HSC Public Health Agency

Stop Smoking Services Report 2012/13

Improving your health and wellbeing

Contents

Executive Summary

Service provision

The PHA commissioned 645 specialist Stop Smoking Services across Northern Ireland (NI) in 2012/13 in a range of local settings including GP practices (n=133), pharmacies (n=445), hospitals (n=10) and community/voluntary settings (n=57). The placement of services was slightly biased towards areas of greatest deprivation[i] to aid in narrowing health inequalities, however differences in the proportion of differing settings delivering the services across the region has enabled recommendations around enhancing service provision to be developed.

Service engagement

In 2012/13, 32714 clients registered with the Stop Smoking Services, a figure which represented 9% of all NI smokers and therefore exceeded the 5% target recommended by NICE and the Ten-year Tobacco Control Strategy. Despite this the uptake figure was 17.0% lower than 2011/12 (n=39,629) and, therefore, the target of a 4% year on year increase in service uptake specified within the service frameworks was not met.[28-30]

The services were most effective at engaging pregnant smokers in comparison to the other priority groups. 37% (n=1,608) of all pregnant smokers in NI engaged in services in 2012/13 compared to 7% (n=8,159) of all routine and manual smokers in NI, 9.7% (n=8,412) of all NI smokers living in the most deprived quintile and only 4.4% (n=423) of all 11-16 year olds who smoke at least weekly. However, the level of engagement of the differing priority groups varied widely between the LCG areas. Focus now needs to be placed on establishing the key drivers of successful engagement from local LCG areas or individual providers, sharing and further implementing these strategies across the region.

Likewise at the individual level the services engaged with the highest proportion of those aged 25-45 and heavy smokers (30+ a day), therefore services need to endeavour to attract individuals outside of these groups potentially through direct engagement with health professionals or targeted advertising.

However, of concern, the services appear to be attracting a smaller proportion of new users and a growing proportion of previous users (who have re-joined the services after previous failed quit attempts). While the reasons for this are unclear, it may be speculated that smokers are using alternative methods to quit smoking. Emphasis needs to be placed on ensuring the public are aware that quitting with support and pharmacotherapy (as recommended by NICE) are the most effective means of quitting.[14]

Service effectiveness

In 2012/13, the Stop Smoking Services demonstrated the highest 4 week quit rate (56.6%, n=18,516) since 2002/03. Although the services effectively met the Quality Standards requirement of a 4 week quit rate of at least 45%, longer term follow up

[i] Deprivation as assessed by multiple deprivation measures (MDM), see Appendix 1 for further information on MDM assessment methodology.[5,6]

showed only 17% of clients quit smoking at 52 weeks, a figure which fell below the Quality Standards requirement of a 20% quit rate. As noted with engagement variations were noted in the effectiveness of services within different LCG areas and within differing provider types. The reasons behind this variation need to be explored in depth to allow successful strategies to be disseminated and implemented across all services.

One key development in 2012/13 has been the introduction of a quality improvement programme for pharmacy services. This programme has resulted in a 5 percentage point increase in the 4 week quit rates of pharmacy services and a 50% reduction in the number of pharmacy providers having a quit rate of under 35%. Further expansion of this programme should now be considered to aid in improving 52 week quit rates.

In the upcoming year, a further area for improvement throughout the services is the follow up of clients. Service data showed a large number of clients were unable to be contacted: 17% of clients were not followed up at 4 weeks and 40% at 52 weeks. Given the finding that in the majority of age groups more clients were lost to follow up than had quit at 52 weeks this is a key area of focus for the 13/14 year.

Conclusion

Overall the Stop Smoking Services continue to provide vital support for smokers wishing to quit. This report highlights key developments necessary to expand and build upon the accessibility, availability and effectiveness of the services. These developments will aid in maximising the contribution of Stop Smoking Services to reducing smoking prevalence rates in Northern Ireland within an overarching tobacco control programme.

I Introduction

Background

It is estimated around 25% of the population currently smoke (equating to around 360,000 adults aged 16 and over) with male smoking prevalence (27%) exceeding that observed in females (23%).[1]

Smoking prevalence has declined from 29% in 1998/99, to 25% in 2011/12. However, prevalence figures have remained relatively stable in recent years (25% in 2005/06, 23% in 2007/08, 24% in 2008/09, 24% in 2009/10 and 2010/11 and 25% in 2011/12).[1,2,3] This steady prevalence exists despite data from the most recent health survey indicating that 76% of smokers had tried to stop smoking at least once, and 66% were planning to quit.[1]

Evidence indicates there is an extensive gap in smoking prevalence between different economic groups - only 9% of professionals smoke compared to 36% of unskilled manual workers.[4] In accordance with this, data has shown that smoking levels are more than twice as high among adults living in the most deprived areas (39%) compared to adults living in the least deprived areas (18%), with prevalence of tobacco smoking also highest within the Belfast Local Commissioning Group (LCG) area (28%) (an area which accounts for around 40% of deprivation in Northern Ireland).[ii] [5,6]

Smoking remains the single greatest cause of preventable illness, premature death and health inequality throughout Northern Ireland with an average of 2,300 people dying prematurely from smoking related illnesses each year.[7,8] It is established that smoking is a major risk factor for a range of non-communicable diseases including coronary heart disease, stroke, reproductive health, cancer and other diseases of the circulatory system.[9] Moreover, a decade of evidence now demonstrates that smoking has been shown to cause harm to those who do not smoke through exposure to environmental tobacco smoke.[10]

Policy context

In February 2012, Department of Health, Social Services and Public Safety for Northern Ireland (DHSSPSNI) launched the Ten Year Tobacco Control Strategy for Northern Ireland.[7] The Tobacco Control Strategy has an overall aim of creating a tobacco free society by encouraging fewer people to start smoking; encouraging more smokers to quit and offering greater protection from tobacco-related harm.[7]

The strategy outlines a number of bespoke targets including:

- Reducing the proportion of adults who smoke to 15% (previously 24% at strategy onset);
- Reducing the proportion of routine and manual smokers to 20% (previously 31% at strategy onset);
- Reducing the proportion of pregnant women who smoke to 9% (previously 15% at strategy onset);

[ii] Deprivation as assessed by multiple deprivation measures (MDM), see Appendix 1 for further information on MDM assessment methodology.[5,6]

- Reducing the proportion of 11-16 year old children who smoke to 3% (previously 8% at strategy onset); and
- Ensuring that a minimum of 5% of the smoking population in Northern Ireland, access the Stop Smoking Services annually.

Moreover, the strategy calls for the Stop Smoking Services in Northern Ireland to be targeted to include not only those groups identified above but that in addition services should be accessible and cater for a range of other important groups including (but not exclusive to) partners of pregnant women who smoke, ethnic minorities, those with a disability, those with a mental health disorder, those from the rural community and pre-operative surgery patients.

Furthermore, the current Corporate PHA Business Plan continues to address smoking prevalence as a key focus for public health while the consultation document for the new Northern Ireland Public Health strategy, '*Fit and Well'*, addresses the need for tobacco prevention and cessation strategies to be implemented throughout the life course.[11,12]

Implementation of tobacco control in NI

The Public Health Agency (PHA) lead on the implementation of the Ten Year Tobacco Control Strategy for Northern Ireland. To facilitate this role the PHA have set up a multi-sectorial strategy implementation group (TSISG) which oversees, coordinates and reports on the implementation of the tobacco strategy via five main work streams:

- Research & Information
- Protection & Enforcement
- Services & Brief Intervention
- Communication & Education
- Policy & Legislation

Core to the strategy implementation process is the use of the MPOWER package developed by the World Health Organisation (WHO): Framework Convention on Tobacco Control.[13] The WHO package has been specifically developed to '*assist in the country-level implementation of effective interventions to reduce the demand for tobacco'*. There are six main components of the MPOWER package,

- **M**onitor tobacco use.
- **Pr**otect people from tobacco smoke.
- **O**ffer help to stop smoking.
- **W**arn about the dangers of smoking.
- **E**nforce bans on tobacco advertising and promotion.
- **R**aise taxes on tobacco products.

As part of the '**O**ffer help to stop smoking' component, the PHA offers a range of managed and self -support services including Stop Smoking Services, Smokers helpline, self- help resource (the quit kit) and information on Stop Smoking (want2stop website). This report focuses on the delivery of one element of these services, the Stop Smoking Services.

