7 per 100,000 population).

Figure 11 summarises the standardised mortality rates (all ages) of CHD by area of residence. All categories clearly demonstrate a steady reduction in CHD mortality rates over the last ten years.

**Figure 11. Coronary Heart Disease: Age-Sex Standardised Mortality Rates per 100,000 Population**

![Graph showing CHD mortality rates](image)

Source: ISD – Coronary Heart Disease (Incidence - Data Tables & Annual Report)

Notes:

i. Coronary Heart Disease is Ischaemic Heart Disease ICD10 I20-I25

ii. Age-Sex Standardised (European Standard Population) Incidence rate per 100,000 population. The age-sex Standardised rates were calculated using the direct method, standardised to the European population. GRO Population Estimates were used in the calculation of the crude and standardised rates.
While Tayside’s three local authority areas have, despite minor year-on-year fluctuations, displayed a decline in CHD mortality rates between 2002 and 2011, there is some variation between the three. In 2011 Dundee City showed the highest CHD mortality rate of 103.8 per 100,000 population, compared with 77.6 in Angus and 85.3 in Perth & Kinross. In 2002 the mortality rates for each local authority were noticeably higher, Dundee City – 184.1; Angus – 172.5 and Perth & Kinross 135.5 per 100,000 population (standardised rate).

In addition, despite minor year-on-year fluctuations the AMI mortality rate has also displayed an overall decline across both Scotland and Tayside over the last decade; decreasing from 100.7 to 50.9 per 100,000 population between 2002 and 2011 for Scottish AMI deaths, while Tayside AMI mortality decreased in rate from 98.3 to 38.7 per 100,000 population during the same period.

All three Tayside local authorities have also shown an overall decline in AMI mortality rates, despite year-on-year fluctuations. In 2011 Dundee City showed the highest AMI mortality rate of 46.0 per 100,000 population, compared with 33.8 in Angus and 36.4 in Perth & Kinross. These 2011 rates can be compared with the considerably higher standardised rates in 2002 of 112.7; 108.2 and 76.5 per 100,000 respectively.

In 1999 ‘White Paper Towards a Healthier Scotland’ set out a national target for reducing the mortality rate from (CHD). This target was set to try and minimise the number of deaths that are considered to be premature (i.e. deaths in people under the age of 75). The target was to reduce the directly standardised mortality rate in people under 75 by 50% between 1995 and 2010. The Coronary Heart Disease and Stroke Strategy Update 2004 set the target to be a 60% reduction.

Figure 12 summarises the progress towards the target for the reduction of CHD mortality rates for those under 75 for both Tayside and Scotland, 1995 - 2010. While both localities clearly displayed a decline in CHD mortality within the target period, Scotland met the target, demonstrating a reduction of 60.7% from a standardised rate of 124.6 in 1995 to 49.0 per 100,000 population in 2010. In comparison, Tayside during the target period showed a decline in mortality rate by 54.5% from 104.1 in 1995 to 47.4 per 100,000 population, just below the reduction target.
The mortality rate for those under 75 continues to decline, in 2011 the Scottish CHD mortality rate was 44.7 per 100,000 population, while Tayside displayed a mortality rate of 45.8 per 100,000 population.

2.6(e) Smoking
(Source: Public Health Intelligence Officer)

It is estimated that in 2004 in Scotland, more than 13,000 deaths were attributable to smoking, equating to 24% of all deaths for that year. Between 2000 and 2004, it was estimated that 21% (4,991) of all deaths in Tayside were attributable to smoking. The greatest percentage of smoking-attributable deaths in Tayside occurred in the male 35-69 years category. Both in Angus and Perth & Kinross, it is estimated that 20% of deaths are due to smoking and this percentage is slightly higher in Dundee City at 23%.

The Scottish Health Survey 2008-2011, estimated that 23% of adults in Tayside were current smokers compared to the Scottish average of 25%. The percentage of males smoking was very slightly higher than the percentage of females. However, in the youngest and oldest age bands, more females than males smoked.

Within Tayside, there was a variation in the percentage of smokers across the three local authority areas, with Dundee City having the highest smoking prevalence at 30% of the adult population followed by Angus (23%) and then Perth & Kinross (20%) according to the Scottish Household Survey 2009/10.

The most current release of statistics from the national minimum dataset for smoking cessation services is for the calendar year 1st January to 31st December 2011. Of the 9,298 quit attempts made in Tayside in 2011, 31% (2,866) were recorded as successful quits at the one month follow-up. Of the remaining 6,432 cases, 3,470 (37%) had
smoked in the last two weeks and 2,962 (32%) were ‘lost to follow-up’/unknown. There is very little difference in the proportion successfully quitting at one month follow-up across the three Tayside CHP areas.

Of the 7,100 quit attempts made via Pharmacy Services in Tayside in 2011, 26% were successful quits at one month follow-up, 37% reported smoking in the last two weeks and 36% were lost to follow-up.

From a total of 7,529 quit attempts made/quit dates set between 1st January and 30th September 2011 in Tayside, 2,343 (31%) were recorded as successful quits at the one month follow-up and 991 (13%) had still quit at three months.

2.6(f) Sexual Health

(i) Sexually Transmitted Infections (STIs)

**Chlamydia:** In Tayside, rates of Chlamydia and other sexually transmitted infections (STIs) are increasing. The highest rates are found in the age 16-25 group in both genders. The increasing rates can be partly explained by the increase in clinical activity and higher rates of case finding. Figure 13 summarises the rates for Chlamydia within Tayside 1996 - 2009. An update for 2010 for Figure 13 is not available due to issues with data collection within the clinic settings. However, data from laboratory diagnoses shows that there was an increase (15.5%) in the number of diagnoses for genital chlamydia between 2009 and 2010 in Tayside.

**Figure 13. Chlamydia Rate per 100,000 Population in Tayside**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>120</td>
</tr>
<tr>
<td>1997</td>
<td>130</td>
</tr>
<tr>
<td>1998</td>
<td>140</td>
</tr>
<tr>
<td>1999</td>
<td>150</td>
</tr>
<tr>
<td>2000</td>
<td>160</td>
</tr>
<tr>
<td>2001</td>
<td>170</td>
</tr>
<tr>
<td>2002</td>
<td>180</td>
</tr>
<tr>
<td>2003</td>
<td>190</td>
</tr>
<tr>
<td>2004</td>
<td>200</td>
</tr>
<tr>
<td>2005</td>
<td>210</td>
</tr>
<tr>
<td>2006</td>
<td>220</td>
</tr>
<tr>
<td>2007</td>
<td>230</td>
</tr>
<tr>
<td>2008</td>
<td>240</td>
</tr>
</tbody>
</table>

Source: ISD Online (Public Health Intelligence Officer - Sexual Health Summary, May 2012)

Positivity rates vary across gender and age groups and are highest among young men, mainly because those accessing services are a higher risk group and are, for example, more likely to attend after contact tracing. Positivity rates are fairly low in women aged 25 and over.

**Uptake of Genitourinary Medicine Services:** The uptake of clinical services within Genitourinary Medicine (GUM) has increased over time as shown in Figure 14. As mentioned previously, data for 2010 is not available due to the integration of sexual health services across Scotland. This means that whereas people would traditionally
attend a specific GUM clinic, they now attend generic sexual health clinics which encompass a wide range of purposes.

**Figure 14. Uptake of Genitourinary Medicine Services in Tayside**

![Graph showing Uptake of Genitourinary Medicine Services in Tayside](image)

Source: ISD Online (Public Health Intelligence Officer. Sexual Health Summary, May 2012)

Note: There was no data recorded in 2001 at Ninewells

**HIV**: The numbers of HIV reports per year are small but, as shown in Figure 15, the number of cases occurring through heterosexual contact is showing an upward trend overall.

**Figure 15. Number of HIV Infected Persons in Tayside by Transmission Category**

![Graph showing Number of HIV Infected Persons in Tayside by Transmission Category](image)

Source: Health Protection Scotland (Public Health Intelligence Officer. Sexual Health Summary, May 2012)

More up-to-date data for Figure 15 is not available however Table 14 displays the number of new HIV diagnoses in 2010 and the total burden of the disease as at 31st December 2010 by the method of transmission in Tayside.

**Table 14. HIV-Infected Persons in Tayside as at 31st December 2010**

<table>
<thead>
<tr>
<th>New diagnoses in 2010</th>
<th>Number of infected persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative to 31st December 2010</td>
<td></td>
</tr>
<tr>
<td>MSM</td>
<td>26</td>
</tr>
<tr>
<td>S.I.between men and women</td>
<td>121</td>
</tr>
<tr>
<td>Injecting drug use</td>
<td>214</td>
</tr>
<tr>
<td>Other/undetermined</td>
<td>307</td>
</tr>
<tr>
<td>Total</td>
<td>673</td>
</tr>
</tbody>
</table>
There is considerable variation in the incidence of HIV between the different Community Planning areas in Tayside. The number of people with HIV is much higher in Dundee City, and accounts for over two thirds of the current HIV population (where the Local Authority area is recorded).

(ii) Teenage Pregnancy

**National Target:** Scotland has a higher rate of teenage pregnancy than most other western European countries; it is a national target of the Scottish Government to reduce unintended teenage pregnancy by 20% (pregnancy rate per 1,000 female population\(^{23}\)) in under 16 year olds from 8.5 in 1995 to 6.8 in 2010. The 2010 Scottish teenage pregnancy rate for under 16 year olds was recorded as 7.1 per 1,000 population, thus the target was narrowly missed nationally.

Locally Tayside met the national reduction target for under 16 pregnancy rates. Between 1995 and 2010 Tayside’s teenage pregnancy rate decreased beyond the target rate of 20%, decreasing in total by 31.2%. (1995 Tayside teenage pregnancy rate was 10.9, compared with 7.5 per 1,000 female population in 2010). Teenage pregnancies for under 16s and 18s are no longer published at local geographies on an annual basis for reasons of confidentiality, instead they are replaced by a three-year aggregate data release.

From these aggregated figures, while both Angus and Perth & Kinross have demonstrated reductions in their teenage pregnancy rates between 1995/97 and 2008/10, only Angus has met and exceeded the target for under 16s. In comparison, Dundee City is the only Tayside local authority area to display an increase in the under 16 pregnancy rate during this period, an increase of 2.9% between 1995/97 to 2008/10.

Table 15 summarises the local target progression between 1995 and 2010 for Tayside and it’s three local authority areas.

**Table 15. Tayside Teenage Pregnancy\(^1\) – Under 16s 1995-2010 Reduction Target (Rate per 1,000 Female Population)**

<table>
<thead>
<tr>
<th>Administrative Area</th>
<th>Year Ending December 31st</th>
<th>1995</th>
<th>2010</th>
<th>Target</th>
<th>% Change</th>
<th>Target Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tayside</td>
<td></td>
<td>10.9</td>
<td>7.5</td>
<td>8.7</td>
<td>-31.2%</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Area</th>
<th>3 Year Rolling Aggregate(^2)</th>
<th>1995/97</th>
<th>2008/10</th>
<th>Target</th>
<th>% Change</th>
<th>Target Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td></td>
<td>9.1</td>
<td>6.9</td>
<td>7.2</td>
<td>-24.2%</td>
<td>✓</td>
</tr>
<tr>
<td>Dundee</td>
<td></td>
<td>14.0</td>
<td>14.4</td>
<td>11.2</td>
<td>2.9%</td>
<td>x</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td></td>
<td>7.4</td>
<td>6.9</td>
<td>5.9</td>
<td>-6.8%</td>
<td>x</td>
</tr>
</tbody>
</table>

Source: ISD Online: Teenage Pregnancies

Notes:

1. Number and rate of pregnancies in women under the age of twenty based on data derived from birth and stillbirth registrations, and from the notifications of therapeutic abortions.

23 Teenage pregnancy rate is counted as the number of deliveries combined with the number of abortions, does not include miscarriages. Available information is used to estimate the woman’s age at the likely time of conception.
**Comparisons:** The Scottish teenage pregnancy rate has seen a small but consistent decline over the last 4 years. In 2010, in the under 16 age group there were 7.1 pregnancies per 1,000, no change from 2009. The rates in the older age groups have reduced, with the under 18s dropping from 37.3 per 1,000 in 2009 to 35.9 per 1,000 in 2010 and the under 20s from 52.9 per 1,000 to 50.2 per 1,000 female population.

