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Introduction

Smoking remains a major cause of poor health in Scotland. It is a Scottish Government priority to support those who want to stop smoking. NHSScotland stop smoking services, referred to as smoking cessation services in previous publications, provide support that has been shown to be both effective and cost-effective.

In June 2018 the Scottish Government published Raising Scotland’s Tobacco-free Generation: Our Tobacco-Control Action Plan 2018. This is a five-year action plan setting out interventions and policies to help reduce the use of and associated harms from using tobacco in Scotland. The actions are set out by category into:

- raising awareness
- encouraging healthier behaviour
- improving services
- providing protection through regulation

Achieving a reduction in population smoking rates to five per cent or less by 2034 remains a Scottish Government key objective.

This release by Information Services Division provides statistics from NHS stop smoking services in Scotland for the period April 2017 to March 2018, including trend data from 2009/10. It is supplemented by a dashboard and excel workbook.

Statistics are presented at national, NHS Board and Local Authority level along with breakdowns including age, gender, deprivation group and drug treatments to help stop smoking.

Statistics are based on total ‘quit attempts’ made during the year, rather than total number of clients with a quit attempt, so could include repeat quit attempts for the same client.

Full background of the national stop smoking (smoking cessation) database and monitoring are available in Appendix A1.1.

Performance figures against the 2017/18 smoking cessation Local Delivery Plan (LDP) standard are available at the LDP Dashboard and LDP publication summary.
Main Points

Quit attempts in 2017/18

- The number of quit attempts made with the help of NHS stop smoking services in 2017/18 fell for the sixth consecutive year to 55,369. This represents a 7.4% decrease from 2016/17 and a 54.4% decrease since 2011/12 when numbers of quit attempts reached their peak. The reason for the fall in quit attempts is likely to be the result of a combination of factors, including the use of electronic cigarettes, which may be for some a step towards quitting smoking.

Success of quit attempts in 2017/18

- Of those making a quit attempt 38.4% (21,237) reported that they were still not smoking at four weeks. This figure fell to 22.7% (12,553) at twelve weeks, both these quit percentages are similar to 2016/17.

- Of the 21,237 self-reported four week quits, 62.1% (13,180) were confirmed as successful by carbon monoxide testing, 2.1% (450) were confirmed as smoking, and 35.8% (7,607) had no carbon monoxide reading taken or the result was unknown.
Results and Commentary

1. Quit attempts made in NHS stop smoking services

The majority of attempts to quit smoking are made by individual smokers without the support of NHS stop smoking services. NHS stop smoking services include pharmacy services and specialist services (non-pharmacy), for example those services which sit within general practices, community and acute care.

This report relates specifically to quit attempts supported by NHS stop smoking services. In 2017/18 there were 55,369 quit attempts made with the help of NHS stop smoking services in Scotland. This is a reduction of 7.4% in the number of quit attempts compared with 2016/17 (59,821 quit attempts). The trend in the number of quit attempts between 2009/10 and 2017/18 is shown in Figure 1.

Figure 1. Number of quit attempts made in NHS stop smoking services, Scotland; 2009/10 - 2017/18

The trend for Scotland overall shows a large reduction (54.4%) in the number of quit attempts between 2011/12, when numbers peaked, and 2017/18. The rate of fall has slowed since 2014/15. This reduction in supported quit attempts is set in the context of a continuing fall in the overall number of people smoking in Scotland. The Scottish Health Survey reported an adult smoking prevalence of 18.2% in 2017 (down from 21.1% in 2016). Other factors include use of electronic cigarettes, which may be for some a step towards quitting smoking.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
2. Success of quit attempts at four and twelve weeks

Client follow-up at both four and twelve weeks can be carried out by face to face discussions, by telephone, by letter or by questionnaire. Information on successful quits at four week follow-up may either be self-reported or validated using carbon monoxide (CO) breath testing which detects current smoking. Carbon monoxide breath testing is a more rigorous method of confirming quits but requires attendance at a smoking cessation service. More information on how quit success is calculated is provided in Appendix A1.2.

Of the 55,369 quit attempts made in 2017/18 in Scotland, 38.4% (21,237) resulted in a self-reported successful quit at the four week follow-up stage. A further 13.9% (7,718) were reported as unsuccessful and for 47.7% (26,414) no information was available.

Of the 21,237 self-reported four week successful quits, 62.1% (13,180) were confirmed successful using a CO test, 2.1% (450) were not confirmed (and therefore were still smoking) and 35.8% (7,607) had no CO reading taken or the result was unknown. This shows that for self-reported quits that were CO tested, the majority (96.7%) were confirmed successful.