The Stop Smoking Services

The PHA commission specialist Stop Smoking Services designed specifically for those smokers who are motivated, ready to quit and prepared to set a quit date. These services use an evidence based approach as recommended by the National Institute for Health and Clinical Excellence and are offered in a range of local settings including GP practices, pharmacies, hospitals and community/voluntary settings across Northern Ireland.[14]

In Northern Ireland, the Stop Smoking Services are run by individuals who have received specific training for this role. The services offer intensive treatment, over the course of 6-12 weeks, with structured support being available for at least four weeks after the clients quit date.

The provision of specialist Stop Smoking Services has grown substantially since 2001/02 with the services having supported over 200,000 people to stop smoking, and over 50% (52%) of these clients remaining quit at 4 weeks.[15-26]

Using evidence-based interventions, commissioners and service providers have worked together during this period of time to achieve optimum outcomes focusing on increasing the access and effectiveness of the services for smokers from target groups, ensuring that resources are allocated appropriately.

The Stop Smoking Services Report 2012/13

Specialist Stop Smoking Services are monitored centrally using a web based monitoring system. Each service provider is required to input details of each individual client they register within the Stop Smoking Services.[iii]

This report provides an analysis of service uptake and 4 week quitting activity in 2012-2013; and service uptake, 4 and 52 week quitting activity in 2011-2012, using data collected from the monitoring system. Data was downloaded on 17 July 2013 and all data is correct as of this date unless otherwise specified.

The following report provides an outline of key findings in relation to service delivery for the Stop Smoking Services. The report is structured as follows:

- **Section II** Stop Smoking Services: targets and key performance indicators;
- **Section III** Service availability and accessibility;
- **Section IV** Service engagement;
- **Section V** Service effectiveness;
- **Section VI** Geographic variations;
- **Section VII** Service level variation by provider type;
- **Section VIII** Discussion and recommendations.

Each report section provides an overview of relevant findings and a summary of performance by Key Performance Indicators (KPIs) where relevant. Rows and column totals in tables may not total 100% due to rounding.

[iii] Only those clients who are motivated to quit and ready to set a quit date may be registered with the Stop Smoking Services.

II Stop Smoking Services: targets and key performance indicators

Stop Smoking Services standards and recommendations

A number of national/regional standards and recommendations are set for Stop Smoking Services. The National Institute for Health and Clinical Excellence and the Ten Year Tobacco Control Strategy identifies that Stop Smoking Services should aim to reach 5% of the smoking population.[iv] [7, 14]

In addition, the DHSSPS has developed a range of evidence based service frameworks which set out explicit standards for health and social care, specific timeframes, and expected outcomes for specific service areas'. These Frameworks serve a dual purpose of allowing patients, clients, carers and families to see what they can expect to receive from their services and allowing commissioners and providers to measure and drive forward performance improvement.

The Service Frameworks for 'Cardiovascular Health and Wellbeing', 'Respiratory Health and Wellbeing' and 'Cancer Prevention, Treatment and Care' (hereafter referred to as the 'Service Frameworks') each refer to the Stop Smoking Services.[28-30] Each of these Service Frameworks has identified a range of targets for the Stop Smoking Services. These include:

- A year on year 4% increase in uptake of Stop Smoking Services; and
- A year on year 2% increase in the number of individuals quitting successfully at 4 and 52 weeks.

A further document 'The Quality Standards for the Delivery of Specialist Stop Smoking Services in Northern Ireland' hereafter referred to as the Quality Standards document, outlines the key requirements of the Stop Smoking Services.[31] The document indicates that all services are expected to aim for a minimum quit rate of 45-50% at four weeks and service providers with quit rates of less than 35% will be subject to review by the PHA/Health and Social Care Board (HSCB). In addition, the document details the requirement for all service providers to achieve a 52 week quit rate of 20%.[31]

While specialist services are required to be available to the whole population, there is a primary focus on the target groups set out in the Ten Year Tobacco Control Strategy; specifically routine and manual workers who smoke, disadvantaged people who smoke, pregnant smokers and children and young people.[7]

A summary of the recommendations and performance targets relating to Stop Smoking Services are provided in Table 2.1 overleaf.

[iv] 5% equates to an approximate total of 18,019 adult [16+] smokers: based on a population smoking prevalence rate of 25%, as reported within the Northern Ireland Health Survey 2011/12 ; and using 2012 Northern Ireland Statistics and Research Agency population statistics for adults aged 16+ (1,441,500).[1,27]

Table 2.1: Stop Smoking Service performance targets and recommendations

	Key performance indicator	Performance target	Source
Client focused	Service uptake: those setting a quit date with the services	5% of total smoking population	Ten Year Tobacco Control Strategy and NICE guidance (PH10) [7, 14]
		4% year on year increase in uptake	Service Frameworks[28-30]
	Short term client outcome: 4 week self-report quit rate	45-50% self reported quit rate	Quality Standards[31]
		2% year on year increase in the number of individuals who self report as quit	Service Frameworks[28-30]
	Long-term client outcome: 52 week self-report quit rate	20% self reported quit rate	Quality Standards[31]
		2% year on year increase in the number of individuals who self report as quit	Service Frameworks[28-30]
Service focused	Four week review quit rates	45-50% quit rate at four week review. Those providers who have quit rates of less than 35% will be subject to review by PHA/HSCB.	Quality Standards[31]

III Service availability and accessibility

Summary

- In 2012/13 645 service providers registered to deliver the Stop Smoking Services;
- In total 83% of all pharmacies and 38% of GP practices in NI were registered to deliver the services;
- The greatest number of providers per 1,000 smokers was within the Belfast LCG area and within the three most deprived quintiles.

Provider type

Overall 645 Stop Smoking Services operated in 2012/13, an increase from 607 in 2011/12 (see Table 3.1). The 645 services were composed of 133 GP providers, 445 pharmacies, 57 community providers and 10 hospital providers. As in the previous year pharmacies delivered the greatest proportion of services (69%) followed by GP's (21%).

The number of GP providers was similar to 2011/12 (n=132 in 2011/12), while the number of community providers increased from 44 in 2011/12 to 57 in 2012/13. Over the course of the year, the number of pharmacies grew from 418 in 2011/12 to 445 in 2012/2013.

Table 3.1: Total number of service providers in 2011/12-2012/13.

	Number of service providers 2012/13 (n,%)	Number of service providers 2011/12 (n,%)[v]
Pharmacy	445 (69%)	418 (69%)
GP	133 (21%)	132(22%)
Hospital sites	10(2%)	10(2%)
Community and other^	57 (9%)	44 (7%)
Total	**645**	**607**

^ includes schools and workplaces

Service provision and accessibility

As the main service providers the proportion of pharmacy and GP practices registered to deliver the Stop Smoking Service was investigated. Overall 83% of pharmacies and 38% of GP practices in Northern Ireland were registered to deliver the Stop Smoking Service.

Belfast Local Commissioning Group (LCG) area had the lowest number of pharmacies signed up to provide the service (74%), while Northern and Western

[v] Number of providers in 2011/12 as recorded in DHSSPS annual report 2011/12[25]

LCG areas had the greatest proportion of local pharmacies delivering the service (90 and 91% respectively).

Northern LCG area had the highest proportion of local GP services registered to deliver the Stop Smoking Service (59%) in comparison to the other four local commissioning group areas.

Table 3.2 Proportion of Pharmacy and GP practices delivering Stop Smoking Services within each LCG area

LCG area	Pharmacies delivering Stop Smoking Services (%)	GP's delivering Stop Smoking Services (%)
Belfast	74	36
Northern	90	59
Southern Eastern	80	31
Southern	84	32
Western	91	23
Northern Ireland	83	38