Figure 16 summarises all three age groups for teenage pregnancy rates across Tayside compared with Scotland. Since 1994 the Tayside teenage pregnancy rate has fluctuated year-on-year; however it has demonstrated a steady decline over the last 4 years. However, Tayside NHS board has consistently exhibited a higher teenage pregnancy rates than the Scottish figure.

**Figure 16. Teenage Pregnancy Rates by Age of Conception for Tayside & Scotland**

Source: NRS/GROS registered births and stillbirths & Notifications (to the Chief Medical Officer for Scotland) of abortions performed under the Abortion Act 1967. (ISD Scotland National Statistics Release)

Notes:

- i. All pregnancies in women aged under 16. Rate calculated on female population aged 13-15 (per 1,000 population)
- ii. All pregnancies in women aged under 18. Rate calculated on female population aged 15-17 (per 1,000 population)
- iii. All pregnancies in women aged under 20. Rate calculated on female population aged 15-19 (per 1,000 population)

In mainland NHS boards in 2010, NHS Highland recorded the lowest rate of teenage pregnancy in the under 16 age group, with 5.4 per 1,000, the highest in this age group recorded in NHS Fife at 9.2 per 1,000, these can be compared with NHS Tayside’s under 16 rate of 7.5 per 1,000 female population.

The lowest rates in the under 18 and under 20 age groups occurred in NHS Grampian, with rates of 27.9 per 1,000 and 41.0 per 1,000 respectively. Once again NHS Fife held the highest pregnancy rate in the under 18 age group with 47.7 per 1,000 female population, while NHS Ayrshire & Arran demonstrated the highest rate of 59.7 per 1,000 in the under 20 age group. Within these two older teenage age groupings, NHS Tayside recorded pregnancy rates of 39.8 (under 18s) and 55.9 (under 20s) per 1,000 female population. The 2010 teenage pregnancy rates for the 'Under 18s' and 'Under 20s' are the lowest recorded since 1994 for Tayside.
Dundee City has consistently had the highest annual teenage pregnancy rate not only across the Tayside local authorities but in general across all Scottish local authority areas since 1999 to date. In mainland council areas, for the three year period 2008/10 the lowest rates of teenage pregnancy were recorded in East Renfrewshire Council (2.7 per 1,000) for the under 16 age group and under 18 age group (15.3 per 1,000). Dundee City Council had the highest teenage pregnancy rate in both these age groups, 14.4 per 1,000 in the under 16 age group and 65.8 per 1,000 in under 18 age group. In 2010, the lowest and highest rates in the under 20 age group in mainland council areas are 22.7 per 1,000 in East Renfrewshire and 67.9 per 1,000 in Dundee City Council.

Table 16 summarises the current teenage pregnancy figures for Tayside’s three local authority areas by age group to allow comparison between the highest and lowest local authority areas across Scotland.

**Table 16. Rate of Teenage Pregnancies by Tayside’s Local Authority of Residence and Age of Mother at Conception**

<table>
<thead>
<tr>
<th>Period</th>
<th>Under 16s</th>
<th></th>
<th>Under 18s</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Angus</td>
<td>Dundee City</td>
<td>Perth &amp; Kinross</td>
<td>Angus</td>
</tr>
<tr>
<td>2007/09</td>
<td>7.4</td>
<td>18.5</td>
<td>6.7</td>
<td>42.2</td>
</tr>
<tr>
<td>2008/10</td>
<td>6.9</td>
<td>14.4</td>
<td>6.9</td>
<td>37.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>Under 20s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Angus</td>
</tr>
<tr>
<td>2009</td>
<td>56.9</td>
</tr>
<tr>
<td>2010</td>
<td>53.4</td>
</tr>
</tbody>
</table>

Source: NRS registered births and stillbirths & Notifications (to the Chief Medical Officer for Scotland) of abortions performed under the Abortion Act 1967. (ISD Scotland - National Release, Table 3)

Notes:

i. All pregnancies in women aged under 16. Rate calculated on female population aged 13-15 (per 1,000 population)
ii. All pregnancies in women aged under 18. Rate calculated on female population aged 15-17 (per 1,000 population)
iii. All pregnancies in women aged under 20. Rate calculated on female population aged 15-19 (per 1,000 population)

In 2010, all three Tayside local authority areas have shown, to some extent, a decrease across all age groups from the previous year, with the exception of Perth & Kinross for those aged under 16, who in 2008/10 recorded a slight increase to 6.9 per 1,000 female population, compared with the previous period rate of 6.7 (2007/09).

Dundee City, while the highest of the Tayside (and Scottish) rates, has shown substantial reduction in rates during the period 2008/10 from 2007/09. For those aged under 16, a reduction in rate from 18.5 to 14.4 per 1,000 female population and from 73.9 to 65.8 per 1,000 female population in the under 18 age group during this period. For those aged under 20 years of age Perth & Kinross recorded the largest reduction in pregnancy rates between 2009 (52.5 per 1,000) and 2010 (43.2 per 1,000).

Figures 17 and 18 summarises the year-on-year fluctuations of the three age groups encompassing teenage pregnancy.

As the figures demonstrate, Dundee City has consistently displayed pregnancy rates higher than it’s Tayside counterparts year-on-year for all three teenage age groups. In contrast, despite some minor fluctuations, Perth & Kinross have in general held the lowest teenage pregnancy rate of the three Tayside local authority areas since 1994.
Across Angus in 2010 those aged under 18’s teenage pregnancy rate was the lowest recorded since 1994 for this local authority. In addition, the rates for all three Tayside local authorities for those aged under 20 are also the lowest recorded rates since 1994. A steady progress is clearly being made in the reduction of teenage pregnancy across Tayside.

Figure 17. Under 16s and 18s Teenage Pregnancy Rate by Tayside’s Local Authority Areas

Source: GROS registered births and stillbirths & Notifications (to the Chief Medical Officer for Scotland) of abortions performed under the Abortion Act 1967. (ISD Scotland National Statistics Release)

Notes:
i. Includes all pregnancies in women aged under 16. The rate is calculated using the female population aged 13-15 (per 1,000 population).

Figure 18. Under 20s Teenage Pregnancy Rate by Tayside’s Local Authority Areas

Source: GROS registered births and stillbirths & Notifications (to the Chief Medical Officer for Scotland) of abortions performed under the Abortion Act 1967. (ISD Scotland National Statistics Release)

Notes: Includes all pregnancies in women aged under 20. Rate calculated using the female population aged 15-19 (per 1,000 population).
2.6(g) Harm Reduction

Levels of needle and syringe (direct) sharing have increased since the late 1990s. Data from across the UK suggests that more than a quarter of Injecting Drug Users (IDUs) reported direct sharing in 2005. The sharing of other injecting related equipment remains more common. Recent work in Scotland has demonstrated that the environment in which injecting takes place can also have an influence injecting practices. There is evidence that groin injection, which presents particular risks to health, is becoming more common. These findings highlight the need to reinforce harm reduction advice and intervention about injection hygiene, vein care and risk management.

Numbers of Drug Users and Injectors in Tayside

- In Tayside, there were 1,377 new individuals reported to the Scottish Drug Misuse Database in 2008/09, an increase of 470 (57.2%) individuals from 2006/07. Of these 1,377 individuals, 246 new clients were from Angus, 877 were residents of Dundee City and 262 were from Perth & Kinross.

- 524 individuals in Tayside reported being current injectors in 2008/09, an increase from 348 individuals in 2006/07. The percentage of users who reported currently injecting in 2008/09 was 41% in Angus, 45% in Dundee City and 24% in Perth & Kinross.

- The report “Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland” by ISD Scotland published in 2011 with 2009/10, estimated that there were approximately 5,000 drug users in Tayside, a prevalence rate of 1.92% of the population aged 15-64. Within Tayside localities, there were 1,100 (a rate of 1.38%) in Angus, 2,800 (3.29%) in Dundee City and 1,200 (1.18%) in Perth & Kinross.

- This report also estimated the number of drug injectors to be 1,254, a prevalence rate of 0.49% of the population aged 15-64. There were 217 injectors in Angus (a prevalence rate of 0.31%), 845 (0.89%) in Dundee City and 193 (0.21%) in Perth & Kinross.

2.7 Quality & Outcomes Framework (QOF) Data

The Quality & Outcomes Framework (QOF) is a fundamental part of the new General Medical Services (GMS) contract\textsuperscript{24}, introduced on 1st April 2004. Participation by general practices in the QOF is voluntary. For those that do participate, the QOF measures achievement against a range of evidence-based indicators, with points and payments awarded according to the level of achievement.

(i) Prevalence data in the QOF

Data on the prevalence of specific diseases or health conditions are an important element of the QOF and are of interest to many parties. Prevalence is a measure of the burden of a disease or health condition in a population at a particular point in time (and is different to incidence, which is a measure of the number of newly diagnosed cases

\textsuperscript{24} QOF is part of the GMS contract and so practices with other contract types are not automatically expected to take part.
within a particular time period). Prevalence data within the QOF are collected in the form of practice "registers". A QOF register may count patients with one specific disease or condition, or it may include multiple conditions. There may also be other criteria for inclusion on a QOF register, such as age or recency of diagnosis.

Prevalence data derived from QOF disease registers are of clear interest from a public health perspective. They can potentially be used to examine variations in the prevalence of the chronic diseases, but they should be interpreted with caution. A major reason for this is that they are what are known as "raw" or "crude" rates - which means that they take no account of differences between practice populations in terms of their age or gender profiles, or other factors that influence the prevalence of health conditions. A QOF prevalence rate is simply the total number of patients on the register, expressed as a proportion or percentage of the total number of patients registered with the practice. They are not adjusted to account for patient age distribution or other factors that may differ between general practices. In addition, while the registers may be restricted the QOF prevalence rate is based on the total number of persons registered with the practice (practice list size) at one point in time.\textsuperscript{25, 26}

\textbf{(ii) Tayside QOF Data}\textsuperscript{27}

During the period April 2011 to March 2012, across Tayside and its three local authority areas, 'smoking' is the QOF condition with the highest prevalence rate of all QOF listed conditions and all areas display rates higher than the Scottish figure. Tayside’s prevalence rate is 25.41 per 100 patients for ‘smoking’ compared with the Scottish rate of 24.28; Angus CHP – 26.73; Dundee CHP – 24.67; Perth & Kinross CHP – 25.29 (based on ‘all practices’).

When the prevalence of the twenty-two QOF conditions is compared, Tayside has a prevalence rate equal to, or lower, than that of Scotland in five of the conditions; Asthma, Cancer, ‘Depression 2 (of 2): new diagnosis of depression’, CVD (Primary Prevention of Cardiovascular Disease) and Palliative Care.