Over the period 2009/10 to 2017/18, the percentage of four week self-reported successful quit attempts that were CO validated in Scotland ranged from 53.1% (2010/11) to 65.4% (2015/16). For comparison over the same time period, in England, CO validated quits at four weeks ranged between 68.6% and 72.4%.

At twelve weeks, successful quits dropped to 22.7% (12,553), while unsuccessful quits and those with no information available rose to 17.7% (9,826) and 59.6% (32,990) respectively.

Over the period 2009/10 to 2017/18 the percentage of successful quit attempts at four weeks has remained between 35.9% and 39.3% inclusive (Figure 2).

The percentage of successful quit attempts at twelve weeks decreased from 17.1% in 2009/10 to 14.1% in 2013/14. The percentage of successful quits at twelve weeks then increased to 22.8% in 2016/7 and remained stable in 2017/18 (22.7%) (Figure 2).

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
The increased percentage of successful quits at twelve weeks may reflect the retargeting of resources by NHS Boards in line with revisions to the Scottish Government’s Health Improvement, Efficiency, Access and Treatment (HEAT) target for 2014/15 and subsequent Local Delivery Plan (LDP) Standards for NHS Scotland. Focus was shifted from attaining successful quits in the most deprived areas from the four week to twelve week follow-up. (Appendix A1.3).

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
3. NHS Board

The continuing pattern of falling numbers of supported quit attempts seen in Scotland over the last six years is reflected in 12 of the 14 NHS Boards, with the exception of NHS Orkney and NHS Dumfries & Galloway, where increases of 8.3% (6 quit attempts) and 6.0% (81 quit attempts) were seen respectively between 2016/17 and 2017/18. Percentage decreases in quit attempts from NHS Boards ranged from 4.3% in both NHS Greater Glasgow & Clyde (660 quit attempts) and NHS Grampian (247 quit attempts) to 31.7% (64 quit attempts) for NHS Shetland.

Figure 3 shows the percentage of successful quit attempts at four weeks in 2017/18 by NHS Board with 95% confidence intervals. Percentages for NHS Boards varied from 33.2% in NHS Lothian to 63.4% in Western Isles. Further information on confidence intervals is available in Appendix A1.4.

The percentage of successful quit attempts at four weeks in NHS Lothian, NHS Tayside and NHS Greater Glasgow & Clyde were significantly lower than the Scotland figure, while the percentage of successful quit attempts in NHS Lanarkshire, NHS Fife, NHS Grampian, NHS Ayrshire & Arran, NHS Forth Valley, NHS Shetland, NHS Orkney and NHS Western Isles were significantly higher. The successful quit attempts at four weeks in the remaining NHS Boards (NHS Highland, NHS Dumfries & Galloway and NHS Borders) were not statistically different from Scotland.

The percentage of cases where information on quit success was unavailable varied widely between NHS Boards and may affect the comparisons below. The definition of unavailable data can be found in Appendix A1.2.

Figure 3: Percentage of successful four week quit attempts (95% confidence intervals) by NHS Board; 2017/18

Note: If the 95% confidence interval does not include the Scottish percentage, the NHS Boards percentage is statistically significantly different from Scotland (‘higher’ or ‘lower’); if the confidence interval includes the Scottish percentage, the NHS Boards percentage is assessed as being similar to Scotland.
Figure 4 shows that in 2017/18 the percentage of successful quit attempts at twelve weeks also varied between NHS Boards from 19.0% in NHS Lothian to 52.0% in NHS Western Isles.

The percentage of successful quit attempts at twelve weeks in NHS Lothian, NHS Tayside and NHS Greater Glasgow & Clyde were significantly lower than the Scotland figure, while the percentage of successful quit attempts in NHS Lanarkshire, NHS Forth Valley, NHS Grampian, NHS Orkney, NHS Shetland and NHS Western Isles were significantly higher. The remaining NHS Boards (NHS Dumfries & Galloway, NHS Highland, NHS Ayrshire & Arran, NHS Fife and NHS Borders) were not statistically different from Scotland.

Note: If the 95% confidence interval does not include the Scottish percentage, the NHS Boards percentage is statistically significantly different from Scotland (‘higher’ or ‘lower’); if the confidence interval includes the Scottish percentage, the NHS Boards percentage is assessed as being similar to Scotland.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) – Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
4. Demographics

Gender

The Scottish Health Survey 2017 reported that 20.5% of males and 16.0% of females were current smokers².

In 2017/18, females accounted for 54.7% (30,296/55,369) of quit attempts made through stop smoking services and males for 45.3% (25,072/55,369) (Figure 5). Comparable figures for England showed a similar gender split (53.0% females and 47.0% males)³.