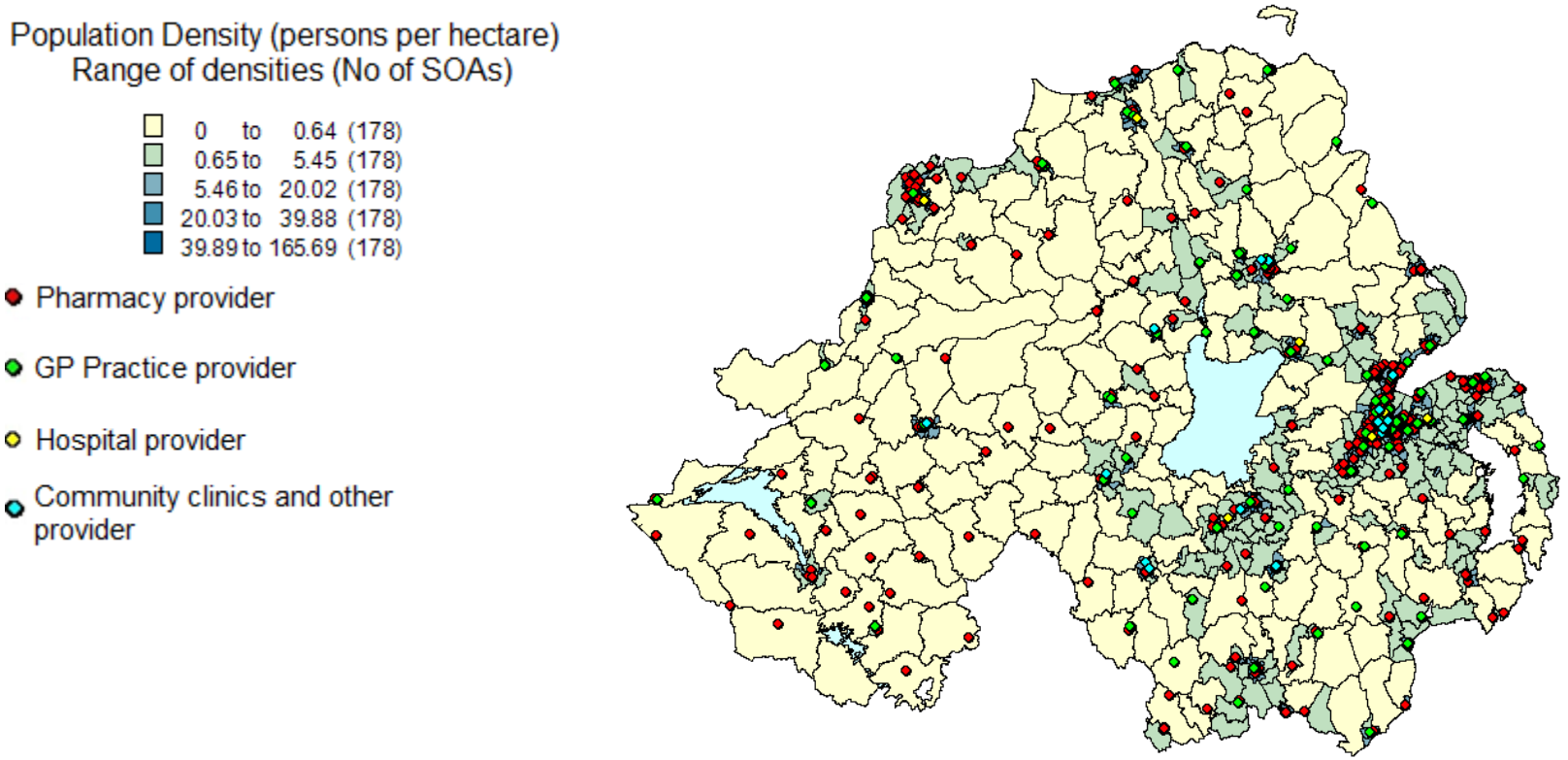
Distribution of service providers

Figures 3.1 and 3.2 (overleaf) show the geographical distribution of service providers across NI by population density and deprivation quintile respectively (see Appendix 1 for information on deprivation assessment methodology). The darkest background colour is indicative of greatest population density or highest deprivation level and the lightest colour of lowest population density/ least deprivation level respectively.

As can be seen the greatest concentration of service providers were located in the areas of highest population density or greatest deprivation.

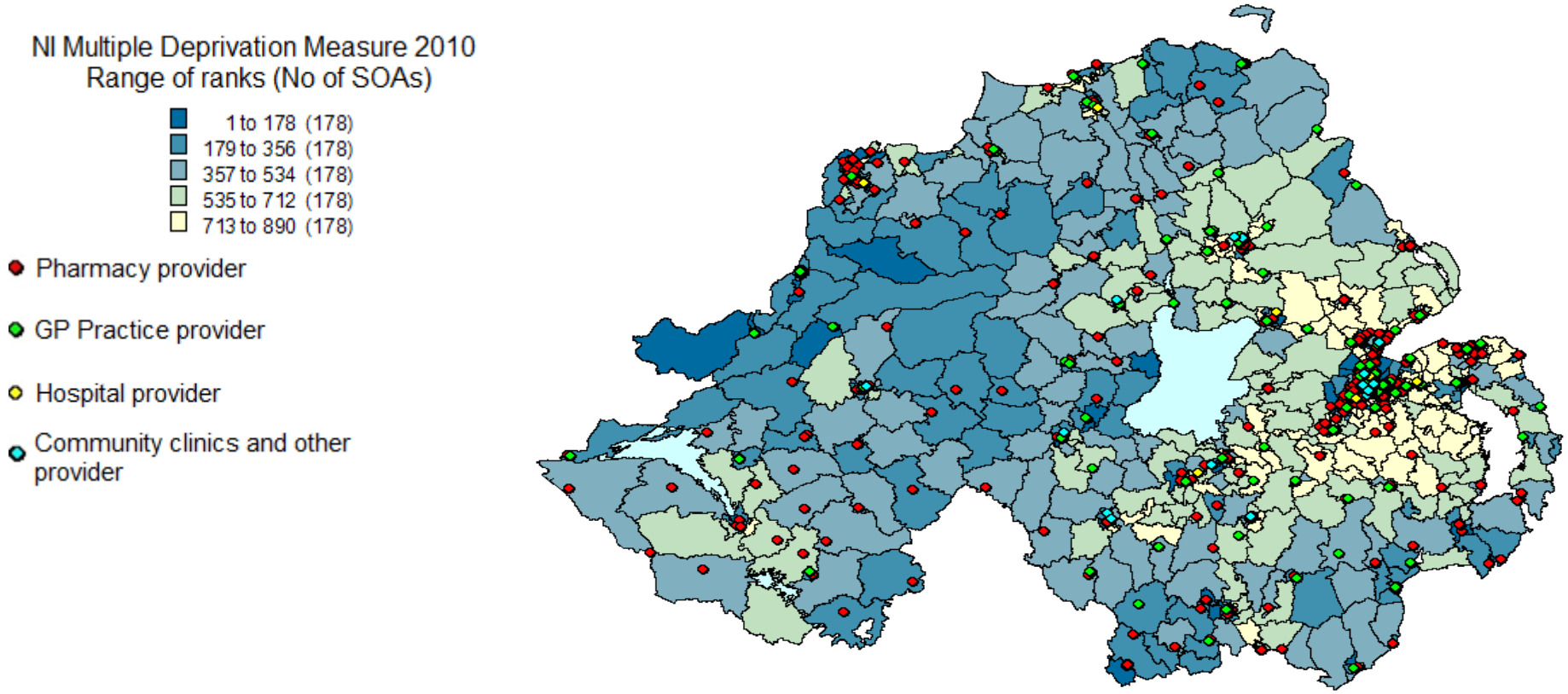
More detailed maps on the number and distribution of service providers by deprivation quintile within each of the individual LCG areas are shown in Appendix 2.

Figure 3.1 Number and location of Stop Smoking Service providers by provider type across Northern Ireland by super output area* population density (person per hectare, 2009)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 3.2 Number and location of Stop Smoking Service providers by provider type across Northern Ireland by super output area* multiple deprivation measure 2010 (MDM)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Service availability

Service availability was further investigated based on the estimated number of smokers within each LCG area. Overall there was an average of 1.79 available service providers per 1,000 smokers in Northern Ireland with Belfast LCG area having the greatest service availability (1.95) and Southern LCG area the poorest availability (1.60) (see Table 3.3).

Table 3.3 Service availability by local Commissioning Group (LCG) area

LCG area	Estimated number of smokers[vi]	Number of providers	Number of providers available per 1000 smokers	Number of smokers per single provider
Belfast	78952	154	1.95	513
Northern	92333	160	1.73	578
Southern Eastern	61285	115	1.88	533
Southern	70095	112	1.60	626
Western	60125	104	1.73	578
Northern Ireland	360375	645	1.79	559

To further investigate the relationship between service provision and deprivation, the number of providers available per 1000 smokers within each deprivation quintile was examined (see Appendix 1 for further information on deprivation quintile assessment methodology).The availability of service providers varied greatly per deprivation quintile. Quintile one-three had the greatest service provision, whereas quintile five (representing the least deprived areas of Northern Ireland) had relatively poor service provision in comparison.

Table 3.4: Service availability by deprivation quintile area

Deprivation Quintile	Estimated number of smokers per quintile area[vii]	Number of services located in each quintile	Number of providers available per 1000 smokers	Number of smokers per single provider
1(most deprived)	86,849	173	1.99	502
2	84,724	181	2.14	468
3	72,795	145	1.99	502
4	65,228	90	1.38	725
5(least deprived)	54,416	56	1.03	972
Northern Ireland	360,375	645	1.79	559

[vi] Estimated number of smokers based on 2012 mid-year estimates (NISRA) and smoking prevalence from Northern Ireland Health Survey 2011/12.