Other patterns of conditions with rates lower than the Scottish rate emerge when analysing Tayside’s three CHPs. While all three CHPs have prevalence rates for ‘Asthma’ and ‘Depression 2 (of 2): new diagnosis of depression’ and CVD (Primary Prevention of Cardiovascular Disease) lower than that of the Scottish rate, individually the prevalence of certain conditions do vary. Table 17 presents the prevalence rates for all QOF conditions between Scotland, Tayside and Tayside’s three local authority areas.

\begin{itemize}
  \item \textsuperscript{25} QOF prevalence figures may differ from prevalence figures from other sources because of coding or definitional issues.
  \item \textsuperscript{26} Year-on-year changes in the size of QOF registers are influenced by various factors including demographic changes, improvements in case findings, changes in definition, data recording, diagnostic practice etc.
  \item \textsuperscript{27} QOF data based on ‘all practices’
\end{itemize}
Table 17. Quality & Outcomes Framework (QOF) Based Prevalence Rates (Crude Rates per 100 patients) by Locality, April 2011 - March 2012

<table>
<thead>
<tr>
<th>Condition</th>
<th>Scotland</th>
<th>NHS Tayside</th>
<th>Angus CHP</th>
<th>Dundee CHP</th>
<th>Perth &amp; Kinross CHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>6.02</td>
<td>5.85</td>
<td>5.80</td>
<td>5.97</td>
<td>5.75</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.86</td>
<td>1.79</td>
<td>1.88</td>
<td>1.62</td>
<td>1.94</td>
</tr>
<tr>
<td>CHD</td>
<td>4.36</td>
<td>4.44</td>
<td>4.85</td>
<td>4.27</td>
<td>4.33</td>
</tr>
<tr>
<td>COPD</td>
<td>2.08</td>
<td>2.32</td>
<td>2.14</td>
<td>2.80</td>
<td>1.87</td>
</tr>
<tr>
<td>Dementia</td>
<td>0.73</td>
<td>0.91</td>
<td>1.03</td>
<td>0.78</td>
<td>0.97</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4.43</td>
<td>4.70</td>
<td>4.82</td>
<td>4.72</td>
<td>4.58</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>0.81</td>
<td>0.96</td>
<td>0.87</td>
<td>0.95</td>
<td>1.03</td>
</tr>
<tr>
<td>Hypertension</td>
<td>13.75</td>
<td>14.66</td>
<td>15.72</td>
<td>13.79</td>
<td>14.89</td>
</tr>
<tr>
<td>Stroke &amp; TIA</td>
<td>2.15</td>
<td>2.45</td>
<td>2.65</td>
<td>2.32</td>
<td>2.45</td>
</tr>
<tr>
<td>Atrial Fibrillation</td>
<td>1.49</td>
<td>1.72</td>
<td>1.84</td>
<td>1.46</td>
<td>1.93</td>
</tr>
<tr>
<td>CKD (Chronic Kidney Disease)</td>
<td>3.27</td>
<td>3.87</td>
<td>4.17</td>
<td>3.86</td>
<td>3.64</td>
</tr>
<tr>
<td>CVD (Primary Prevention of Cardiovascular Disease)</td>
<td>1.52</td>
<td>1.45</td>
<td>1.51</td>
<td>1.39</td>
<td>1.48</td>
</tr>
<tr>
<td>Depression 1 (of 2) - Conditions assessed for depression</td>
<td>7.81</td>
<td>8.14</td>
<td>8.62</td>
<td>7.95</td>
<td>7.99</td>
</tr>
<tr>
<td>Depression 2 (of 2) - New diagnosis of depression</td>
<td>9.02</td>
<td>5.96</td>
<td>3.85</td>
<td>7.29</td>
<td>5.98</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>0.74</td>
<td>0.76</td>
<td>0.71</td>
<td>0.82</td>
<td>0.74</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>3.69</td>
<td>5.23</td>
<td>5.62</td>
<td>5.08</td>
<td>5.12</td>
</tr>
<tr>
<td>Learning Disabilities</td>
<td>0.47</td>
<td>0.48</td>
<td>0.43</td>
<td>0.58</td>
<td>0.41</td>
</tr>
<tr>
<td>LVD (Left Ventriculum Dysfunction)</td>
<td>0.57</td>
<td>0.69</td>
<td>0.52</td>
<td>0.71</td>
<td>0.80</td>
</tr>
<tr>
<td>Mental Health</td>
<td>0.85</td>
<td>0.96</td>
<td>0.79</td>
<td>1.09</td>
<td>0.93</td>
</tr>
<tr>
<td>Obesity</td>
<td>8.63</td>
<td>9.65</td>
<td>11.28</td>
<td>9.66</td>
<td>8.40</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>0.19</td>
<td>0.17</td>
<td>0.21</td>
<td>0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>Smoking (Conditions assessed for smoking)</td>
<td>24.28</td>
<td>25.41</td>
<td>26.73</td>
<td>24.67</td>
<td>25.29</td>
</tr>
</tbody>
</table>

Source: ISD Website – QOF Database

Notes:

i. Although the QOF is part of the new General Medical Services (GMS), practices with other contract types (17C or 2C) may also choose to use the QOF. These figures include data from practices of any contract type, and are therefore based on larger numbers of practices than tables based on GMS practices alone.

ii. QOF registers may relate to a single condition, or a number of conditions and do not always count what they appear to on face value (e.g. “smoking” and “depression 1” do not count all patients who smoke or have depression). There may also be restrictions on who is counted on the register, e.g. according to age.

iii. Prevalence = number of patients on the specified QOF register, divided by list size, multiplied by 100.

Within Angus prevalence rates for Epilepsy, Learning Disabilities, LVD (Left Ventriculum Dysfunction) and Mental Health are all lower than the Scottish rates for these conditions. In comparison, prevalence rates for Cancer, CHD, Atrial Fibrillation, and Palliative Care are all lower than the Scottish rate in Dundee City. Perth & Kinross’s prevalence rates for Learning Disabilities, CHD, COPD, Obesity and Palliative Care are all lower in this area compared with Scottish rates, in addition Perth & Kinross’s Epilepsy prevalence rate, equals that of Scotland.
Of those Tayside prevalence rates less than the Scottish figure, both asthma and cancer are two primary ‘Long Term Conditions (LTCs)’. Here the QOF prevalence rate (based on ‘all practices’) for asthma demonstrates that in 2011/12; both Angus (5.80 per 100 patients) & Perth & Kinross (5.75 per 100 patients) had a prevalence rate slightly lower than both the Tayside (5.85 per 100 patients) and Scotland (6.02 per 100 patients) rates. Dundee City’s rate of 5.97 per 100 patients, though slightly higher than the Tayside prevalence rate, it is still lower than the Scottish rate.

The Tayside cancer prevalence rate of 1.79 per 100 patients is slightly lower than the Scottish rate of 1.86 in 2011/12. Of Tayside’s three local authorities, only Dundee CHP held a prevalence rate (1.62 per patients) less than both the Tayside and Scotland rates. Compared with Angus CHP (1.88 per 100 patients) and Perth & Kinross CHP (1.94 per 100 patients) - (based on ‘all practices’).

In addition to asthma and cancer, there are several other QOF conditions that are high profile ‘LTCs’ including; Coronary Heart Disease (CHD), COPD, Dementia, Diabetes, Heart Failure, Hypertension and Stroke/TIA.

Having discussed Asthma and Cancer, with the exception of CHD (Dundee and Perth & Kinross CHPs) and COPD (Perth & Kinross CHP only) in 2011/12, all three Tayside local authorities had a prevalence rate for the identified LTCs higher than the Scottish rate (based on ‘all practices’), and in some cases higher than the Tayside prevalence rate (see Table 14).

Within the condition of CHD, Dundee and Perth & Kinross CHPs had prevalence rates lower than the Scotland rate of 4.36 (4.27 and 4.33 per 100 patients respectively), however in comparison Angus had a slightly higher rate of 4.85 per 100 patients in 2011/12, in addition higher to the Tayside CHD prevalence rate of 4.44 per 100 patients.

The Tayside prevalence rate for COPD in 2011/12 was 2.32 per 100 patients, while it’s Perth & Kinross CHP had a prevalence rate (1.87 per 100 patients) lower than this and the Scotland rate (2.08 per 100 patients). However in comparison Angus and Dundee CHPs had slightly higher rates, 2.14 and 2.80 per 100 patients respectively, compared to their Tayside counterpart and Scotland.
COMMUNITY PHARMACY IN NHS TAYSIDE

Community pharmacists are the most accessible of all health care professionals and are positioned at the interface between NHS care and self-care. Pharmacists see patients regularly when they come in to collect prescriptions, and provide a ‘no appointment necessary’ service for giving advice on managing illness and improving health. In addition, premises registered with the General Pharmaceutical Council, and supervised by a pharmacist, can advise on and sell Pharmacy-Only medicines, GSL (General Sales List medicines) and health care products, as well as provide medicines using Patient Group Directions. This role of community pharmacy is an important and increasing aspect for promoting self-care.

Tayside has 92 community pharmacies that are located across three Community Health Partnership Areas; Angus, Dundee and Perth and Kinross. The population served by the pharmacies in Tayside is currently estimated as 405,721 but is projected to increase, with the population of Perth and Kinross by the largest amount.

Information on the current population of Tayside demonstrates that each individual pharmacy can be estimated to be serving a population of around 4,400 people. This compares to the neighbouring areas of Forth Valley (4,163 patients per pharmacy), Fife (4,321 patients per pharmacy) and Grampian (4,239 patients per pharmacy).

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of community Pharmacies</th>
<th>Population (GROS 2009)</th>
<th>Population per community Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Tayside</td>
<td>92</td>
<td>405,721</td>
<td>4,410</td>
</tr>
<tr>
<td>Angus</td>
<td>23</td>
<td>110,630</td>
<td>4,810</td>
</tr>
<tr>
<td>Dundee</td>
<td>36</td>
<td>145,570</td>
<td>4,044</td>
</tr>
<tr>
<td>Perth and Kinross</td>
<td>33</td>
<td>149,721</td>
<td>4,531</td>
</tr>
</tbody>
</table>

There is no standard as to the number of people that should be served by a pharmacy but Table 14 shows that there is some differences in the average population served by each pharmacy between the three CHP areas, with Angus having the greatest number of patients per pharmacy and higher dispensary workloads (mean 7,107 items per month, with NHST average of 6,417). The number of items dispensed during 2011/12 grew by 4.7%, 3.7% and 4.9% for Angus, Dundee and Perth and Kinross respectively, compared to 2008/09.

The new Community Pharmacy contract and changes to the law regarding supervision will enable Community Pharmacists to adopt the role envisaged by The Right Medicine, supported by changes to the roles of the supporting community pharmacy staff. In particular, the report for the Scottish Government published in 2010, "Establishing Effective Therapeutic Partnerships - A generic framework to underpin the Chronic Medication Service element of the Community Pharmacy Contract provides a route map for the major professional and contractual changes that are currently being implemented in Scotland."
Data from the Tayside record linkage facility, The Health Informatics Centre (HIC), demonstrates that 60% of patients use one pharmacy exclusively, with a further 25% using two pharmacies in 2009/2010 (Figure 17). During these 12 months, 322,000 people utilised pharmacies in Tayside; 194,000 people used just one pharmacy. Approximately 94% of the population of Tayside had a prescription dispensed within this period. These figures are prior to the introduction of the Chronic Medication Service that requires registration with a pharmacy. It is therefore anticipated that the proportion of patients using one pharmacy exclusively will increase.

Figure 17: Percentage of Patients Utilising One or More Pharmacies in Tayside

Across Tayside, community pharmacies are widely distributed so that they can serve the many different centres of population in rural and urban areas (MAP A below). Equity of provision includes access (e.g. hours of service, disability, infirmity), age, gender, ethnicity and socioeconomic status. As pharmacy moves from a largely supply-based service to delivering a wider pharmaceutical care service, it is important that services reach those who need them most.

The needs of different populations vary according to differing disease burdens e.g. cardiovascular disease displays a social gradient with increasing levels of disease moving from social class I to V, and of differing health behaviours. The same is true with ethnicity where different ethnic groups display different levels of cardiovascular risk factors e.g. smoking, obesity and cholesterol levels. In order to ensure that pharmaceutical care services are accessible, meet treatment goals and deliver health improvement, NHS Tayside will work to ensure that local planning reflects the diversity of needs within the local population. Maps included in Appendix 1 show the location of the pharmacies within each CHP. Pharmacies are located widely across Tayside within centres of population.
MAP (A) : Community Pharmacy Locations in Tayside
### 3.1 Opening Hours

The availability of a pharmacy in a locality is an enabling factor in the ability of the population to get access to effective healthcare. Pharmacies not only provide dispensing services for patients requiring prescribed medication, but also advice on minor ailments and self-care and provision of the different services available through patient group directions. The pharmacy contract enables the population of Tayside to access the four additional core pharmaceutical care service elements, as well as the range of locally negotiated services identified as necessary to meet local needs. The relationship between the locally negotiated services and community pharmacy may well change over time as the core areas of the new community pharmacy contract are fully implemented. To date Scottish research confirms that peak hours for visits to community pharmacies are between 9 am - 12 noon (43%) and 2 - 5 pm (32%). However, for some services, such as the supply of emergency hormonal contraception, these are mainly accessed over the weekend period.

Pharmacies must provide opening hours of five and a half days per week. These must cover 9.00am to 5.30pm on 5 days of the week. They can be closed for 1 hour during the middle of the day and offer one day per week of a 9am to 1pm opening (NHS Tayside Primary Care Services: Hours of Service). There are some local variations on these hours that have been agreed by the NHS Board based on local circumstances and need, to suit the requirements at individual locations (Table 15).