![Figure 5: Number of quit attempts by gender; 2017/18](image)

In 2017/18 although a higher percentage of quit attempts were made by females, males had slightly higher success in quitting at both the four and twelve week follow-up stages. The percentage of successful quit attempts made by males at four and twelve weeks were 39.4% and 23.7% respectively, compared to 37.5% and 21.8% respectively for females (Figure 6).

Figure 6 shows that the percentage of successful quits is slightly higher for males than females at both four and twelve weeks in each year between 2009/10 to 2017/18. There was no consistent pattern of change in the percentage of successful quit attempts at four weeks over this time.

The percentage of successful quit attempts at twelve weeks decreased between 2009/10 and 2013/14 for both males and females, since then the percentage of successful quits increased to 2016/17. In 2017/18 the percentages were similar to the previous year.
Figure 6: Percentage of successful four and twelve week quit attempts at Scotland level by gender; 2009/10 - 2017/18

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Age

In 2017, the highest smoking prevalence was among those aged 25-34 (23.6%)\(^2\). By contrast, quit attempts were highest in 45-54 year olds, with 23.2% (12,866) of total quit attempts being made in this age group (Figure 7).

**Figure 7: Number of quit attempts at Scotland level by age group; 2017/18**

![Bar chart showing number of quit attempts by age group](image)

In general, the percentage of successful quit attempts increased with age group at both the four and twelve week follow-up stages for all age groups up to 65-74 years (Figure 8). At four weeks, the percentage of successful quit attempts rose from 27.0% in the under 18 age group to 46.1% in the 65-74 age group. At twelve weeks, the percentage of successful quit attempts rose from 9.9% in the under 18 age group to 31.8% in the 65-74 age group.

**Figure 8: Percentage of successful four and twelve week quit attempts at Scotland level by age group; 2017/18**

![Bar chart showing percentage of successful quit attempts by age group](image)
In general a similar pattern of the percentage of successful quit attempts increasing with age group up to 65-74 years was observed in both males and females, however this increase extended into the 75 years and over for females (Figure 9).

The percentage of successful quit attempts for females at four weeks rose from 27.5% in the under 18 age group to 45.0% in the 75 and over age group, the percentage for males increased from 26.5% in the under 18 age group to 48.9% in the 65-74 age group.

At the twelve week follow-up stage, the percentage of successful quit attempts for females rose from 10.0% the under 18 age group to 29.4% in the 75 and over age group, the percentage for males increased from 9.8% in the under 18 age group to 35.3% in the 65-74 age group.

Increased success for males compared to females is more evident in the older age groups.

**Figure 9: Percentage of successful four and twelve week quit attempts at Scotland level by gender and age group; 2017/18**

See associated dashboard and tables for further information:
- NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
- NHS Smoking Cessation Services (Scotland) – Excel Workbook
Area deprivation

In 2017 the prevalence of current smoking is highest among people living in the 20.0% most deprived areas in Scotland, (27.4% in the most deprived quintile compared to 9.4% in the least deprived)\(^2\). It is therefore important that stop smoking services reach people living in these areas.

The 20.0% most deprived areas accounted for 36.8% (20,396) of all quit attempts in Scotland. This partly reflects higher smoking rates in deprived areas. There is a clear gradient of service uptake across deprivation categories, with the highest uptake in the most deprived category and the lowest uptake in the least deprived at 7.0% (3,892). These figures are consistent with research reporting that smoking cessation services are effective in reaching deprived groups\(^4\).

The percentage of successful quit attempts at four weeks was highest in the least deprived group (43.3%) and lowest in the most deprived group (36.5%) (Figure 10). The percentages of successful quit attempts at four weeks in 2017/18 in each deprivation quintile were similar to the previous year (less than 1.0 percentage point difference in each quintile).

Figure 10: Percentage of successful four week quit attempts by deprivation quintiles: Scotland; 2009/10 - 2017/18

At twelve weeks, the percentage of successful quit attempts was again highest in the least deprived areas (26.8%) and lowest in the most deprived areas (20.9%) (Figure 11). After a steady decline in the percentage of successful quit attempts at twelve weeks in each deprivation quintile over the period 2009/10 to 2013/14, the percentages increased up until 2016/17. The percentages for 2017/18 in each deprivation group are similar to the previous year.
Figure 11: Percentage of successful twelve week quit attempts by deprivation quintiles: Scotland; 2009/10 - 2017/18

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Pregnant Women

Smoking in pregnancy carries serious health risks for both the woman and her unborn child. In 2017/18, 1,552 quit attempts were made by pregnant women with support from NHS stop smoking services, a drop of 27.1% on the previous year (2016/17) and the fifth consecutive year when there had been a drop. The pattern of falling quit attempts in pregnant women in 2017/18 is reflected in all but two NHS Boards, NHS Dumfries and Galloway and NHS Orkney where increases in number of quit attempts of 36 and 3 were seen respectively. Despite this reduction in supported quit attempts the overall number of women smoking during pregnancy continues to fall.\(^5\)

The percentage of successful quit attempts at both four and twelve weeks have increased in 2017/18 to their highest levels to date (Figure 12).