[vii] Estimated number of smokers based on 2010 small area population estimates 2010 (NISRA) and smoking prevalence from Northern Ireland Health Survey 2011/12.2010 small area estimates are factored up to 2012 population estimates. Local quintiles estimates may not sum NI total due to rounding.

IV Service engagement

Summary

- Overall 32,714 clients set a quit date with the Stop Smoking Services, a figure equating to an estimated 9% of all smokers in NI, and thereby exceeding the uptake recommendations within NICE and the Ten Year Tobacco Control Strategy; [7,14]

- Uptake was 17% lower than that observed in 2011/12 and thereby did not meet the target of a 4% year on year increase in uptake identified within the service frameworks;[28-30]

- Engagement of priority groups;

    - 8,159 routine and manual smokers set a quit date with the Stop Smoking Services equating to approximately 7% of all routine and manual smokers in NI;

    - Service uptake was greatest in the most deprived quintile (n=8412), in comparison to the least deprived quintile (n=2763);

    - 37% of all pregnant smokers in NI (n=1,608) set a quit date with the services with service uptake increasing by 10% in 2012/13 compared to 2011/12;

    - 423 11-16 year olds set a quit date with the services equating to 4.4% of all 11-16 year olds who smoke at least weekly.

Overall service uptake

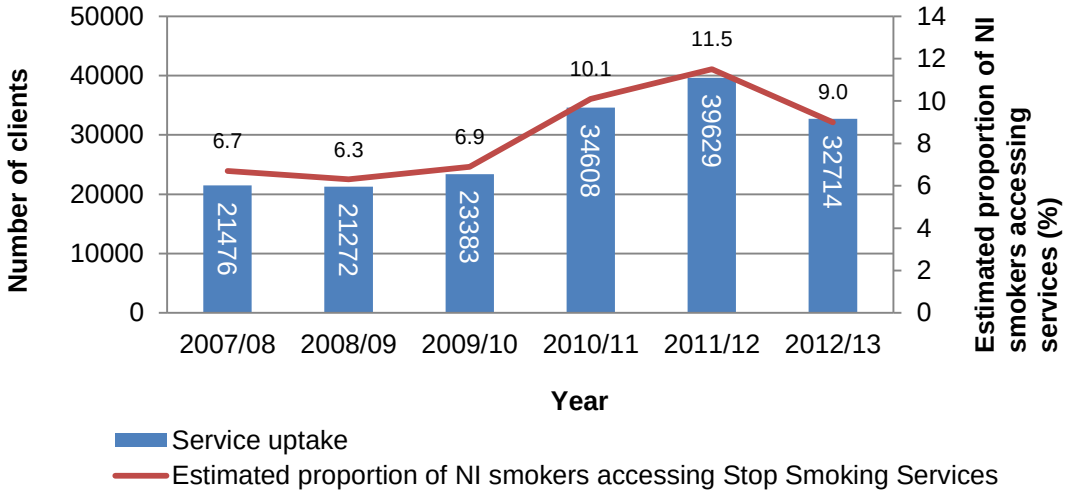
Uptake of services is defined as the total number of clients (smokers)[viii] setting a quit date with the Stop Smoking Services. During 2012/13 (1st April 2012 - 31st March 2013) uptake was recorded as 32,714, a figure 17% lower than that observed in 2011/12 (see Figure 4.1).

Although this figure did not exceed the 4% year on year target increase for Stop Smoking Services outlined in the Service Frameworks, 9% of all smokers in NI engaged with the services, a figure surpassing the 5% uptake figure as recommended within NICE and the Tobacco Control Strategy.[7,14]

Figure 4.1 illustrates the number of smokers setting a quit date with the services and the estimated proportion of NI smokers accessing the services since 2007/08. Trends showed from 07/08 to 11/12 the number and estimated proportion of NI smokers accessing the services increased, however, a fall in the estimated proportion of smokers accessing the service was noted in 2012/13 in line with the decreased service uptake.

[viii] These clients may not be unique individuals; rather they are unique quit attempts. Clients are not able to re-enter the service for 6 months following a failed quit attempt.

Figure 4.1: Uptake of Stop Smoking Services 2007/08-2012/13[ix]



UK service uptake

Table 4.1 shows the estimated uptake of Stop Smoking Services in NI compared to the remainder of the UK. In 2012/13, 11% of all smokers in Scotland accessed services, with Northern Ireland demonstrating the next greatest access (9%). In comparison Table 4.1 shows the Stop Smoking Services in England reached 8.4% of all smokers and the services in Wales reached only 1.3% of all smokers.

It is, however, important to identify any limitations associated with comparing service access across the UK. While NI has a uniform Stop Smoking Service with generic Quality Standards across all delivery settings, the uniformity of services elsewhere in the UK is more variable. For example, in Scotland, around 25% of services are provided through specialist intensive services, while 75% of services are delivered through less intensive pharmacy support services.

Table 4.1: Estimated proportion of adult smoking population accessing Stop Smoking Services by UK region in 2012-13

	Service uptake (n)*[32-34]	Population size: aged 16+ (n)[27]	Smoking prevalence (%)[35-37,1]	Assumed smoking population (n)[$]	Proportion of smoking population accessing Services (%)
England	724,427	43,363,400	20%	8,672,680	8.4%
Scotland	116,198	4,398,900	25%	1,099,725	11%
Wales*	7,061	2,429,800	23%	558,854	1.3%
Northern Ireland	32,714	1,441,500	25%	360,375	9.0%

*Welsh data for 2011—12 data. 2012 service data not available at time of production

$ Assumed number of smokers aged 16+.

[ix] Estimated proportion of smokers accessing services is calculated based on yearly mid-year population estimates (NISRA) and smoking prevalence from the Continuous Household survey 2007-2010/11 and the Northern Ireland Health Survey (2010/11-2011/12).

Previous use of services

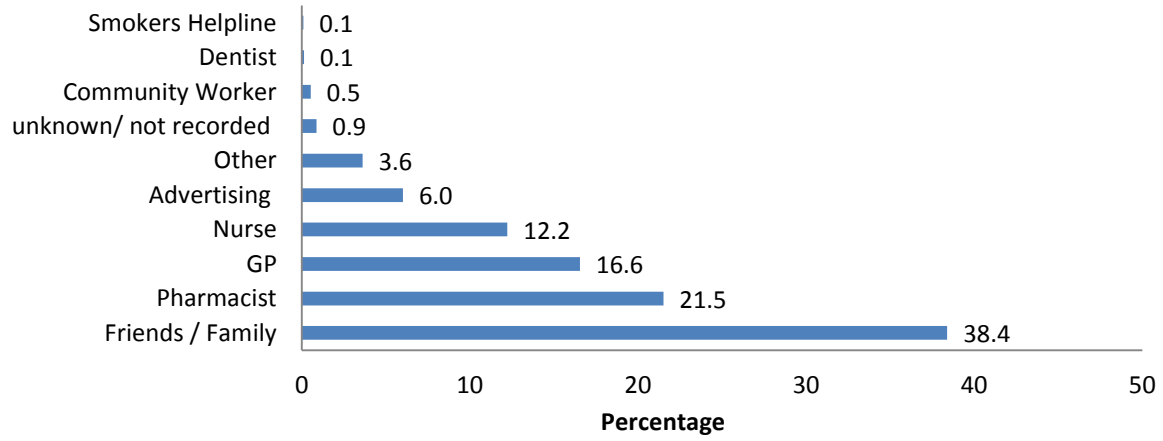
2012/13 service data showed 28% (n=9,160) of currently registered clients had previously used the services with the remaining 72% of clients being new to the services. This compared to 24% (n=9,235) individuals in 2011/12 who had previously used services and 76% new users. This may be indicative of a growing number of repeat users of the service and potential limited engagement of new service users.

Promotion of services

The largest proportion of clients heard about the service either through friends and family (38.4%) or from a pharmacy (21.5%) or GP practice (16.6%) (see Figure 4.2 overleaf). In total 50.4% of clients heard of the services through a health professional (GP, pharmacist, nurse or dentist).

In comparison to 2011/12, fewer clients reported hearing about the services from family or friends, a GP or pharmacist. The exceptions to this were hearing about the service from a nurse which increased from 8.7% in 2011/12 to 12.23% in 2012/13 and advertising which rose from 5.3% in 2011/12 to 6.02% in 2012/13 .The Helpline and dentist had not previously been mentioned as a source of information prior to 2012/13.