Several pharmacies have extended hours to 6pm and many offer a service all day on Saturday and on Sundays in Dundee and Perth and Kinross. The number of the pharmacies in each CHP that are open until 5.30pm*; open until 6.00pm*; open between 6pm and 8pm*; open on Saturday morning only; open all day Saturday; and open on Sunday are shown in the table below. (*on weekdays)

#### Table 19: Community pharmacy opening Hours in NHS Tayside (February 2010)

<table>
<thead>
<tr>
<th>Locality</th>
<th>Number of Contracts</th>
<th>Weekday Hours</th>
<th>All Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>To 5.30pm</td>
<td>5.30pm to 6pm</td>
<td>6pm to 8pm</td>
</tr>
<tr>
<td>Angus Locality</td>
<td>23</td>
<td>12</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Dundee Locality</td>
<td>36</td>
<td>22</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Perth &amp; Kinross Locality</td>
<td>33</td>
<td>19</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

There is one pharmacy closed on a Saturday, based within a Health Centre (Dundee). Under the new negotiated arrangement, pharmaceutical services are provided by pharmacies normally open on Saturdays and Sundays across each CHP. Arrangements for the festive period are set out in Table 16.
### Table 20: Community Pharmacy Festive Rota Service in NHS Tayside (February 2012)

<table>
<thead>
<tr>
<th>Group</th>
<th>Pharmacy open</th>
<th>Localities Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>One pharmacy to be open (in Arbroath)</td>
<td>Arbroath, Carnoustie, Friockheim, Letham.</td>
</tr>
<tr>
<td>B</td>
<td>Two pharmacies to be open (one in Forfar and one in Montrose)</td>
<td>Brechin, Edzell, Forfar, Kirriemuir, Montrose</td>
</tr>
<tr>
<td>C</td>
<td>Four pharmacies to be open (within the central and city centre areas of Dundee)</td>
<td>Dundee, Invergowrie, Monifieth, Muirhead.</td>
</tr>
<tr>
<td>D</td>
<td>One pharmacy to be open (in Perth)</td>
<td>Bridge of Earn, Errol, Perth, Scone</td>
</tr>
<tr>
<td>E</td>
<td>One pharmacy to be open</td>
<td>Kinross, Milnathort</td>
</tr>
<tr>
<td>F</td>
<td>One pharmacy to be open (in Crieff)</td>
<td>Auchterarder, Comrie Crieff</td>
</tr>
<tr>
<td>G</td>
<td>One pharmacy to be open (in Pitlochry)</td>
<td>Aberfeldy, Dunkeld, Pitlochry, Stanley</td>
</tr>
<tr>
<td>H</td>
<td>One pharmacy to be open (in Blairgowrie)</td>
<td>Alyth, Blairgowrie, Coupar Angus</td>
</tr>
</tbody>
</table>

In Angus and Perth and Kinross, festive rota services are well distributed to cover rural populations.

#### 3.2 Travel Time

Previous national research has indicated that 86% of the population are within 20 minutes travelling time of their pharmacy and 44% are within 10 minutes. These data also showed that 47% of respondents travelled by car and 42% walked. The majority (83%) started and ended their journey at home with only 8% travelling from their place of work. This data is broadly supported by a UK wide survey showed that 56% of respondents were a short walk away from a pharmacy with an additional 22% further than a short walk but less than one mile. The respondents in this survey reported a mean distance of travel of 0.8 miles to a pharmacy. When travelling to a community pharmacy 54% of respondents reported travelling by foot, 36% drive themselves, 3% drive others, 5% travel by bus and 1% by bike.

Geographical Information Systems are a useful method to enable estimation of patient travelling times for access to local health services.

#### 3.3 Access and Facilities of Community Pharmacy Premises in NHS Tayside

Facilities available within community pharmacy premises should be consistent with advice in the *Scottish Health Planning Note 36-Part 3 Community Pharmacy Premises in Scotland- Providing NHS Pharmaceutical Services* produced by Health Facilities Scotland. There are also new premises standards published by the General Pharmaceutical Council in September 2012. These standards will be translated into rules and consulted upon and then approved and laid before Parliament. It is not expected that this to happen before October 2013, at the earliest. Over the next 12 months, the GPhC will work with patients and the public, pharmacy professionals, pharmacy owners and superintendents, and professional, industry and trade bodies to plan and manage the transition to the new standards. Partnership working will be critical to the success of the transition to the new standards.

Until these standards are introduced, the core requirements from the previous arrangements will be relevant.

Core requirements for new premises are set out and must include:

- **Equality of Access for all Patients** - A formal assessment should have been performed, to ensure that they are consistent with the duties placed on service providers by the
Disability Discrimination Act 1995 and where deficiencies have been identified should have in place a plan for rectification.

- **Waiting Area** - Premises are to include a waiting area with appropriate seating and sufficient space to enable a wheelchair user, guide dog or someone with a pushchair to sit without obstructing the route of travel of others.

- **Consultation Area** - Premises are to have a consultation area which is fit for purpose, offers privacy and is capable of accommodating two people standing or seated and wheelchair access. Where locally negotiated services such as methadone supervision (and other supervised products) are also offered within the pharmacy then this area should also ensure safety for both the clients using the service and the staff involved in providing the service, as well as provide reasonable separation from other pharmacy users.

- **Health Promotion Area** - Premises will have an area which is set aside for the display of health promotion leaflets and health educational materials.

- **Environment and Design** - Premises, in particular the area/s where clinical activities are provided will be uncluttered, provide a professional image and be conducive to efficient working.

- **Storage of Returned Medicines** - Premises will have appropriate facilities for the collection and storage of returned medicines.

- **Signage** - Services panels detailing information on the services the pharmacy offers should be available in all premises and signage should be used to alert members of the public and patients to the appropriate areas/facilities of the pharmacy.

- **Needle and Syringe Exchange** - The area used provides privacy, with space for sharp collection bins, including additional space for storage of the bins within the pharmacy premises and ensures safety for staff involved in providing the service.

### 3.4 Information Technology

Pharmacies require secure and confidential access to information about patients, medicines and NHS developments. Many of the steps needed to implement the new pharmacy contract require IT support and improved communication between community pharmacy, general practice and the hospital services. NHS Tayside has established a generic email system to all 92 community pharmacies which contains both NHS net and company email accounts. This provides a more effective communication process with community pharmacy for non patient identifiable information.

In 2001-2002, the first project was established within NHS Ayrshire & Arran to develop a system to provide the necessary functionality for the Electronic Transfer of Prescriptions (ETP). Since then there have been further policy and service developments that have resulted in changes to the ePharmacy Programme, as an integral part of the wider NHS eHealth programme. The current implementation of the Chronic Medication Service has established an electronic care plan format to support the improved pharmaceutical care of patients through the new service. NHS Tayside has developed an electronic platform which enables pharmaceutical care plans to be transferred routinely between secondary care and primary care.
3.5 Community Pharmacy Workforce

Pharmacists

Community pharmacy services are delivered by a trained and knowledgeable workforce. Approximately two-thirds of all registered pharmacists are employed within community pharmacy. The pharmacist provides an expert source of knowledge about medicines to the public with a number of pharmacists possessing specialised areas of competence in the areas in which they work.

Information obtained previously from the register of the Royal Pharmaceutical Society of Great Britain indicated that there are approximately 350 pharmacists with a registered address in Tayside. Of interest is the data showing that the numbers of community pharmacist prescribers have been trained and now deliver regular clinics (Table 17). Work to increase opportunities for pharmacist prescribers has been undertaken through the Public Health Service and locally negotiated services. Prescribing pharmacists are now utilised in the smoking cessation service.

Table 21: Numbers of Community Pharmacy Prescribers Working Regularly in Pharmacies in NHS Tayside

<table>
<thead>
<tr>
<th></th>
<th>Angus</th>
<th>Dundee</th>
<th>Perth &amp; Kinross</th>
<th>Tayside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Supplementary Prescribers</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Practicing Independent Prescribers</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Pharmacy Technicians

A pharmacy technician is a person who has been accepted onto the General Pharmaceutical Council (GPhC) pharmacy technician professional register through meeting the knowledge, performance and practice training requirements. The pharmacy technician role is generally based around the safe and effective supply of medicines, healthcare advice and information. However, many pharmacy technicians supervise pharmacy staff and manage technical services.

Pharmacy technicians are now a regulated profession and as such are required to practice safely and effectively according to the GPhC Standards of Conduct, Ethics and Performance which sets the patient as the central focus. It is a requirement for pharmacy technicians to be responsible for identifying and addressing their own professional development needs through participation in continuing professional development (CPD). Individual pharmacy technicians are accountable for their own practice. Together, this provides an assurance of quality which will generate a confidence in the professional practice of the pharmacy technician workforce.

An accuracy checking technician is a pharmacy technician who has completed a recognised training programme allowing them to carry out the final accuracy check on prescriptions which have been clinically screened by a pharmacist. The development of this role has enabled the release of pharmacist time from the final accuracy checking process allowing more time to provide services aligned with the community pharmacy contract.

The availability of a skilled pharmacy technician workforce is critical to enable the process of allowing pharmacy practice to take on the changes required by the pharmacy contract. The GPhC reported in December 2012 there were 2000 registered pharmacy technicians with
postal addresses in Scotland, from that number 206 live in Tayside with approximately 140 working in the community pharmacy sector.

**Pharmacy Support Staff**

A Dispensing Assistant will have completed the SVQ level 2 Pharmacy Services or equivalent accredited course, or undertaking training towards this. They assist the pharmacist and pharmacy technician in carrying out a range of pharmacy support activities including routine dispensing, storage and supply of medicines and the provision of healthcare advice.

A Medicines Counter Assistant is required to complete an accredited programme of training for work in support of the sale of non-prescription medicines, the receipt of prescriptions, the handing out of completed dispensed items and the giving of advice on health matters.

A new training programme has been developed for pharmacy support staff entitled Pharmacist Assistant. This training programme will provide the underpinning knowledge for pharmacy support staff to assist with the provide the provision of the community pharmacy contract.

**Training Support in NHS Tayside**

In 2003 the post, Lead Pharmacy Technician for Education, Training and Development was established. The post holder manages the local delivery of relevant accredited education and training programmes and uses expert knowledge to advise NHS Tayside staff in hospital and community sectors on pharmacy staff development related issues.

Training support is offered to individual trainees by providing practical advice, peer support and encouragement. By increasing the number of qualified pharmacy staff in Tayside, and providing relevant ongoing learning opportunities, it is more likely that the service can meet the challenges of the community pharmacy contract and the healthcare needs of our population.
3.6 **Additional Core Pharmaceutical Care Services**

All community pharmacies are required to provide the four additional core pharmaceutical care services:

- Minor Ailments Service
- Public Health Service
- Acute Medication Service
- Chronic Medication Service

All four of the additional core pharmaceutical care services are in place. The MAS was introduced in July 2006 and tier one of the PHS was introduced at the same time. The PHS was introduced in August 2007. The Acute Medication Service (AMS) was implemented during 2008. The Chronic Medication Service (CMS) has been implemented across all pharmacies in Tayside over the last two years.

### 3.6(a) Minor Ailment Service (MAS)

The Minor Ailment Service (MAS) allows eligible individuals to register with and use a community pharmacy as the first port of call for the treatment of common illnesses on the NHS. A patient registers with the community pharmacy of their choice in order to use MAS. Once registered they can present at any point with symptoms and the pharmacist, having ascertained whether the patient is still eligible to use the service, will treat, advise or refer them to another health care practitioner where appropriate.

The following persons are currently **eligible** to register for the service:

- persons who are under 16 years of age or under 19 years of age and in full-time education;
- persons who are aged 60 years or over;
- persons who have a valid maternity exemption certificate, medical exemption certificate, or war pension exemption certificate;
- persons who get Income Support, Income-based Jobseeker’s Allowance, Income-related Employment and Support Allowance, or Pension Credit Guarantee Credit; and
- persons who are named on, or are entitled to, an NHS tax credit exemption certificate or a valid HC2 certificate.

The following persons are **not eligible** to register for the service:

- persons who are not included in the list of eligible persons above;
- persons not registered with a Scottish GP practice; temporary residents; and
- patients in Care Homes (Nursing and Residential Homes)

When the pharmacist decides that the most appropriate action is to treat the presenting condition/s, they will then decide on the course of treatment they wish to recommend for the patient. This recommendation is supported by national and local formularies. The pharmacist receives a capitation fee and any associated reimbursement costs for the product supplied in a similar way as for a product supplied on a GP10.

The pharmacist registers a person electronically for MAS via the central Patient Registration System (PRS) using their Community Health Index (CHI) number. A MAS patient registration
The signing of the registration form means that the patient is able to receive care via MAS even if the registration process is not complete (for example confirmation of their registration has not been received from PRS). The principle applied to the service is that reimbursement for items will be authorised even if subsequently the patient’s registration is not successful.