Of the 1,552 quit attempts made by pregnant women in 2017/18, 40.1% (622) resulted in a quit at four weeks, a 5.6 percentage point increase from 2016/17. The equivalent four week quit figure for England was 45%.\(^3\) Of the 622 self-reported quits, 29.1% (181) were confirmed using a CO test, 1.7% (11) failed the CO test and were confirmed as smoking, and 69.1% (430) had no CO reading taken or the result was unknown.

The percentage of self reported successful quit attempts at twelve weeks was 25.5% (395), a 4.3 percentage point increase from 2016/17.

\textbf{Figure 12: Percentage of successful four and twelve week quit attempts at Scotland level amongst pregnant women; 2009/10 - 2017/18}

The percentages of successful quit attempts at four and twelve weeks for pregnant women who smoke varies considerably by NHS Board. NHS Forth Valley had the highest successful percentage at both four and twelve weeks, at 77.6% and 57.9% respectively while NHS Shetland had the lowest successful percentage at four weeks (0.0%) and both NHS Shetland
and NHS Orkney had the lowest successful percentage at twelve weeks (0.0%). It should be noted that the Shetland and Orkney percentages are based on very small numbers.

The Information Services Division publishes information on the numbers of women who were current smokers at the time of booking their first antenatal appointment at hospital, published in the Births in Scottish Hospitals report.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Prison Setting

Smoking prevalence of those imprisoned in Scotland is much higher than the general population. From a survey carried out by the Scottish Prison Service in 2017, it found that 68% of prisoners smoke, a 4 percentage point drop since the 2015 survey. It was recognised by the Scottish Government in their tobacco control strategy, ‘Creating a Tobacco-free Generation’ (2013), that creating a smoke-free prison environment was a key step in achieving a smoke free generation. In July 2017 the Scottish Prison Service committed to making all prisons smoke-free by the end of 2018.

From first reported data in 2013/14, the number of quit attempts made across the fifteen prisons in Scotland has increased year-on-year from 650 in 2013/14 to 1,634 in 2017/18 (Figure 13). This increase is due to increased participation from prisons in stop smoking services along with better data collection and reporting. In 2017/18 six of the fifteen prisons in Scotland had increased numbers of quit attempts compared to the previous year. The largest increase was at Her Majesty’s Young Offenders Institution Polmont in NHS Forth Valley, an increase of 101 quit attempts.

Of the 1,634 quit attempts made in a prison setting in 2017/18, 39.7% (649) resulted in a successful quit at four weeks, a 6.4 percentage point increase from 2016/17. The percentage of self reported successful quit attempts at twelve weeks dropped to 21.8% (356), a 3.2 percentage point increase from 2016/17.

Increased success of quit attempts at four and twelve weeks were seen in seven and six prisons respectively compared to the previous year.
Figure 14 shows the percentage of successful quit attempts at four and twelve weeks in the prison setting over time. The percentage of successful quit attempts at four weeks has increased over the last two years although it is lower than the first year of reporting (2013/14). The percentage of successful quit attempts at twelve weeks has risen for the third year and is at its highest level since the first year of reporting.

Figure 14: Percentage of successful four and twelve week quit attempts in Scotland’s Prisons; 2013/14 - 2017/18

Prisons differ in a number of characteristics, e.g. population size, smoking prevalence, long/short term prison sentencing, therefore care must be taken when interpreting these figures.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
5. Methods available to help quit attempts

**Pharmacy and specialist services (non-pharmacy)**

Pharmacy stop smoking services accounted for 38,991 (70.4%) of quit attempts made in Scotland in 2017/18. In contrast, the majority of quit attempts in England are in specialist (non-pharmacy) services, for example those services which sit within general practices, community and acute care (81.3% for the same time period)\(^3\).

The split of pharmacy and specialist services to support quit attempts varied among NHS Boards from 12.2% pharmacy and 87.8% specialist services in NHS Western Isles to 95.7% pharmacy and 4.3% specialist services in NHS Tayside (Figure 15).

**Figure 15: Distribution of quit attempts via pharmacy / specialist services: NHS Board; 2017/18**

Of the 21,237 four week quits in 2017/18 in Scotland, 62.6% (13,293) were made in pharmacy services and 37.4% (7,944) in specialist services. Of the 12,553 twelve week quits in 2017/18 in Scotland, 57.1% (7,171) were made in pharmacy services, and 42.9% (5,382) in specialist services.