Figure 4.2: How did you hear about the Stop Smoking Services 2012-13



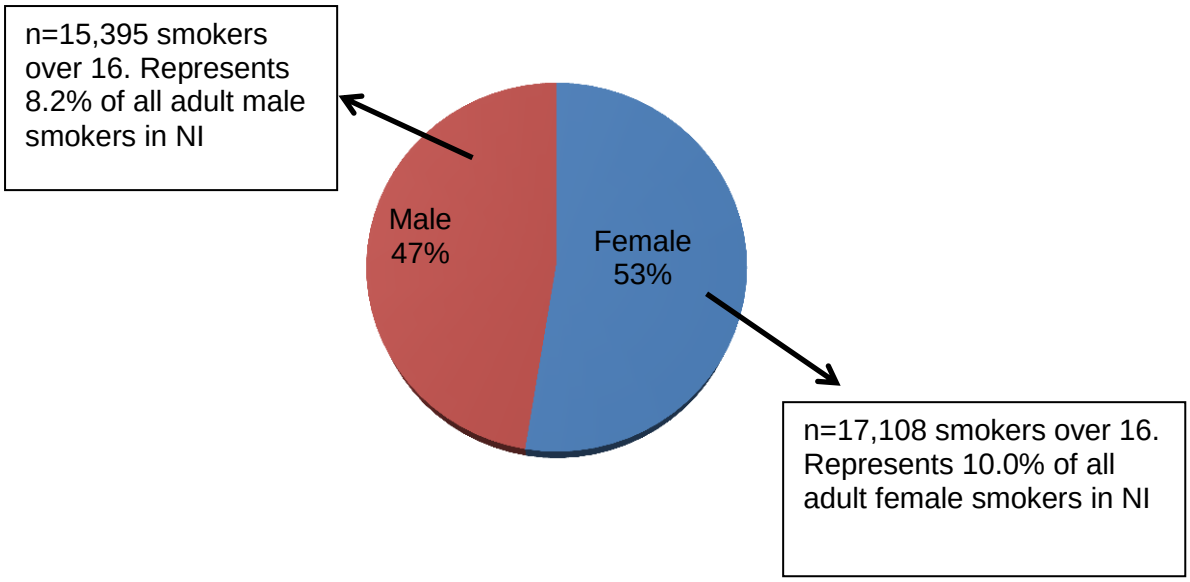
Base: 32,714

Profiling NI Stop Smoking Service users

Gender and age profiles

Overall, more females (52.6%, n=17,198) than males (47.4%, n=15,511) registered with the Stop Smoking Services in 2012/13, a pattern similar to previous years.[x] The number of adults over 16 who registered with the Stop Smoking Services in 2012/13 equated to approximately 8.2% of all adult male smokers in NI and 10.0% of adult female smokers.

Figure 4.3 Gender distribution of Stop Smoking Service uptake



Base: 32,709, 5 respondents did not provide information on gender.

The increased uptake of females compared to males was observed within all age groups (see Figure 4.4 overleaf) with the exception of the under 16's and over 75's, however, overall numbers within these two groups were substantially lower than within the other age groups.

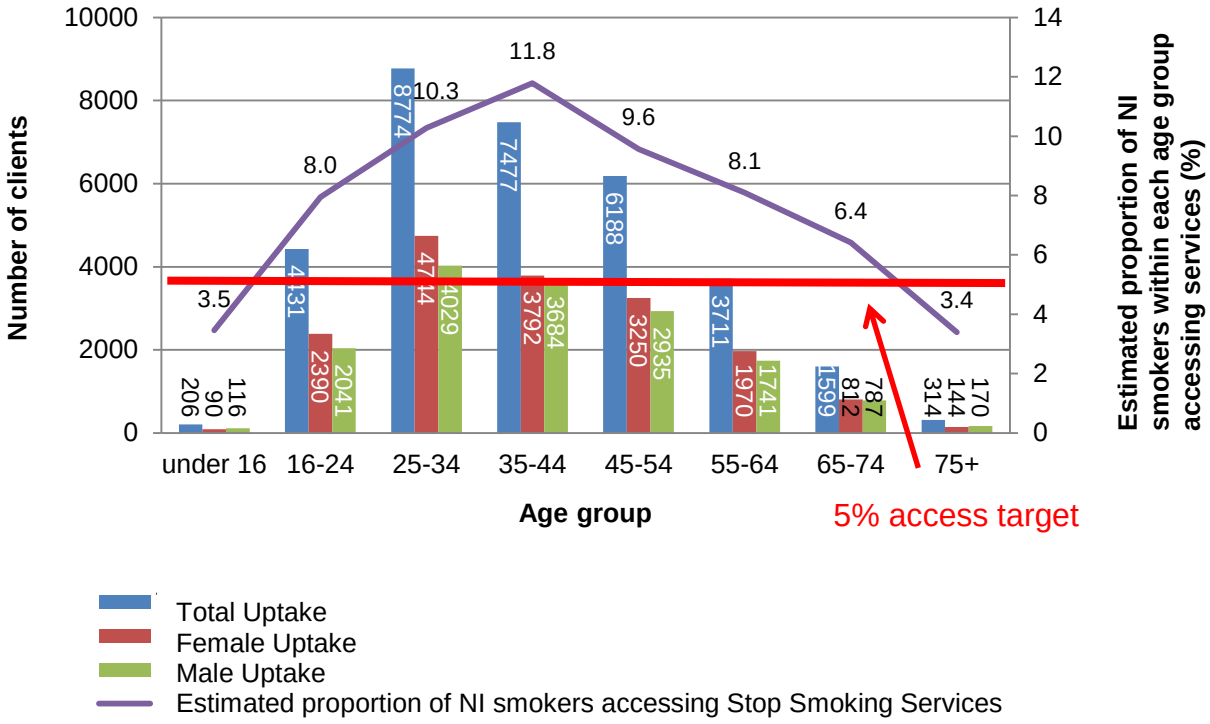
As shown in Figure 4.4 (bar chart), the greatest service uptake was noted in the 25-34 year old age group (n=8,774;26.8%), followed by the 35-44 year old age group (n=7,477; 22.7%), and then the 45-54 year old age group (n=6,188;18.9%). Lowest uptake was observed in the under 16's (<1%) and over 75's (1%).

Using combined data from the Northern Ireland Health Survey 2010/11 and 2011/12 approximate numbers of smokers per age group were calculated. These figures were used to derive an estimated proportion of smokers within each age group accessing the Stop Smoking Services. As can be seen in Figure 4.4 (line chart) estimated access to services increased to a peak among those age 35-44 and then declined steadily with age.

[x] Providers did not complete monitoring information on gender for five service users.

In all but the under 16's and over 75 age groups, the services were accessed by at least five per cent of the population as recommended by NICE guidance.[14]

Figure 4.4 Uptake and estimated access to, Stop Smoking Services by gender and age, 2012-13



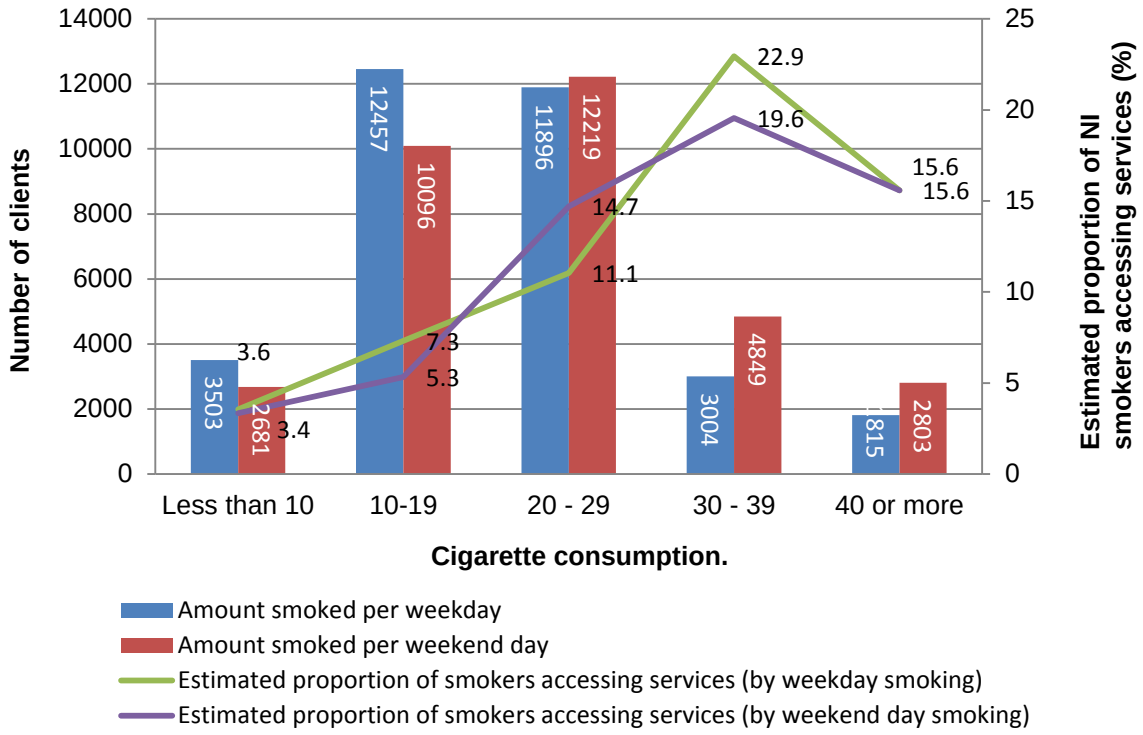
Baseline: 32,700. 14 individuals did not provide information on age. This included 6 females and 8 males.