A pharmacist also uses their PMR system to generate a CP2 form detailing the output of a MAS consultation; the treatment provided, a referral or advice only provided. A corresponding electronic claim message is generated and sent to Practitioner Services via ePMS to support payment processing through ePay.

3.6(b) Public Health Service (PHS)

The Public Health Service (PHS) element of the contract aims to encourage the pro-active involvement of community pharmacists and their staff in supporting self care, offering suitable interventions to promote healthy lifestyles and establishing a health promoting environment across the network of community pharmacies by participating in national and local campaigns.

It comprises the following services:

- the provision of advice to both patients and members of the public on healthy living options and promotion of self care;
- the provision of NHS or NHS-approved health promotion campaign materials, other health education information and additional support materials to patients and members of the public;
- the participation in national health promotion campaigns which are on display and visible in the pharmacy for agreed periods of time, including the display of materials in a window of the pharmacy, or in the absence of a suitable window space, another space in the pharmacy;
- the participation in local health promotion campaigns where agreed between the local NHS Board and community pharmacist;
- the provision of a smoking cessation service, comprising of advice and supply of nicotine replacement therapy (NRT) and other smoking cessation products over a period of up to 12 weeks, in order to help people give up smoking; and
- the provision of a sexual health service comprising of the supply of emergency hormonal contraception (EHC), advice and referral if necessary.

During 2012, work commenced to review the national service specification for smoking cessation and provision of emergency hormonal contraception. It is expected that new specifications will be implemented in 2013.

The Public Health Service covers three core activities:-
• a health promoting philosophy
• health promoting activities
• a health promoting environment

Health protection, health improvement and promoting medicine safety should be an integral part of a pharmacist’s holistic approach to pharmaceutical care services.

In the spirit of “Health Promoting Health Service” all interactions between community pharmacists and their support staff with patients and the general public allows for the giving of opportunistic advice on healthy living and the encouragement and support for patients to self care.

Community pharmacy contractors have supported campaigns on topics such as influenza vaccination, Meningitis and Physical Activity. The support is provided partly by the insertion of a poster in the community pharmacy window and the adoption by the pharmacy staff of opportunistic consistent health promotion messages about the topic.

**Health Promoting Environment**

Community pharmacy contractors provide an area inside their premises to support health improvement activities, including the display of health promotion campaign materials and access to appropriate health education information and support materials.

Community pharmacy contractors are encouraged to ensure that staff, patients and customers are aware of Smoke Free Scotland legislation and community pharmacy contractors comply with the requirements of the legislation banning smoking in public places.

3.6(c) Acute Medication Service (AMS)

The Acute Medication Service (AMS) was the first building block in the introduction of electronic transmission of prescription information (ETP) between GP prescribers and community pharmacy contractors. With the electronic transfer of prescriptions, a GP prints a GP10 prescription form, which also carries a bar code and unique prescription number (UPN). At the same time as printing the form, the GP IT system automatically sends an electronic prescribed message to the ePharmacy Message store (ePMS). The electronic message contains exactly the same information as printed on the GP10. On receiving a prescription in the pharmacy, the pharmacist scans the bar code which pulls down the electronic message from ePMS. The pharmacist then uses the information in the electronic message for dispensing purposes, reducing the need for data entry and transcription. Dispensing a prescription triggers the creation of a corresponding electronic claim message, which the pharmacist sends to ePMS, where it is retrieved by Practitioner Services to support payment processing through ePay.

3.6(d) Chronic Medication Service (CMS)

The Chronic Medication Service (CMS) allows patients with long-term conditions to register with a community pharmacy of their choice for the provision of pharmaceutical care as part of a shared agreement between the patient, community pharmacist and General Practitioner (GP). It introduces a more systematic way of working and formalises the role of community pharmacists in the management of individual patients with long term conditions in order to assist in improving the patient’s understanding of their medicines and optimising the clinical benefits from their therapy.
Eligibility criteria:

1. Registered with a Scottish General Practice
2. Patient has a long term condition
3. Not resident in a Care Home

There are three stages to CMS:

**Stage 1** involves the registration of patients for CMS. A patient with a long term condition/s registers with a community pharmacy of their choice. He/she can only register with one pharmacy at any one time for the service. Registration is voluntary and includes an explicit informed patient consent process. This consent is given to the registering pharmacist.

**Stage 2** introduces a generic pharmaceutical care planning framework which is based on the systematic approach to the practice of pharmaceutical care as described in the Clinical Resource and Audit Group (CRAG) Framework document, Clinical Pharmacy Practice in Primary Care. Initially the pharmacist assesses registered patients to identify and prioritise individuals or patient groups with unmet pharmaceutical care needs in order to target patients most in need of their support. The pharmacist then undertakes to identify and record the patient’s pharmaceutical care needs, care issues, any desired outcomes and the actions required to deliver those outcomes. These are documented and monitored in a pharmaceutical care plan.

Two new tools have been introduced under CMS to focus attention on parts of the patient journey where medicines can cause a higher rate of problems.

**High Risk Medicines Support Tools**

The aim of this initiative is to bring into focus high risk medicines and formalise how the pharmaceutical care is delivered to patients on these medications within CMS. Guidance and risk assessments for specific therapies i.e. Lithium and Methotrexate are now available from within the PCR and other high risk medicines will be added in due course e.g. Warfarin and Azathioprine.

These tools should be used to aid delivery of CMS to this high risk group of patients. The focus allows outcomes to be recorded and evidence gathered around specific areas which will help give clear benefits to patients and show benefits of the service to other stakeholders. This is intended to demonstrate that by improving patient safety, pharmacists have positively contributed to the Scottish Government’s Quality Strategy: being patient-centred, safe and effective.

**New Medicine Intervention Support Tool (NMIST)**

The aim of NMIST is to increase patient adherence to new medicines prescribed to treat long term conditions. The support tool has been built into the Pharmacy Care Record (PCR), in a similar way to the tool already available for high risk medicines and pharmacy contractors can use it to support initiation and registration for CMS.

The tool is set up to provide guidance on interventions with a patient who has a new medicine and also offers related risk assessment information. The structure for intervention with patients receiving a new medicine differs slightly from the intervention for patients with a high risk medicine and this has been reflected within the PCR.
The focus allows outcomes to be recorded and evidence gathered on use of new medicines and the impact pharmacists have around adherence. Such information will demonstrate that by delivering effective pharmaceutical care, which is patient-centred, safe and effective, pharmacists can contribute through CMS in a positive manner to the SG Quality Strategy. NMIST also potentially offers greater patient numbers than the other support tools to aid contractors with continued CMS engagement.

**Stage 3** establishes the shared care element which allows a patient’s GP to produce a 24 or 48 week serial prescription for a patient which is dispensed at appropriate time intervals determined by the GP. Once the last installment from the serial prescription has been dispensed the pharmacist electronically sends an end of care treatment summary, which includes a serial prescription renewal request to the GP practice. The end of care treatment summary details any relevant data such as compliance reporting and any recommended action/s for the GP.

Patients receiving a serial prescription are likely to be relatively stable and attend general practice for monitoring and long term condition clinics.

**ePharmacy developments**

Like the Minor Ailment Service (MAS), a patient is registered electronically for CMS by the Patient Registration System (PRS). A CMS patient registration request is generated by the pharmacist’s Patient Medical Record (PMR) system and sent to PRS via the ePharmacy message store (ePMS). PRS will send back a message informing the pharmacist whether registration has been successful or not. The patient’s GP practice is also notified electronically once a patient is registered for CMS and the patient’s record is flagged. This acts as a trigger for the GP when they open the patient record so that they know that they can enter in Stage 3 of CMS and generate a serial prescription for that patient. Withdrawal is also electronically supported in the same way as registration. Again the GP practice is alerted to a registration withdrawal.

The care planning process will be supported electronically by the pharmacy PMR system. It will assist in documenting the care plan electronically, printing a paper copy for the patient and electronically generating the end of care treatment summary.

eCMS also builds on the Electronic Transfer of Prescriptions (ETP) and allows a GP to produce a “master” serial prescription which is transmitted by ETP to ePMS. When the paper form is scanned in the pharmacy this retrieves the electronic prescription. The pharmacist retains the serial prescription and scans it at the appropriate dispensing intervals to pull down the electronic prescription data. This also allows for a check for any cancellation messages that may have been sent by the GP. As with electronic Acute Medication Service (eAMS), each dispensing triggers the creation of an electronic claim message which the pharmacist sends to ePMS from where it is accessed by Practitioner Services for payment processing through ePay.

**3.6(e) Unscheduled Care**

Unscheduled care can be described as:-

“NHS care which cannot reasonably be foreseen or planned in advance of contact with the relevant healthcare professional, or is care which, unavoidably, is out with the core working period of NHS Scotland. It follows that such demand can occur at any time and that services to meet this demand must be available 24 hours a day.”
In the past the largest group of patients requiring unscheduled care tended to use one of the following routes:

- an urgent appointment with their GP
- advice from NHS 24
- referral to the Out of Hours service via NHS 24

Service developments, implemented within community pharmacy, have led to pharmacies becoming an important access route for people requiring unscheduled care particularly over weekends and public holidays such service developments implemented by community pharmacy contractors include:-

- The National Patient Group Direction for the Urgent Supply of Repeat Medicines and Appliances
- Community pharmacy Direct Referral to local Out of Hours services
- The NHS Minor Ailment service

National Patient Group Direction for the Urgent Supply of Repeat Medicines and Appliances

The PGD for urgent provision of repeat medicines and appliances has been developed by NHS 24 on behalf of NHS Scotland, and implemented by NHS Boards. The PGD enables community pharmacy contractors to provide patients with up to one prescribing cycle of their repeat medicines and appliances when the patient’s prescriber is unavailable, the surgery is closed or an out-of-hours system is in operation.

Patient Group Directions (PGD) are written instructions for the supply or administration of medicines to groups of patients who may not be individually identified before presentation for prescribing treatment. By using the national PGD for the urgent supply of repeat medicines and appliances pharmacists can provide a supply of the patient’s medicine for up to the equivalent of the quantity of medicine normally prescribed for the patient.

3.7 Services Supported by National Procurement

3.7(a) Stoma service

Stoma care services are now offered by 92 community pharmacies in Tayside, under arrangements with National Procurement. The service that is provided ensures that delivery of stoma products for patients is timely, efficient and supportive; flexibility exists within the provision to meet the needs of the patient; and patient choice is considered in determining how the service and products should be provided.

3.8 Locally Negotiated Pharmaceutical Care Services

Locally negotiated pharmaceutical care services have been developed by NHS Tayside to meet specific needs within the population. These services are currently operated through locally negotiated contracts and not provided by all pharmacies. Under the legislation contained the Smoking Health and Social Care Act (Scotland) 2005, it is the duty of NHS Boards to secure the pharmaceutical care services necessary to meet these needs. The pharmaceutical care services plan defines the specific needs of different sections of the population for locally negotiated pharmaceutical care services.

3.8 (a) Advice to Nursing Homes
A Locally Enhanced Scheme (LES) was commissioned by Tayside Health Board to provide and improve the quality of pharmaceutical care for patients living within the care home setting. The LES has a particular focus on nursing home beds with an emphasis on systems and processes for ordering and storage of medicines, medication compliance record keeping, administration and disposal of medicines and appliances, direct patient care with respect to the clinical and cost effective use of medicines.

The SLA has been designed to augment the previous dispensing and/or delivery service that community pharmacies provided. The SLA aims to ensure a uniform approach to the services provided to care homes from community pharmacies and so improve the profile of variance, cost and harm attributed to the use of medicines in this sector. A further aim of the LES is to improve communications between general practice and community pharmacists in regard to the patients within the care homes.

Currently, a successor LES is being designed, aimed at the frail elderly. This new LES will seek to support older people living within their own homes, as well as those living within care environments.

3.8(b) Services for Substance Misusers

In common with other regions of Scotland, Tayside faces significant challenges from rising levels of substance misuse. The Road to Recovery is the Scottish Policy document on substance misuse treatment and accessibility. This document lays out the guidance on recovery-focused services and treatment modalities. The emphasis in this document is on recovery plans and the opportunity for substance misusers to receive treatment in their own environments.