Pharmacies have a lower percentage of successful quit attempts at four and twelve weeks than specialist stop smoking services, which offer more intensive support (34.1% and 18.4% at four and twelve weeks compared to 48.5% and 32.9% respectively) (Figure 16).

The percentage of successful quit attempts at both four and twelve weeks for both specialist services and pharmacy have remained relatively stable since 2015/16.
The percentage of successful quit attempts at four and twelve weeks for pharmacy and specialist services vary considerably by NHS Board though the variation is less for pharmacy services (Figure 17 & 18).

**Figure 16: Percentage of successful four and twelve week quit attempts via pharmacy / specialist services: Scotland; 2009/10 - 2017/18**

**Figure 17: Percentage of successful four and twelve week quit attempts via specialist services: NHS Board; 2017/18**
Figure 18: Percentage of successful four and twelve week quit attempts via pharmacy: NHS Board; 2017/18

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Drug treatments to help stop smoking

There are various different products that can be used to help people quit smoking these include:

- Nicotine replacement therapy – is a medication that provides a low level of nicotine, without the tar, carbon monoxide and other poisonous chemicals present in tobacco smoke.
- Varenicline - is a prescription medication. It both reduces cravings for and decreases the pleasurable effects of cigarettes and other tobacco products.
- Bupropion – is a prescription medication. It reduces interest in smoking, and nicotine cravings and withdrawal are reduced.

In 2017/18, 68.5% (37,930) of all quit attempts (55,369) involved the use of either Nicotine Replacement Therapy (NRT) as a single product (21.7%), or NRT as part of a combination of more than one NRT product (46.8%) (Figure 19) (Table 1).

Table 1 – Drug treatment used in quit attempts; 2017/18

<table>
<thead>
<tr>
<th>Drug treatment</th>
<th>Quit Attempts</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRT - more than one product</td>
<td>25,893</td>
<td>46.8</td>
</tr>
<tr>
<td>NRT - single product</td>
<td>12,037</td>
<td>21.7</td>
</tr>
<tr>
<td>Varenicline only</td>
<td>8,667</td>
<td>15.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>8,345</td>
<td>15.1</td>
</tr>
<tr>
<td>NRT + Varenicline (change in product)</td>
<td>336</td>
<td>0.6</td>
</tr>
<tr>
<td>Bupropion only</td>
<td>55</td>
<td>0.1</td>
</tr>
<tr>
<td>NRT + Bupropion (change in product)</td>
<td>25</td>
<td>0.0</td>
</tr>
<tr>
<td>NRT - not specified</td>
<td>11</td>
<td>0.0</td>
</tr>
</tbody>
</table>

There has been a year-on-year decline in the percentage of quit attempts using Nicotine Replacement Therapy (NRT) as a single product. In 2009/10, 68.1% of quit attempts used NRT as a single product compared to 27.1% in 2017/18. During the same time period the percentage of quit attempts using a combination of more than one NRT product has increased from 11.0% in 2009/10 to 46.8% in 2017/18. The highest percentage of quit attempts with more than one NRT product was in 2015/16 (49.8%) (Figure 19). Comparable data for England for 2017/18 show that 22.4% of quit attempts used only a single NRT product and 31.8% used combinations.

The percentage of quit attempts using varenicline only has been variable over the time period 2009/10 to 2017/18 with the percentage in 2017/18 (15.7%) being the highest (Figure 19). Comparable figures for England show that varenicline only is used in 27.8% of quit attempts.

The percentage of quit attempts using bupropion only was 0.1% in each of the last six years (2012/13 to 2017/18). Prior to this, it was 0.3% (in 2009/10 and 2010/11) and 0.2% (in 2011/12). Comparable figures for England show that bupropion only was used in 0.3% of quit attempts in 2017/18.
The percentage of successful quit attempts at four and twelve weeks for drug treatment are shown in Figure 20. In 2017/18, at both four and twelve weeks the highest percentage success was for varenicline only (51.9% and 33.8% respectively).

The second highest percentage of successful quit attempts at four weeks used bupropion only (43.6%). At twelve weeks the second highest percentage success was 23.6% for both bupropion only and NRT single use. It should be noted that the percentages for bupropion only are based on very small numbers and should be treated with caution (see Table 1).

NRT as a single product had a higher percentage success at four and twelve weeks than combination NRT (38.6% vs. 35.4% at four weeks and 23.6% vs.19.8% at twelve weeks, respectively).
Figure 20: Percentage of successful four and twelve week quit attempts by drug treatment; Scotland 2017/18

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Intervention type

There are a number of behavioural approaches to supporting quit attempts. Most take a structured multi-session supporting approach that can take the form of one-to-one support, couple / family group based support, telephone support, or closed group course support where participants join on the same date and attend for a set period. Another approach uses open (rolling) groups where participants can join and leave at any time (so may include people at different stages of their quit attempt).