Tobacco consumption profiles

The majority of clients accessing the services smoked either 10-19 or 20-29 cigarettes each weekday or weekend day (see Figure 4.5) with more females being lighter smokers (less than 20 a weekday or weekend day) than males (See Appendix 3, Table 1 for details of tobacco consumption by gender).

As can be seen from Figure 4.5 nearly a fifth (19.6-22.9%) of the estimated number of all NI smokers who smoked 30-39 cigarettes a day accessed the Stop Smoking Services, in comparison to only 5.3%-7.3% of the estimated number of NI smokers who smoked 10-19 cigarettes a weekday/ weekend day. This may indicate a lack of engagement with a large proportion of those smoking less than 30 cigarettes a day.

Figure 4.5: Uptake and estimated access to, Stop Smoking Services by cigarette consumption, 2012-13

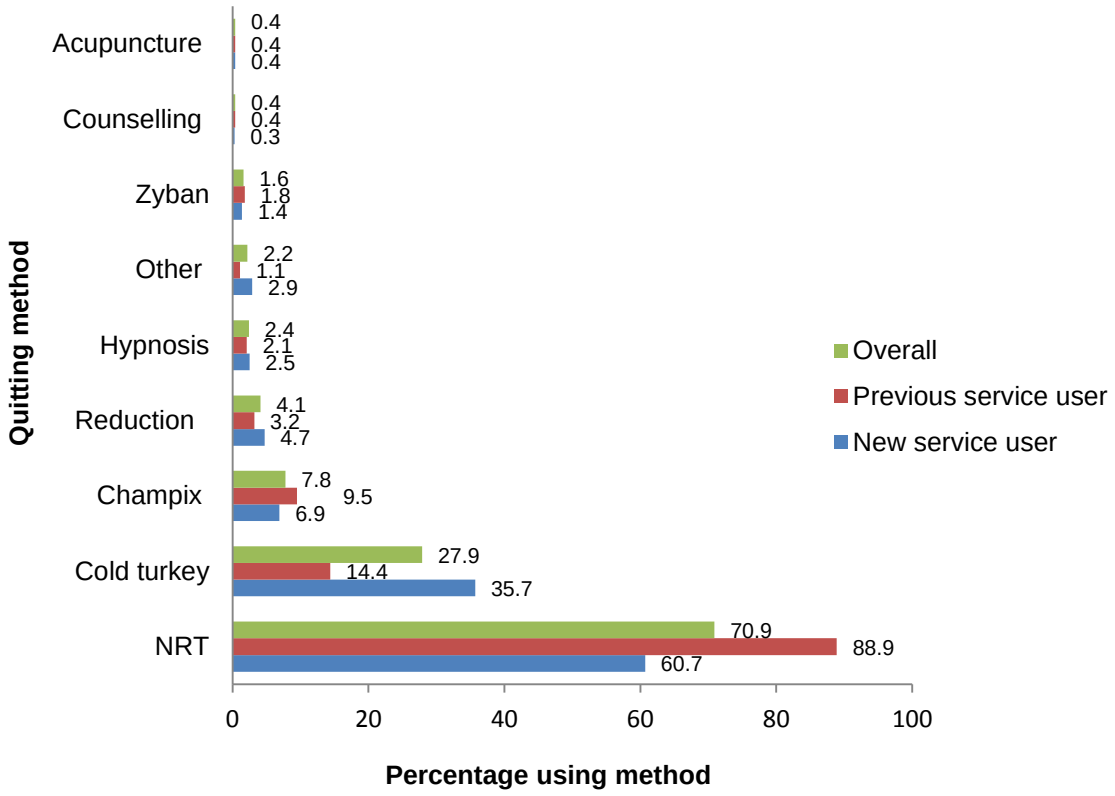


Base: 32,675 clients responded on weekday cigarette consumption, 32,648 clients responded on weekend consumption

Service users' previous quitting behaviour

The most popular method of quitting by all service users was using Nicotine Replacement Therapy (NRT) (70.9%), followed by 27.9% of service users who had attempted to quit cold turkey (see Figure 4.6). More previous service users (88.9%) reported using NRT than new service users (60.7%) while more new service users reported using cold turkey (35.7%) than previous service users (14.4%).

Figure 4.6 Clients previous quitting methods[xi]



Base: 29,044 responses received overall, 10,755 from previous service users and 17,504 from new service users.

[xi] Quitting methods were selected from a drop down menu on the web monitoring system. 5,491 clients reported 'none' as a quitting and 2,577 clients said n/a to the question and are therefore not included within the analysis.

Engaging the priority groups

The NI Ten Year Tobacco Control Strategy highlights three key priority groups for smoking cessation which include disadvantaged populations, pregnant smokers and children and young people (aged 11-16).[7]

Disadvantaged populations

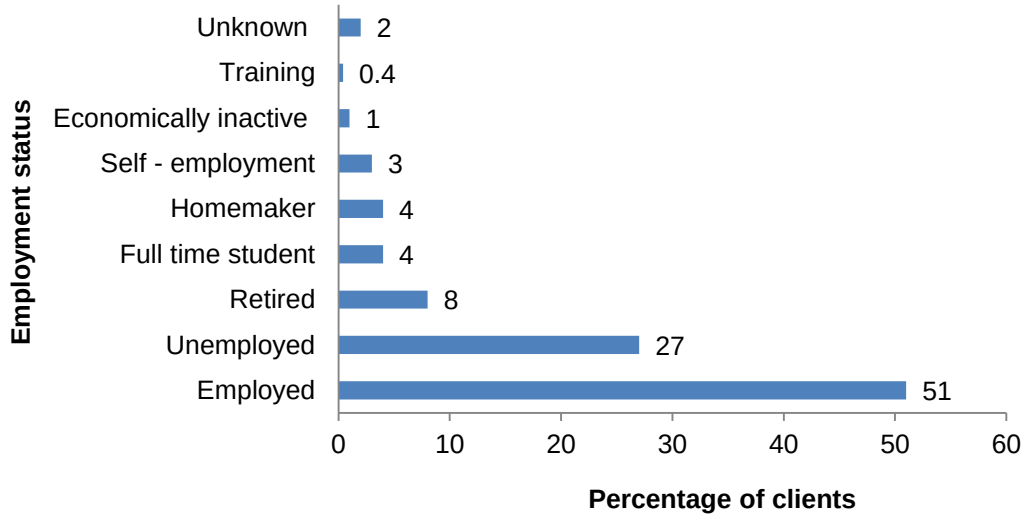
The Stop Smoking Services define a client as disadvantaged if he or she is:

- Registered as unemployed or economically inactive and/or;
- Registered as a routine and manual worker and/or;
- Living in the most deprived quintile area (as assessed by the Northern Ireland multiple-deprivation measure).[xii]

Employment

Just over half of clients who engaged with the Stop Smoking Services were employed or self-employed (n=17,443, 54%) and more than a quarter of clients were either unemployed or economically inactive (n=9,297, 28%). However, no information is currently available from national surveys on the employment status of smokers in NI, therefore, it is not feasible to estimate the proportion of employed or unemployed smokers accessing services.