The Scottish Government Policy documents Getting It Right for Every Child and Getting Our Priorities Right outline the effect of parental substance misuse on children and families. These documents provide guidance on the importance of early intervention to families affected by substance misuse to ensure the best possible outcomes for children through maintaining the family unit where possible. Commitment 13 within the Mental Health Act set out a pathway for substance misuse services and mental health services to work together to provide a holistic service for individuals with co-morbidity.

The Hepatitis C Virus Strategy for Scotland promotes the establishment of sustainable injecting equipment providers in a range of locations to ensure accessibility to clean injecting equipment for intravenous drug users. The strategy aims to reduce the transmission of Hepatitis C virus through health protection measures.

Locally Negotiated Medication Services

In Tayside, all community pharmacies provide medication dispensing and supervision service to people with substance misuse problems. Pharmacy capacity in Perth and Kinross and Angus is sufficient to meet current patient need, however, there is a need for service redesign in some areas of Dundee city where patients may travel some distances to access their medication on a daily basis.

Tayside Substance Misuse Services (TSMS) have seen a year on year increase in the number of people receiving medical treatments across Tayside as the service has evolved to meet waiting times, the national HEAT target, of referral to treatment within three weeks. NHS Tayside have proposed that the delivery model for substance misuse services be redesigned, and have been working with community pharmacy colleagues to deliver a new model of care under the locally negotiated service scheme which will help to increase
capacity and improve patient care. Currently small tests of change are ongoing to develop a pharmaceutical care planning tool for methadone, which could be rolled out across Tayside.

**Injecting Equipment Provision**

The Scottish Drug Misuse Database estimates that there are around 4000 injecting drug users in Tayside. There are a number of health risks associated with injecting drugs, including blood-borne virus (BBV) infections, abscesses, bacterial infections and thrombosis.

There is evidence from around the world that, Injecting Equipment Provision (IEP) services are effective in reducing risky behaviours and in the reduction in HIV transmission. Less convincing is the evidence in relation to reducing HCV transmission.

The Injecting Equipment Provision Guidelines published in May 2010, sets out objectives for Boards to deliver; including injecting equipment provision, access to Blood Borne Virus (BBV) testing, Hepatitis A + B immunisation, wound care and referral to specialist treatment services as appropriate.

These objectives are being taken forward across Tayside IEP services being delivered a static needle exchange site in Dundee, Minor injury units in Angus and fifteen community pharmacies across Tayside. Needle exchange is also available in the Police custody suites of Dundee & Perth and Kinross.

**3.8(c) Tayside Community Pharmacy Palliative Care Network**

This initiative was developed in response to concerns expressed in accessing palliative care medicines for patients being cared for at home. Twenty five community pharmacies throughout Tayside form the Tayside Community Pharmacy Palliative Care Network. The scheme follows the framework described in the Scottish Executive Circular MEL (1999) 78 for a Community Pharmacy Model Scheme for Palliative Care. The pharmacies in the scheme stock an agreed range of palliative care medicines.

Patients or their carers continue to use their usual community pharmacy to obtain prescriptions. The community pharmacies participating in the scheme are only accessed when the patient's usual community pharmacy cannot supply the palliative care medicine(s) within the time-scale required (Table 18).

*The aims of the scheme are to:*

- Allow timely access to palliative care medicines for patients being cared for at home.
- Provide information regarding palliative care medicines to patients, carers and healthcare professionals.

During 2012/13 six additional pharmacies were recruited to the scheme to enhance the service available.

The network is not designed to provide a formal overnight out-of-hours service. However the current arrangements for contacting those pharmacists who are willing to be contacted during this period is available to the out of hours service.
Table 22: Localities with Community Pharmacies Holding Palliative Care Medicines Stock List

<table>
<thead>
<tr>
<th>Locality</th>
<th>Pharmacy Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>Arbroath (2 pharmacies)</td>
</tr>
<tr>
<td></td>
<td>Brechin</td>
</tr>
<tr>
<td></td>
<td>Carnoustie</td>
</tr>
<tr>
<td></td>
<td>Forfar</td>
</tr>
<tr>
<td></td>
<td>Kirriemuir</td>
</tr>
<tr>
<td></td>
<td>Monifieth</td>
</tr>
<tr>
<td></td>
<td>Montrose (2 pharmacies)</td>
</tr>
<tr>
<td>Dundee</td>
<td>Broughty Ferry</td>
</tr>
<tr>
<td></td>
<td>Dundee (4 pharmacies)</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>Aberfeldy</td>
</tr>
<tr>
<td></td>
<td>Auchterarder</td>
</tr>
<tr>
<td></td>
<td>Blairgowrie</td>
</tr>
<tr>
<td></td>
<td>Crieff</td>
</tr>
<tr>
<td></td>
<td>Milnathort</td>
</tr>
<tr>
<td></td>
<td>Perth (4 pharmacies)</td>
</tr>
<tr>
<td></td>
<td>Pitlochry</td>
</tr>
<tr>
<td></td>
<td>Scone</td>
</tr>
</tbody>
</table>

3.8(d) Immunisation

In 2006, it was recognised that community pharmacies could be utilised to improve occupational influenza immunisation rates. A programme of training and service implementation was undertaken and now immunisation is provided from forty of Tayside’s ninety two pharmacies. Community pharmacies have been involved in several immunisation campaigns, including for influenza immunisation for NHS staff, local authority care workers, poultry workers and recently human papilloma virus immunisation for young women.
4.0 RELATING POPULATION NEEDS TO THE PROVISION OF PHARMACEUTICAL CARE SERVICES

4.1 Assessing the Need for Pharmaceutical Care Services

Community pharmacy services provide a range of pharmaceutical care services (PCS) to their patients and the general public. Tayside now has 92 community pharmacies, with two new pharmacy contracts awarded in 2012. In terms of travelling time, there would appear to be sufficient PCS within a reasonable travelling distance of all communities in Tayside. One community has dispensing services provided by the Aberfeldy and Kinloch Rannoch Medical Practice in Perthshire.

It is noted, for example, that the community at Abernethy may be provided with pharmaceutical care services through a pharmacy in Newburgh, Fife. Some residents in the south of Perth and Kinross will obtain their pharmaceutical care services from e.g. Dunblane in Forth Valley.

A joint initiative between health boards and ISD is currently being undertaken to develop methods to profile the catchment areas of community pharmacies and the population that uses each pharmacy. This work may enable a better understanding of the need for services and especially how the needs of vulnerable populations can be better met.

4.2 Community Pharmacy Premises

Community pharmacy sits at the interface between self-care and NHS care. Community pharmacies are important sources of health advice and health interventions within our local communities. Importantly, community pharmacies are accessed by almost all of the population, including populations of special relevance to health services such as families and older people, young men, by young people and by people from more disadvantaged communities. With the implementation of the new pharmacy contract, provision of a wide range of services has become standardised throughout all pharmacies, including a public health service. Pharmacies are the main provider of smoking cessation support and emergency hormonal contraception. The core additional services and the range of locally negotiated local services have increased the requirement for high quality consultation rooms that comply with the Health Protection Scotland publication on Infection Prevention and Control Guidance within NHS and non-NHS Primary and Community Care settings in NHS Scotland.

Consultation rooms/private areas

NHS Tayside has invested in community pharmacies to enable them to develop private areas that can be utilised for the provision of clinical services, counselling and/or advice. These areas are essential to enable the delivery of national services such as the provision of emergency hormonal contraception or local services such as immunisation in a confidential manner. The development of consultation or private areas in many pharmacies has been an enabling factor in the development of these services.

From data collected in 2012, 91 pharmacies in Tayside out of 92 have a consultation room. A recent document from Community Pharmacy Scotland has assisted in defining the standard of premises required for carrying out various services within pharmacies.

Wheelchair access

A programme of funded alterations across the localities means that 76 of 92 pharmacies have disabled access.
Hearing loop systems
Hearing loop systems are available in 76 pharmacies (83%) in Tayside. Hearing loops provide improved listening clarity for people with hearing loss who experience difficulty and fatigue, when trying to understand speech, because of distance, reverberation, and distracting background noise. This information is summarised in Table 19 below:

Table 23: Facilities at Community Pharmacy premises in NHS Tayside (February 2012)

<table>
<thead>
<tr>
<th>Area</th>
<th>Facility: Consultation room and Private area</th>
<th>Facility: Consultation Room only</th>
<th>Facility: Private Advice area only</th>
<th>Facility: Disabled access</th>
<th>Facility Induction Hearing loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Tayside</td>
<td>49</td>
<td>43</td>
<td>1</td>
<td>80</td>
<td>76</td>
</tr>
<tr>
<td>Angus</td>
<td>13</td>
<td>10</td>
<td>0</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Dundee</td>
<td>24</td>
<td>12</td>
<td>1</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Perth and Kinross</td>
<td>12</td>
<td>21</td>
<td>0</td>
<td>28</td>
<td>30</td>
</tr>
</tbody>
</table>

4.3 Hours of Service
Core general practice hours of service are Monday to Friday between 8am and 6pm. It can be seen from Table 15 that pharmaceutical care services are available across NHS Tayside during these times and for some of the hours of service provided by the GP Out of Hours Service. The needs of patients to access healthcare on weekends when GP practices are closed are also met by the hours of community pharmacies across NHS Tayside as a whole.

4.4 The Need for Additional Core Pharmaceutical Care Services
4.4 (a) Minor Ailments Service (MAS)
MAS supports the management of common clinical conditions under the NHS and represents a cost-effective option when compared to GP consultation. It enables eligible people to register with the community pharmacy of their choice and have their common conditions treated by their community pharmacist on the NHS without the need to visit a GP. A research paper by The Bow Group, “delivering enhanced pharmacy service in a modern NHS: Improving outcomes in public health and long term conditions”, found that an average GP consultation cost £32. The average cost of a pharmacy consultation was £17.75. The report emphasised the potential of pharmacy consultations to decrease costs to the health service. Factors that may affect the need and uptake of MAS include:

- Eligibility criteria for MAS
- Size of the Scottish population
- Epidemiology of minor ailments
- Rate of uptake of MAS
- Historical service provision

Registrations have increased monthly across Scotland to more than 845,000 by in 2012 (Figure 18). In Tayside, registrations for 2012 increased to 56,941, up 12% on 2009. Around 13.5% of patients currently registered on GP practice lists are registered with MAS, compared to 15.2% across Scotland. The average cost of an item dispensed under MAS in Tayside was £2.23 in 2011/2012 compared to £2.09 on a Scotland basis. The most frequently prescribed items provided across Scotland through MAS are shown in Table 21.

Figure 18: MAS Registrations as a Percentage of GP Practice Populations by NHS Board, March 2010
Table 24 - NHS Board Cipher - Translation

<table>
<thead>
<tr>
<th>NHS Cipher</th>
<th>NHS Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ayrshire and Arran</td>
</tr>
<tr>
<td>B</td>
<td>Borders</td>
</tr>
<tr>
<td>F</td>
<td>Fife</td>
</tr>
<tr>
<td>G</td>
<td>Greater Glasgow and Clyde</td>
</tr>
<tr>
<td>H</td>
<td>Highland</td>
</tr>
<tr>
<td>L</td>
<td>Lanarkshire</td>
</tr>
<tr>
<td>N</td>
<td>Grampian</td>
</tr>
<tr>
<td>R</td>
<td>Orkney</td>
</tr>
<tr>
<td>S</td>
<td>Lothian</td>
</tr>
<tr>
<td>T</td>
<td>Tayside</td>
</tr>
<tr>
<td>V</td>
<td>Forth Valley</td>
</tr>
<tr>
<td>W</td>
<td>Western Isles</td>
</tr>
<tr>
<td>Y</td>
<td>Dumfries and Galloway</td>
</tr>
<tr>
<td>Z</td>
<td>Shetland</td>
</tr>
</tbody>
</table>
Table 25: Examples of items supplied across Scotland through the MAS 2011/2012

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Examples of use in MAS</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paracetamol</td>
<td>Pain, fever</td>
<td>407,998</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>Pain, fever, inflammation</td>
<td>134,813</td>
</tr>
<tr>
<td>Simple Linctus</td>
<td>Cough</td>
<td>101,392</td>
</tr>
<tr>
<td>Emollients</td>
<td>Dry scaly skin</td>
<td>67,889</td>
</tr>
<tr>
<td>Dimeticone</td>
<td>Scabies, head lice</td>
<td>65,966</td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>Eye infections</td>
<td>59,868</td>
</tr>
<tr>
<td>Clotrimazole</td>
<td>Vaginal thrush, athlete's foot</td>
<td>57,139</td>
</tr>
<tr>
<td>Chlorphenamine Maleate</td>
<td>Hayfever</td>
<td>56,752</td>
</tr>
<tr>
<td>Compound Alginic Acid Preparations</td>
<td>Indigestion / heartburn</td>
<td>51,708</td>
</tr>
<tr>
<td>Cetirizine</td>
<td>Hay fever, other allergic reactions</td>
<td>43,604</td>
</tr>
</tbody>
</table>

Source: ISD 2013

An average community pharmacist advises around ten members of the public each day on the treatment of such conditions. This therefore is equal to over 920 consultations per day in Tayside. During the year 2011/12, 56,941 patients were registered with the Minor Ailments Scheme. Community pharmacists undertook an average of 2 consultations per patient registered during this year.