Both one to one and group support are effective at increasing the percentage of successful quit attempts\(^4\). Some quit attempts use a combination of both group and one-to-one support (either face-to-face or via telephone).

Pharmacy services are based almost entirely on one-to-one support, but there is more variation in specialist services. Figure 21 shows the intervention types used in the 16,378 quit attempts made through specialist services. Like pharmacy, one-to-one was the most frequently used option, used for 12,270 (74.9%) of quit attempts. Group support accounted for 3,268 (20.0%) of the attempts, with open (rolling) group support at 2,662 (16.3%) and closed group support 606 (3.7%). Telephone support was used in 2,082 (12.7%) of attempts and couple / family group based support in just 112 (0.7%).

Figure 21: Number of specialist services quit attempts by intervention type: Scotland; 2017/18

Telephone support had the highest percentage of successful quit attempts at four and twelve weeks with 60.6% and 45.2% respectively (Figure 22). Closed groups, couple/family groups and open (rolling) groups had four week percentages of successful quit attempts over 50.0% (53.3%, 51.8% and 50.8% respectively); while one-to-one support was 46.4%.

At twelve weeks the second highest percentage of successful quits involved couple/family group support at 42.9% (for which numbers are small). Similar percentages of successful quit
attempts was seen with the remaining intervention types, open (rolling) groups, one-to-one support and closed groups at nearly 32.0% (31.9%, 31.9% and 31.5% respectively).

**Figure 22: Percentage of successful four and twelve week quit attempts by intervention type: Scotland; 2017/18**

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Glossary

Data Zones
A data zone is the key small-area statistical geography in Scotland. The data-zone geography covers the whole of Scotland and nests within local authority boundaries. Data zones are groups of Census output areas and have populations of between 500 and 1,000 household residents. Where possible, they have been made to respect physical boundaries and natural communities. They have a regular shape and, as far as possible, contain households with similar social characteristics.

Deprivation
The Scottish Index of Multiple Deprivation (SIMD) identifies small area concentrations of multiple deprivation across all of Scotland in a consistent way. It allows effective targeting of policies and funding where the aim is to wholly or partly tackle or take account of area concentrations of multiple deprivation.

Deprivation Quintile
The Scottish Index of Multiple Deprivation (SIMD) ranks small areas (called data zones) from most deprived (ranked 1) to least deprived (ranked 6,976) and these can be categorised into quintiles in two ways (population-weighted or non-population weighted). For this report quintiles are based on population-weighted quintiles.

Population-weighted quintiles are calculated by ranking all datazones from most to least deprived and then grouping these into 5 quintiles with approximately 20% of the population in each quintile.

Non-population weighted quintiles are calculated by ranking all datazones from most to least deprived and then grouping these into 5 quintiles with 20% of the datazones in each quintile.

Scottish Health Survey
The Scottish Health Survey (SHeS) provides a detailed picture of the health of the Scottish population in private households and is designed to make a major contribution to the monitoring of health in Scotland. Smoking prevalence in the adult population is one of many indicators reported on.
## List of Tables

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<th>File and size</th>
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<tr>
<td>NHS Smoking Cessation Services (Scotland) 2017/18 Excel Workbook</td>
<td>xls (1.5 MB)</td>
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</table>
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Further Information

Further Information can be found on the ISD website.
The next release of this publication will be October 2019.

Rate this publication

Please provide feedback on this publication to help us improve our services.
References

1. Raising Scotland’s Tobacco-free Generation: Our Tobacco-Control Action Plan 2018
2. Scottish Health Survey 2017
4. A guide to smoking cessation in Scotland 2010
5. Births in Scottish Hospitals
7. Tobacco Control Strategy - Creating a Tobacco-Free Generation
Appendices

Appendix 1 – Background information

A1.1 The national smoking cessation database and monitoring

In July 2005 ISD Scotland set up a national smoking cessation database to capture data on people presenting to NHS services in Scotland for help to stop smoking. This is a web-based system, accessible over the NHSnet, with over 300 registered users across Scotland. Users include: smoking cessation coordinators/managers in NHS boards; cessation practitioners; admin and public health analyst staff; and ISD-based IT, analyst and database management personnel.

The database is designed to collect the national minimum dataset for smoking cessation services plus additional information to meet local needs and to provide extra local functionality such as reports, letter generation and arranging client appointments. The national database is used by all 14 NHS Boards in Scotland. NHS Greater Glasgow & Clyde used a local system until the end of December 2015.