Figure 4.7 Employment status of clients' 2012/13



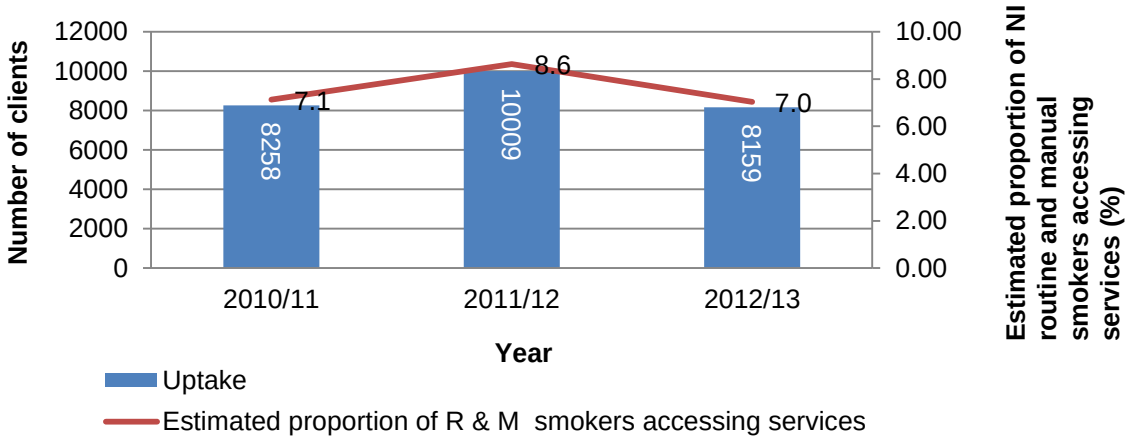
Base 32,714

[xii] Criteria for disadvantaged as defined within the Ten Year Tobacco Control Strategy[7]

Occupation

As part of routine service monitoring, each client is asked about their occupation. In 2012/13 8,159 of service users indicated they had a routine and manual occupation, equating to 7% of all routine and manual smokers in NI.[xiii] Overall there was a 18% decline in service uptake among this group, a figure comparable to the overall service decline.

Figure 4.8 Uptake and estimated access to Stop Smoking Services by routine and manual (R & M) smokers 10/11-12/13

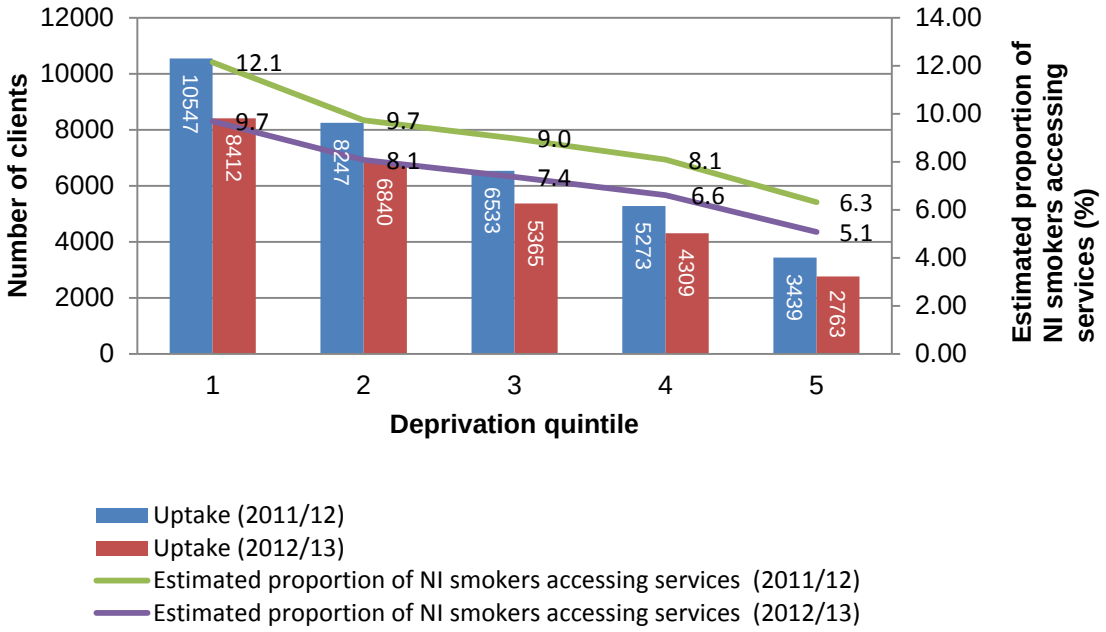


Deprivation area

Figure 4.9 (bar chart) shows the number of Stop Smoking Service users within each of the five deprivation quintiles decreased in 2012/13 compared to 2011/12. However, despite this reduction in service uptake, three times as many smokers from the most deprived quintile (n=8,412) accessed the services in comparison to the least deprived quintile (n=2,763) illustrating the services are effectively targeting inequality.

[xiii] Estimated proportion of routine and manual smokers in 2010/11-2012/13 is calculated using the number of routine and manual smokers accessing the services as the numerator and the estimated number of routine and manual smokers in NI (based on 2011 census data on occupational status and NIHS 2010/11 smoking prevalence of 31%) as the denominator.

Figure 4.9 Uptake and estimated access to, Stop Smoking Services within each deprivation quintile 2011/12-2012/13



Base: 2012/13: n=27,689, 5,025 individuals provided no or incomplete postcode details, 2011/12: n=34039, 5, 590 individuals provided no or incomplete postcode details.

Pregnancy

Smoking during pregnancy poses a serious threat to the health of mother and child and has been described as the most modifiable risk factor for adverse pregnancy outcomes. Given these facts NICE have developed guidance specifically for smoking cessation within this group.[38] Smoking during pregnancy has been shown to be linked to an increased risk of miscarriage, still birth, placenta abruption, placenta previa, preterm birth (less than 37 weeks) and sudden infant death syndrome (SIDS).[39-41] Furthermore, recent evidence from the Department of Health in England shows that the risk of infant mortality may increase by up to 40% if a women smokes while pregnant.[42]

Although it has been commonly reported that smoking during pregnancy may be associated with low birth weight (less than 2,500g), more recent research has suggested in turn that low birth weight may be associated with increased adult morbidities including for example, Coronary Heart Disease, Type 2 diabetes and adiposity. This would suggest low birth weight may carry a lifetime risk for the individual.[43]

Information on the number of pregnant women who smoke in Northern Ireland is available from two different sources, the Infant Feeding Survey 2010 and the Northern Ireland Maternity System (NIMATS) / Child Health System (CHS). The Infant Feeding Survey reported 28% of mothers in Northern Ireland smoked in the 12 months before pregnancy. Of the mothers who smoked before or during pregnancy approximately half gave up at some point before the birth and 15% continued to

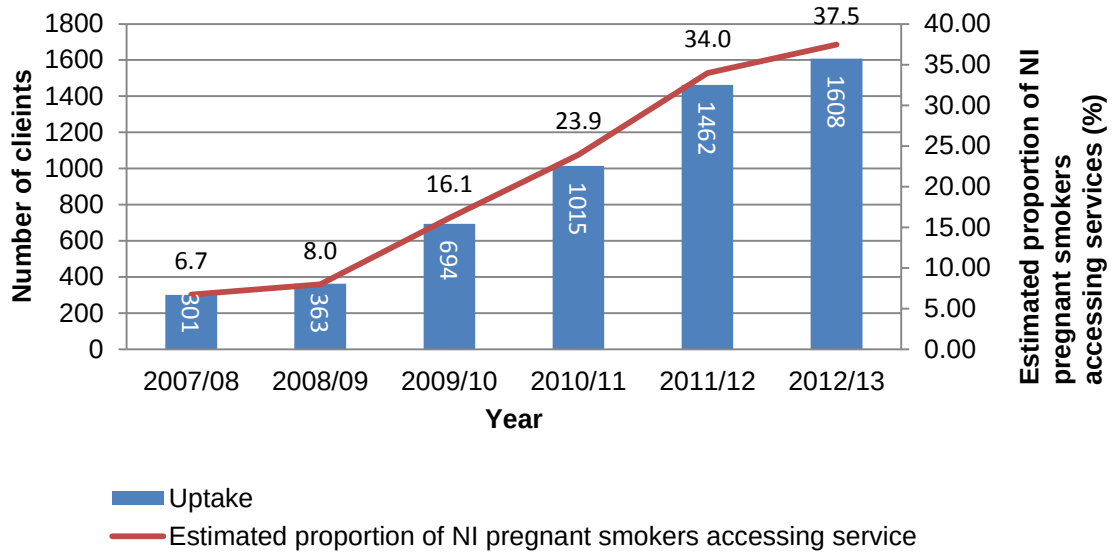
smoke during pregnancy. Mothers in routine and manual occupations were more than four times as likely as those in managerial and professional occupations to have smoked throughout pregnancy (23% and 5% respectively).[44]

Results available from routine data collection (NIMATS/CHS) show that 17.0% (n= 4,292) of pregnant women self-reported being a smoker at the time of their first antenatal appointment during 2012.[xiv] [45] Helping support pregnant women to quit is, therefore an important aspect of the Stop Smoking Services and the importance of this area is identified within the Ten Year Tobacco Control Strategy.[7]

In total, 1608 pregnant women registered with the Stop Smoking Services in 2012/13, representing 37% of all pregnant smokers. As can be seen from Figure 4.10 the absolute increase in numbers accessing the services over the years has directly influenced the estimated proportion of pregnant smokers using the services.