Consultation with patient groups has identified that much greater public awareness of the service is required. Patient groups strongly support the service but find that many of their members are not aware of it. It may be that additional publicity is required within Tayside to raise the profile of the service within different sections of the population.

- All pharmacies have engaged in provision of the Minor Ailments Service and population coverage is likely to be sufficient.
- A public awareness campaign is necessary to increase uptake of the service.

4.4(b) Public Health Service (PHS)

PHS outlines the contribution of pharmacists to health improvement and medicine safety. It engages community pharmacists in the task of health improvement for individuals and local communities. As well ensuring that each pharmacy has a health promoting philosophy, undertakes health promoting activities and provides a health promoting environment, PHS also encompasses smoking cessation and sexual health services within its scope.

4.4(b) (i) Smoking Cessation

During 2012, over 9,500 smokers set a quit date across Tayside, with 83% of patients choosing to use a pharmacy for their quit attempt. The numbers of smokers using services to make a quit attempt has more than tripled since service inception in 2006/07. NHS Tayside will meet the HEAT 6 target for 2012/2013 through the contribution of community pharmacies.

Pharmacies are preferentially utilised by some populations for their health care needs. These populations include young people, families and older people, as well as people from disadvantaged communities. A good example of this is the work of community pharmacies with pregnant smokers through the Give It Up For Baby smoking incentive scheme in Dundee. In 2012 pharmacies recruited 227 pregnant smokers and were able to support 15% of the population of pregnant smokers to continue their quit attempt to 4 weeks: the best performance in Scotland.
Populations from disadvantaged communities have also heavily utilised pharmacies. Quit4U was launched in March 2009 by the Minister. This smoking cessation incentive scheme targets smokers in disadvantaged communities and encourages them to make a quit attempt through social support and an incentive payment. An independent evaluation of the scheme was published in 2012. This found that the scheme was both highly effective and highly cost effective, producing statistically better patient outcomes than the Scottish benchmark. Table 22 shows the latest available figures released for smoking cessation activity by CHP.

**Table 26: Uptake of Smoking Cessation Services within NHS Tayside 2011**

<table>
<thead>
<tr>
<th></th>
<th>Estimated Smokers (% of population)</th>
<th>Number of Quit Attempts 201</th>
<th>Estimated Annual Service Uptake (% of total smokers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Tayside</td>
<td>82,662 (20.4)</td>
<td>9,298</td>
<td>11.2%</td>
</tr>
<tr>
<td>Angus</td>
<td>20,686 (18.7)</td>
<td>2,574</td>
<td>12.4%</td>
</tr>
<tr>
<td>Dundee</td>
<td>36,672 (25.2)</td>
<td>3,596</td>
<td>9.8%</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>25,190 (16.8)</td>
<td>3,004</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Source: [www.ISD.org.uk](http://www.ISD.org.uk) 2012

Work has been undertaken with each pharmacy to provide feedback on the patient outcomes arising from their smoking cessation services. Information on the expected numbers of smokers who should be recruited by each pharmacy in order to meet the HEAT 6 target has been given and performance data on quit rates shared. The approach has been welcomed by pharmacists and will be continued in 2013.

4.4(b) (ii) Sexual Health

Tayside NHS Board consistently exhibits one of the highest teenage pregnancy rates across all Scottish health boards. For 2009, NHS Tayside had the highest teenage pregnancy rates within two of the three age groups that are monitored by the Scottish Government; for those aged under 18, 46.6 per 1,000 (Scotland 39.8 per 1,000) and 62.5 per 1,000 population for those under 20 (Scotland 52.8 per 1,000). (Figure 19)

NHS Tayside has invested in the provision of EHC from pharmacies since 2006 and this service has been increasingly accessed by young people; most women choose a community pharmacy for this service. A total of 5,156 young people accessed this service from community pharmacy during 2011/12, compared to 1,360 in 2006/7.
Table 23 demonstrates that women from Angus have a relatively low use of pharmacies supplying EHC compared to the other Tayside localities. It is possible that young women from Angus either do not access the service or choose to access the service in a large local town centre such as Dundee. Women using pharmacies in Dundee locality demonstrate the highest rate of EHC utilisation in Tayside. City centre pharmacies with extended hours are accessed by the greatest number of clients. Over time, utilisation of pharmacies in rural towns has increased, although City Centre pharmacies are still utilised to the greatest extent which could be a direct result of opening ours but may also be due to increased perceptions of anonymity.

<table>
<thead>
<tr>
<th>Location</th>
<th>2009/10 (%)</th>
<th>2010/11 (%)</th>
<th>2011/12 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>630 (13)</td>
<td>520 (11)</td>
<td>617 (12)</td>
</tr>
<tr>
<td>Dundee</td>
<td>3,020 (63)</td>
<td>2,953 (64)</td>
<td>3,161 (61)</td>
</tr>
<tr>
<td>Perth</td>
<td>1,137 (24)</td>
<td>1,153 (25)</td>
<td>1,378 (27)</td>
</tr>
<tr>
<td>Total</td>
<td>4,787</td>
<td>4,626</td>
<td>5,156</td>
</tr>
</tbody>
</table>

Previous assessment work for this service identified that clients were often repeat users of EHC and that relatively few clients accessed other services to obtain long-acting contraception or to be tested for sexually transmitted infections.

An opportunity to work with Perth and Kinross Council has been progressed. A patient experience programme has been undertaken with identified groups of young people in Perth and Kinross, in order to understand their impressions of services including pharmacies. Several other strands of work have been undertaken to improve the quality of services offered. These include implementation of the You’re Welcome standards, to ensure that pharmacies provide a welcoming environment for young people and also further implementation of the C Card initiative into pharmacies.
4.4(c) Acute Medication Service (AMS)

AMS is the provision of pharmaceutical services for acute episodes of care. It provides patients with access to the pharmacy of their choice for the dispensing of acute prescriptions and associated counselling and advice. Acute prescriptions are estimated to represent around 25% of the total dispensing workload, with prescriptions for anti-infectives (BNF chapter 5) estimated to represent around 4% of Tayside prescription items (Table 24).

Table 28: Estimated Acute Dispensing activity in NHS Tayside 2011/2012

<table>
<thead>
<tr>
<th>Population Centre</th>
<th>Estimated Average Monthly Number of items 2009/2010</th>
<th>Average Monthly Number of Anti-infective Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>163,465</td>
<td>6,539</td>
</tr>
<tr>
<td>Dundee</td>
<td>226,885</td>
<td>9,075</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>185,564</td>
<td>7,423</td>
</tr>
</tbody>
</table>

Source ISD 2013

Unscheduled Care Services

A growing number of items are being dispensed through the unscheduled care service. Table 25 below shows the number of items that are dispensed through this route by community pharmacies in Tayside. Pharmacies are now open on Sundays in the major towns in Tayside.

Table 29: Unscheduled Care – Utilisation of community pharmacy by CHP area August 2009 to July 2010.

<table>
<thead>
<tr>
<th></th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Tayside</td>
<td>17,142</td>
</tr>
<tr>
<td>Angus</td>
<td>3,882</td>
</tr>
<tr>
<td>Dundee</td>
<td>8,046</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>5,214</td>
</tr>
</tbody>
</table>

4.4(d) Chronic Medication Services (CMS)

The Chronic Medication Service (CMS) is the final strand of the new community pharmacy contract and is now being rolled out to patients in the community as an Additional Pharmaceutical Service. The intention is that the basis for remuneration for this service should migrate gradually to one based on capitation.

CMS covers the continuity of pharmaceutical care for patients with long-term conditions. It allows these patients to register with the community pharmacy of their choice for the provision of their pharmaceutical care as part of a shared care arrangement between the patient, their community pharmacist and their general practitioner.

The Scottish Government has released circular PCA (P) 2012 18 which sets out how the next stage of implementation will be managed. It has been agreed that the roll out of CMS should move beyond the initial stages. The CMS phasing payment will now be linked to the use of the clinical tools built into the PCR which are used to help risk assess and provide care for patients. In order to ensure full payment is made contractors must ensure that they meet the eligibility criteria which have been set and achieve the following clinical indicators.
Quality Indicators

1. By the end of January 2013 95% of all patients registered by the 31st of October must have a completed initial risk assessment
2. By the end of February 2013 95% of all patients registered by the 31st of October must have a completed initial risk assessment
3. By the end of March 2013 95% of all patients registered by the 31st of January must have a completed initial risk assessment
4. By the end of March 2013 each pharmacy must have completed 4 high risk medicine interventions
5. By the end of March 2013 each pharmacy must have completed 4 new medicine interventions

NHS Tayside had £107 million allocated for the prescribing of medicines in 2009/10. Primary care services receive around 70% of this allocation, split between the three CHPs and covering MAS prescribing. Ensuring that patients receive the maximum health gain from use of this resource is a key objective of the new community pharmacy contract.

The amount of activity in terms of dispensing of medicines to treat long term conditions is increasing year on year (Figure 21).

Figure 21: Increase in total numbers of items dispensed in NHS Tayside 2009-2012
The Contribution of Pharmaceutical Care Services to the Management of Long-Term Conditions

Until the new contract matures there is limited information available on some of these factors and it is necessary to concentrate on the main driver of need that is the prevalence of long-term conditions within the local populations. Direct data to describe the contribution of pharmaceutical care to the management of long-term conditions will not be available until the activity undertaken through CMS has been commenced and reviewed.

However it is possible to estimate a representative figure for the number of patients with a diagnosed condition from QOF-based crude prevalence rates (Table 17) and the estimated population per community pharmacy (Table 18). The estimated number of patients using a pharmacy with a QOF-defined condition is given in Table 26 below.

**Table 30: Estimated Number of Patients with a QOF-defined Conditions Using a Pharmacy, by Tayside Locality, 2011/12**

<table>
<thead>
<tr>
<th>Condition</th>
<th>NHS Tayside</th>
<th>Angus CHP</th>
<th>Dundee CHP</th>
<th>Perth &amp; Kinross CHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>258</td>
<td>279</td>
<td>241</td>
<td>261</td>
</tr>
<tr>
<td>Cancer</td>
<td>79</td>
<td>90</td>
<td>66</td>
<td>88</td>
</tr>
<tr>
<td>CHD</td>
<td>196</td>
<td>233</td>
<td>173</td>
<td>196</td>
</tr>
<tr>
<td>COPD</td>
<td>102</td>
<td>103</td>
<td>113</td>
<td>85</td>
</tr>
<tr>
<td>Dementia</td>
<td>40</td>
<td>50</td>
<td>32</td>
<td>44</td>
</tr>
<tr>
<td>Diabetes</td>
<td>207</td>
<td>232</td>
<td>191</td>
<td>208</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>42</td>
<td>42</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>Hypertension</td>
<td>647</td>
<td>756</td>
<td>558</td>
<td>675</td>
</tr>
<tr>
<td>Stroke &amp; TIA</td>
<td>108</td>
<td>127</td>
<td>94</td>
<td>111</td>
</tr>
<tr>
<td>Artrial Fibrillation</td>
<td>76</td>
<td>89</td>
<td>59</td>
<td>87</td>
</tr>
<tr>
<td>CKD (<em>Chronic Kidney Disease</em>)</td>
<td>171</td>
<td>201</td>
<td>156</td>
<td>165</td>
</tr>
<tr>
<td>CVD (<em>Primary Prevention of Cardiovascular Disease</em>)</td>
<td>64</td>
<td>73</td>
<td>56</td>
<td>67</td>
</tr>
<tr>
<td>Depression 1 (of 2) - Conditions assessed for depression</td>
<td>359</td>
<td>415</td>
<td>321</td>
<td>362</td>
</tr>
<tr>
<td>Depression 2 (of 2) - <em>New diagnosis of depression</em></td>
<td>263</td>
<td>185</td>
<td>295</td>
<td>271</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>34</td>
<td>34</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>231</td>
<td>270</td>
<td>205</td>
<td>232</td>
</tr>
<tr>
<td>Learning Disabilities</td>
<td>21</td>
<td>21</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>LVD (<em>Left Ventricular Dysfunction</em>)</td>
<td>30</td>
<td>25</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>Mental Health</td>
<td>42</td>
<td>38</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>Obesity</td>
<td>426</td>
<td>543</td>
<td>391</td>
<td>381</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