Further background to the national database and monitoring is available on the smoking cessation page on the ISD website. This includes the national minimum dataset for smoking cessation services, guidelines for using the minimum dataset, a definition of smoking cessation services to be included in the national monitoring along with data protection and client confidentiality guidance.

In addition, a guide to smoking cessation in Scotland contains various documents providing guidance for health professionals and smoking cessation co-ordinators and advisers on smoking cessation.

ISD published the Smoking Cessation Services (Scotland) 2016/17 report on 23 October 2017. This included for the first time a Tableau dashboard, ISD undertook a user consultation in August/September 2018 to ask for feedback of the dashboard. Results of the consultation will be made available on the ISD Smoking Cessation pages in December 2018.

A1.2 How the percentage of successful quit attempts are calculated

The percentage of successful quit attempts (also known as quit rates) are calculated as the number of records where the client self-reported as ‘not smoked, even a puff, in the last two weeks’ (four week follow-up) or ‘smoked up to five cigarettes since four week follow-up’ (twelve week follow-up) as a percentage of total quit attempts made/quit dates set. This approach follows the Russell standard, a well validated approach to measuring outcomes from smoking cessation interventions.

As the denominator is total quit dates set, large numbers of cases lost to follow-up greatly lower the calculated percentage of successful quits. The percentage of cases lost to follow-up at 4 weeks is higher in Scotland than England. There are also NHS Boards in Scotland
with particularly high percentages of cases lost to follow-up. Care should be taken in making direct comparisons between the Scotland and England 4 week quit rates. There may be differences, for example, in the types of services included in the English monitoring, or the profile of clients seen in services.

Most commonly, ‘lost to follow-up’/’unknown’/’blank’ will be due to failure to make contact with the client or non-return of follow-up questionnaire; or administrative factors such as late receipt of initial quit attempt information; or follow-ups not undertaken or not recorded. The figure will include a proportion of cases (around 1% of the total) where client did not consent to follow-up or client had died. It is important to be aware of the influence of cases ‘lost to follow-up’/unknown/blank when looking at NHS Board quit rates.

This report includes statistics on Carbon monoxide (CO) validated quits at four weeks after the quit date, as well as self-reported quits. Carbon monoxide breath test validation measures the level of carbon monoxide and provides an indication of the level of use of tobacco. Care should be taken in interpreting these statistics as there are variations across the country in the percentage of quit attempts where carbon monoxide validation has been attempted.

A1.3 The smoking cessation HEAT target / Local Delivery Plan (LDP) Standard

A series of HEAT targets for the NHS were published in 2007, including a target related to smoking cessation. This target was: ‘Through smoking cessation services, support 8% of each NHS Board’s smoking population in successfully quitting (at one month post quit) over the period 2008/09 to 2010/11’. This was measured through a separate target monitoring process, using data from the national cessation services monitoring and national database. Final data on performance against the target was published in September 2011.

From 1 April 2011, there was a successor smoking cessation HEAT target for 2011/12 to 2013/14 which had an explicit focus for the first time on inequalities in smoking rates. The target was ‘To deliver at least 80,000 successful quits (at one month post quit) including 48,000 in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas over the three years ending March 2014’. Progress towards the target in 2011/12 to 2012/13 was reported in ISDs short report in September 2013 with the final performance figures reported in September 2014.

A new HEAT target was introduced from 1 April 2014 with the emphasis on targeting people in deprived areas where smoking prevalence is highest. The target was to achieve at least 12,000 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2015. Performance figures were reported in October 2015.

In April 2015 the previous HEAT target was replaced by a Local Delivery Plan standard. This focused on targeting people in deprived areas where smoking prevalence is highest. The target was to achieve at least 7,278 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over
Boards) over 1 year ending March 2016. The performance results against this standard were reported in the Smoking Cessation Services (Scotland) 2015/16 report.

Another Local Delivery Plan standard was introduced in April 2016. The standard was to achieve at least 9,404 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2017. The performance results against this standard were reported in the Smoking Cessation Services (Scotland) 2016/17 report.

The 2017/18 Local Delivery Plan standard was introduced in April 2017. The standard was to achieve, as for the 2016/17 Local Delivery Plan Standard, at least 9,404 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2018. Performance results against this standard are reported in the Local Delivery Plan standard publication summary and dashboard.

### A1.4 Confidence Intervals

A confidence interval is a range of values that is normally used to describe the uncertainty around a point estimate of a quantity, for example a mortality rate. In the case of indicators based on a sample of the population, uncertainty arises from random differences between the sample and the population itself. The stated value should therefore be considered as only an estimate of the true or ‘underlying’ value. Confidence intervals quantify the uncertainty in this estimate and, generally speaking, describe how different the point estimate could have been if the underlying conditions stayed the same, but chance had led to a different set of data. The wider the confidence interval, the greater the uncertainty in the estimate. Confidence intervals are given with a stated probability level. In this report this is 95%, and so there is a 95% probability (i.e. a 19 in 20 chance) that the confidence interval includes the ‘true’ value of the indicator. The use of 95% is arbitrary, but is conventional practice in medical and public health statistics.

The 95% confidence interval for an indicator value for an area is used to compare that area against the overall Scotland value. The Scotland value is treated as an exact reference value, allowing the confidence interval for an indicator value to be used to test whether the value was statistically significantly different to the Scottish figure. If the interval does not include the Scottish value, the area is assessed as being statistically significantly different from Scotland (perhaps ‘better’ or ‘worse’, depending on the indicator); if the interval includes the Scottish value, the area is assessed as being similar to Scotland. This is illustrated in the example below.
NHS Board 1: NHS Board is statistically significantly higher than the Scotland average.
NHS Board 2: NHS Board is similar to the Scotland average.
NHS Board 3: NHS Board is similar to the Scotland average.
NHS Board 4: NHS Board is statistically significantly lower than the Scotland average.
Appendix 2 – Publication Metadata

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<th>Metadata Indicator</th>
<th>Description</th>
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<td>Publication title</td>
<td>NHS Smoking Cessation Service Statistics (Scotland) 1 April 2017 to 31 March 2018</td>
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<tr>
<td>Description</td>
<td>This release presents data on quit attempts made with the help of NHS stop smoking services during the financial years, 2009/10 – 2017/18, and the outcomes of those quit attempts.</td>
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<tr>
<td>Theme</td>
<td>Health and Social Care</td>
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<td>Topic</td>
<td>Lifestyles &amp; Behaviours</td>
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<td>Format</td>
<td>PDF report with Tableau Dashboard and excel workbook</td>
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<td>Data source(s)</td>
<td>The national minimum dataset for smoking cessation services in Scotland (2009/10 - 2017/18); Scottish Surveys Core Questions (2012-2016); Scottish Health Survey (2017); and Maternity information - Scottish Morbidity Records 02 (SMR02).</td>
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<td>Release date</td>
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<td>Frequency</td>
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<td>Timeframe of data and timeliness</td>
<td>The timeframe for this publication is the financial year 2017/18 (data for 2009/10 to 2016/17 are also shown).</td>
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<td>Continuity of data</td>
<td>2009/10 – 2017/18</td>
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<td>Revisions statement</td>
<td>Data are generally noted as provisional (due to a small shortfall in completeness of data) at time of publication. The data are then revised in the following year publication.</td>
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<td>Revisions relevant to this publication</td>
<td>2016/17 figures for NHS Greater Glasgow &amp; Clyde have been revised following a request by NHS GG&amp;C for ISD to investigate an issue of under-recording of successful quits attempts among pregnant women.</td>
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<td>Concepts and definitions</td>
<td>Background to the national smoking cessation services monitoring and national smoking cessation services database are available on the smoking cessation page on the ISD Scotland website.</td>
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<td>Relevance and key uses of the statistics</td>
<td>The national cessation monitoring analyses produced by ISD are used to provide vital evidence of the reach and quit success of NHS smoking cessation services in Scotland. The cessation monitoring data are also used for smoking cessation HEAT (Health Improvement, Efficiency, Access and Treatment) target monitoring and Local Delivery Plan (LPD) monitoring.</td>
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<td>Accuracy</td>
<td>Data were cross-checked against national smoking cessation database ‘standard reports’ and results from the previous annual monitoring reports.</td>
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<td>Completeness</td>
<td>The report acknowledges missing smoking cessation information has an impact on quit rates, and that it is important to be aware of the influence of this when looking at NHS Board quit rates.</td>
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<td>Comparability</td>
<td>Routine data from smoking cessation services are also collected in England. This report includes comparable data from the monitoring of NHS smoking cessation services in England.</td>
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<td>Accessibility</td>
<td>It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines.</td>
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<td>Coherence and clarity</td>
<td>The report includes detail on the background to the national smoking cessation services monitoring in Scotland as well as analysis results. The report has been produced using the standard ISD publications template and is available as a PDF file. Information is presented in a tableau dashboard and an excel workbook.</td>
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Appendix 3 – Early access details

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads
- NHS Board Smoking Cessation Co-ordinators
- Sheila Duffy, Chief Executive, ASH Scotland
Appendix 4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of ‘Official Statistics’. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD’s statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD’s statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).