A joint initiative between Health Boards and ISD is currently being undertaken. This work will develop an indirect standardisation methodology to enable profiling of similar pharmacies across Scotland and comparison of their activity and success in addressing the needs of the population using them.
4.5 The Need for Locally Negotiated Pharmaceutical Care Services

Locally negotiated services are those negotiated at individual NHS Board level, but with reference to nationally agreed indicative benchmarks for both service specification and payment. They include a range of services available to the public but not necessarily from every community pharmacy. They cover:-

4.5(a) Substance Misuse services

All community pharmacies across Tayside provide services to Substance Misuse patients. These pharmacies provide services to around 2,000 people whom receive medical treatments for the treatment of their substance misuse; the majority of whom (more than 1500) attend the pharmacy on a daily basis. Community pharmacists have a unique opportunity to develop therapeutic relationship with people who misuse substances. A Tayside world café event involving people who misuse substances, stakeholders and professionals, concluded that the current locally negotiated service based around dispensing and supervision was out dated and undermined the important role which pharmacists play in the treatment of substance misuse. NHS Tayside is currently working with the Area Pharmacy Contractors Committee to develop and deliver a local service based on key performance indicators around pharmaceutical care. This redesign will further implement the United Kingdom Guidance on the Clinical Management of Drug Misuse and Dependence.

Fifteen of these pharmacies also provide injecting equipment for people who inject drugs. Community pharmacy services within NHS Tayside already provide Standard IEP services, as set out in the injecting equipment provider guidelines. NHS Tayside recently introduced the NEO database into IEP services across Tayside. This is a commercial web based system which allows sites to share data, and allows IEP staff to log interventions in a consistent manner. Data for quarters July-Sep 2012 and Oct-Dec 2012, is complete for all sites.

Table 31: IEP Activity by Locality July-Dec 12.

<table>
<thead>
<tr>
<th>Locality</th>
<th>No Transactions</th>
<th>No Needles/syringes Distributed</th>
<th>No returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dundee</td>
<td>3302</td>
<td>37453</td>
<td>8344</td>
</tr>
<tr>
<td>Angus</td>
<td>1328</td>
<td>56866</td>
<td>10872</td>
</tr>
<tr>
<td>P&amp;K</td>
<td>1726</td>
<td>42325</td>
<td>3340</td>
</tr>
</tbody>
</table>

Source: local data recording

NHS Tayside carried out a service user survey in 2012, to assess service user perceptions of IEP service and this will inform future service education and development, in line with the recommendations. The most recent survey of the views of 68 service users enabled some profiling of the population and also provided some opinions on service provision. The respondents to the survey were almost exclusively injecting drug users, with 98.5% stating that heroin was the main drug injected and 38% of these injecting 2-3 times per day. 79% of respondents said that staff attitudes towards them was “very good” and needle exchange services overall were rated “very good”.

The IEP guidelines has a minimum set of standards which apply to standard IEP services, and clients were asked for feedback on these and their knowledge of overdose prevention and take home Naloxone. The table below shows the responses.
Table 32: Feedback from Substance Misuse Clients on their Knowledge of Safe Injecting Practice and Overdose Prevention

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Washing hand with soap and water before injecting?</td>
<td>45 (66%)</td>
<td>20 (29%)</td>
</tr>
<tr>
<td>2. Correct use of each piece of equipment?</td>
<td>48 (70.5%)</td>
<td>17 (25%)</td>
</tr>
<tr>
<td>3. The risks of sharing injecting equipment?</td>
<td>52 (76.5%)</td>
<td>14 (20.5%)</td>
</tr>
<tr>
<td>4. Correct way to dispose of used equipment?</td>
<td>58 (85%)</td>
<td>8  (12%)</td>
</tr>
<tr>
<td>5. Alternative options to injecting?</td>
<td>44 (65%)</td>
<td>22 (32%)</td>
</tr>
<tr>
<td>6. Overdose Prevention and take home Naxolone?</td>
<td>46 (68%)</td>
<td>20 (29%)</td>
</tr>
<tr>
<td>6a) if yes to above, do you know where to access Naxolone?</td>
<td>59 (87%)</td>
<td>7  (10%)</td>
</tr>
</tbody>
</table>

The current contract between NHS Tayside and community pharmacies is based on an allocation of resource to provide needle exchange services. Community pharmacy is remunerated quarterly pro rata, depending on their activity.

A service objective is to improve the way that services are delivered in future to improve access, better meet demand and make better use of resources. We are developing proposals for a new model of delivery.

4.5(b) Pharmaceutical Care of Older People

Care Homes

A Locally Enhanced Scheme (LES) was commissioned by Tayside Health Board to provide and improve the quality of pharmaceutical care for patients living within the care home setting. The LES had a particular focus on nursing home beds with an emphasis on: systems and processes for ordering and storage of medicines, medication compliance record keeping, administration and disposal of medicines and appliances, direct patient care with respect to the clinical and cost effective use of medicines.

Care homes are usually served by one community pharmacy, but evidence suggested that the care home may interact with up to 20 general medical practices in any given day. The system of multiple general practices providing medical support to a single care home had many downfalls, including communication with other healthcare professionals, record keeping within the care home and untimely receipt of prescriptions.

The SLA was designed to augment the previous dispensing and/or delivery service that community pharmacies provided. The SLA aimed to ensure a uniform approach to the services provided to care homes from community pharmacies and so improve the profile of variance, cost and harm attributed to the use of medicines in this sector. A further aim of the LES was to improve communications between general practice and community pharmacists in regard to the patients within the care homes. There are currently 3538 registered care home beds for older people in Tayside (Table 42).
Table 33: Numbers of Nursing Homes and Beds in Tayside

<table>
<thead>
<tr>
<th></th>
<th>Number of Establishments</th>
<th>Number of Places</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Local Authority</td>
<td>Private</td>
<td>Voluntary</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>103</td>
<td>375</td>
<td>2,716</td>
<td>447</td>
</tr>
<tr>
<td>Angus</td>
<td>32</td>
<td>106</td>
<td>876</td>
<td>71</td>
</tr>
<tr>
<td>Dundee</td>
<td>25</td>
<td>141</td>
<td>730</td>
<td>156</td>
</tr>
<tr>
<td>Perth &amp; Kinross</td>
<td>46</td>
<td>128</td>
<td>1110</td>
<td>220</td>
</tr>
</tbody>
</table>

The community pharmacy LES for Care Homes represents a change in the pharmaceutical care of people in care homes. The details of the Chronic Medication Service (CMS) application to care home patients are not specified at present, and therefore the LES offers an opportunity to develop similar elements of care to the CMS locally. The demonstration of improved communication with GPs can be expected not only to affect the care of patients in care homes, but also to support the implementation of this aspect of the CMS.

Support for people in their own homes

Traditionally, local authority home care services staff (Social Care Officers) have not had the authority or training to support people in their own homes with medication-related tasks, other than giving a verbal prompt to remind someone to take their medication. However, all three local authorities in Tayside have been involved with NHS Tayside in planning and training Social Care Officers to administer a limited range of medication. In addition, NHS Tayside is in the process of training community Health Care Assistants to administer a similar limited range of medication.

Pharmaceutical Care Needs Assessment - Older People

In the UK, it is known that almost half of the NHS drugs budget is spent on medicines for older people, but that as many as 50% of older people may not be taking their medicines as intended. A Scottish Consumer Council report in 2002 showed that people over 65 years old use community pharmacies often, and most of them always use the same pharmacy. They reported being comfortable about approaching their pharmacist for medical advice, and a significant number had done so in the previous 12 months, and felt that there was sufficient privacy. However large proportions of older people would not ask for advice on: smoking, weight/diet, drug misuse and alcohol, and older people least likely to identify any of the options for additional services which could be delivered by pharmacies (authorisation of repeat prescriptions, health checks e.g. blood pressure, smoking cessation clinics, and review of medication).

A series of focus groups series of six focus groups were held with older people, to discuss pharmaceutical care (medication-related needs) in Tayside, in order to inform the Pharmaceutical Care Services Plan and the future development of community pharmacy services in the area. The exercise enabled patient’s views to be formulated into a series of recommendations, based on four identified themes:

- Access to pharmacies and medicines
- Awareness of services available from pharmacies
- Advice and information
- Maintaining independence
4.5(c) Tayside Community Pharmacy Palliative Care Network

Network members recorded involvement in 562 episodes of care in 2011/12. During this time, progress was also made in aligning community pharmacy in NHS Tayside with the Living and Dying Well – Building on Progress Action Plan. Completed actions include delivery of a comprehensive programme of education, integration of the pharmacy network with the specialist service, improved communication within the multi-disciplinary team and improved networking between community pharmacies in a locality.

4.5(d) Immunisation

Forty community pharmacies across Tayside now provide immunisation services. This capacity was developed to increase the ability to deliver immunisation during a pandemic of influenza. Involvement in general immunisation campaigns has been through contribution to occupational health campaigns with influenza immunisation to health and council staff and to care home workers and poultry workers. Around 400 NHS staff per year (20% of the total cohort) currently choose to be immunised through a pharmacy.

Community pharmacies have also contributed to the Human Papilloma Virus Immunisation campaign. Although this is a schools based campaign, pharmacies were asked to immunise young women who did not attend school but were eligible for immunisation, or who missed out on the opportunity at school to be immunised. Over the course of the initial catch-up campaign, around 500 young women were able to obtain their course of vaccine or complete their course of vaccine, through a pharmacy. This service continues to provide additional options for access for young women who do not receive the full course of vaccine at school.
5 SUMMARY

NHS Tayside provides health services to a population of approximately 405,721 people living throughout Angus, Dundee and Perth and Kinross. The local demographic profiles show that there are pockets of social disadvantage across the three localities, with the largest share in Dundee City. The populations of Angus and Perth and Kinross have larger proportions of middle-aged and older people and sections of their communities distributed through rural areas. Populations in Perth and Kinross and Dundee have grown in size recently.

There are 92 contracted community pharmacies in Tayside. These are well distributed across the region and appear to meet the access needs of the vast majority of the population.

The Additional Core Pharmaceutical Care Services developed under the Community Pharmacy Contract have developed robustly and make a fundamental contribution to the health of the population. Locally agreed services have been developed across the region according to the priorities of NHS Tayside and the assessed needs of local communities. Some of these services display characteristics that would be categorised as best pharmacy practice within NHS Scotland and show the determination of the pharmacy profession to play their part in improving Tayside’s health.

Conclusions

- The distribution of pharmacy premises is sufficient to deliver pharmaceutical care services as required by the current pharmaceutical regulations and assessment of need. Work to develop systematic methods of needs assessment has commenced with colleagues and partners.
- There are a good range of services providing access to pharmaceutical care across Tayside for people with disabilities.
- Work to complete the implementation of the new Community Pharmacy Contract is progressing, including implementation of the final stages of the Chronic Medication Service. A patient experience programme has commenced to understand the views of people using the service. A programme of needs assessment has commenced to better understand the care requirements of the population with long-term conditions.
- Work to deploy supplementary and independent community pharmacist prescribers to support the public health priorities of obesity and tobacco use has progressed and data on patient outcomes is promising.
- Work involving the multi-disciplinary team and patient representatives has begun to fully implement the UK Guidance on Drug Misuse and Dependence.
- The provision of smoking cessation from community pharmacy has been significantly strengthened, and the new HEAT 6 target has been successfully delivered up to end of 2012/2013. Work to improve patient outcomes with pharmacies should be continued.
- Work to strengthen the provision of sexual health services has commenced in Perth and Kinross, with the support of the NHS team members and the local authority. A patient experience programme has been commenced to understand the perceptions of young people using these services.
- Community pharmacy has successfully contributed to the delivery of immunisation of NHS Tayside staff with seasonal influenza and to the out-of-school part of the human papilloma virus (HPV) immunisation campaign.