In 2012/13 uptake was approximately 10% higher than that recorded in 2011/12 despite the overall 17% decrease in service uptake indicating a service responsive to this key priority group.

Figure 4.10 Uptake and estimated access to Stop Smoking Services by pregnant smokers 07/08-12/13[xv]



[xiv] The first ante-natal hospital visit a woman attends is usually scheduled around 10-12 weeks of pregnancy.

[xv] Estimated proportion of pregnant smokers accessing services is calculated using service uptake as the numerator and number of pregnant smokers in Northern Ireland taken from Northern Ireland Maternity Service data as denominator.

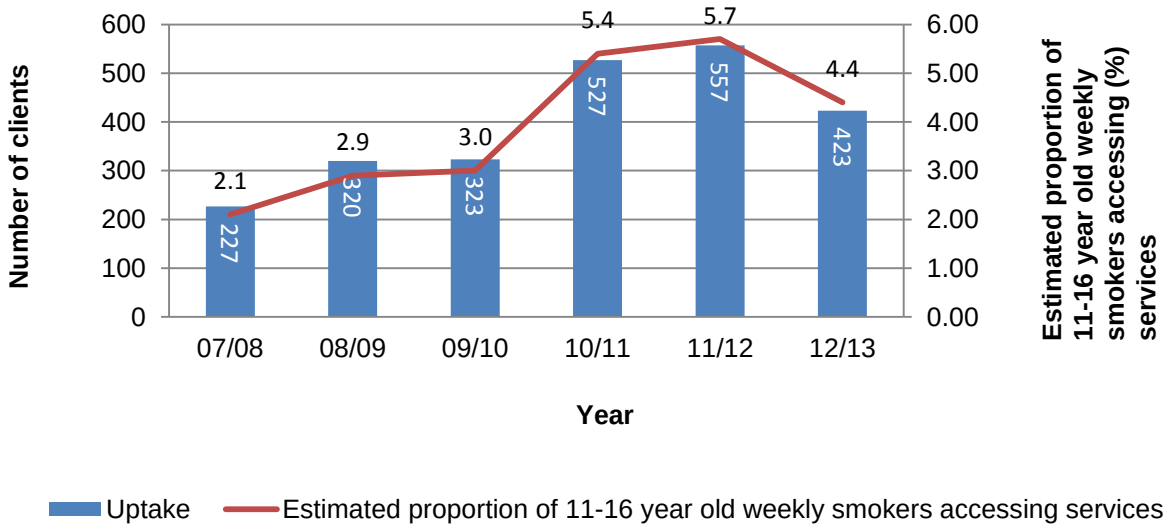
Children and young people

Survey evidence shows that 19% of young people (aged 11-16) reported having ever smoked with 25% of this group admitting to smoking on a daily basis. However, the majority (71%) of 11-16 year olds who smoke at least once a week say they would like to give up.[46]

Children who smoke are a key target audience for smoking cessation as the younger an adolescent begins to smoke the more likely they are to become a regular smoker.[47,48]

In total 423, 11-16 year olds accessed the services, a 24% reduction on 2011/12. This equates to approximately 4.44% of children and young people who smoke at least weekly accessing the services.[xvi]

Figure 4.11 Uptake and estimated access to Stop Smoking Services by 11-16 year old smokers 07/08-12/13



[xvi] Estimated proportion of 11-16 year old weekly smokers uses the number of 11-16 year olds accessing services as the numerator and the estimated number of 11-16 year old weekly smokers in NI (based on YPBAS 2007/ 2010 data and NISRA mid-year population estimates) as the denominator.

V Service effectiveness

Summary

- 56.6% of all clients who set a quit date with the services in 2012/13 quit at 4 weeks (n=18,516), thereby meeting the Quality Standards requirements. This was the highest 4 week quit rate since 2002/03;
- Although the numbers registering with the services in 2012/13, were 17% lower than in the previous year the actual number of clients who had quit at 4 weeks was only 10.9% lower than in 2011/12, a decrease which did not fulfil the yearly target increase in numbers quit;[28-30]
- 26.5% (n= 8,674) of clients had not quit at 4 weeks in 2012/13 although 59.6% (n=5,171) of this group cut down on smoking and 38% of this group wished to re-join the services;
- In 2011-12, 17.0% of clients quit smoking at 52 weeks. Overall there was 14.5% more successful quits at 52 weeks in comparison to 2010/11, a figure which substantially exceeded the 2% year on year target increase (in numbers quitting) called for within the service frameworks [;28-30]
- At 52 weeks, 27.7% (n=5,745) of clients had not quit, however, 68% of these clients' had cut down on smoking;
- Examination of the priority groups showed
    - At 4 weeks the Stop Smoking Services helped
        - 22.2% of all pregnant smokers in NI quit,
        - 4.29% of all routine and manual smokers in NI quit,
        - 5.87% of all those smokers who live in the most deprived quintile in NI quit
        - 2% of all 11-16 year old weekly smokers quit and
    - At 52 weeks the Stop Smoking Services helped
        - 8.9% of all pregnant smokers in NI quit,
        - 1.69% of all routine and manual smokers in NI quit
        - 1.63% of all those smokers who live in the most deprived quintile in NI quit and
        - <1% of all 11-16 year old weekly smokers quit.

Four and fifty-two week self-report quit activity

Stop Smoking Service providers are expected to follow up clients to find out their smoking status four and 52 weeks after their quit date. Smoking status at four[xvii] and

[xvii] A client is considered to be quit at 4 weeks if they have not smoked in the third or fourth week since setting a quit date.

52 weeks is ascertained through self-report. In addition carbon monoxide monitoring is utilised at the 4 week stage to verify a successful quit attempt.

Each client is classified under three potential categories at the four and 52 week follow-up stage:

- Quit successfully, (based on clients' self-reported smoking status);
- Not quit (based on clients' self-reported smoking status); or
- Lost to follow-up.

Those clients who have been classified as lost to follow-up are those who have been unable to be contacted since registering with the service (setting a quit date). Service providers are obligated to make three attempts to follow up clients at the four/ fifty two week stage.

This chapter details 4 week quit rates for those clients registered in the period 1st April 2012- 31st March 2013 plus 4 and 52 week quit rates for those clients registered with the Stop Smoking Services during the period 1st April 2011- 31st March 2012. Throughout this section 52 week quit rates are calculated by two methods, from only those who quit at 4 weeks or from all those who set a quit date with the services.

Four and 52 week quitting activity overview

In 2012/13, 18,516 (56.6%) of all smokers who had registered with the Stop Smoking Services quit at four weeks, 26.5% (n=8,674) of all smokers had not quit at four weeks and 16.9% (n=5,524) were lost to follow up (Table 5.1)

Four week quit rates in 2011/12 and 2012/13 were above that required with the Quality standards for Stop Smoking Services (45%).[31] In fact 4 week quit rates had improved in 2012/13 (56.6%) compared with the previous year (52.4%), while the number of service users who self-reported as 'not quit' had decreased from 31.1% in 2011/12 to 26.5% in 2012/13.

For those clients who registered with the services in 2011-12, 32.5% of those who had quit at 4 weeks remained quit at 52 weeks, 27.7% of clients had not quit and 39.9% were lost to follow up at the 52 week stage (Table 5.1). The number of successful quits at 52 weeks equated to 17.0% of all service users who registered with the services in 2011/12 and thereby did not meet the recommendations outlined within the Quality Standards document.

Table 5.1 Overall quitting activity of Stop Smoking Service users

		Quit (%)	Not quit (%)	Lost to follow up(%)
2012-13	4 week quit rate (n=32,714)	56.6	26.5	16.9
2011-12	4 week quit rate (n=39,629)	52.4	31.1	16.5
	52 week quit rate (based on only those clients quit at 4 weeks) (n=20,776)	32.5	27.7	39.9
	52 week quit rate (based on all clients who registered with the services)(n=39,629)	17.0	14.5	68.4

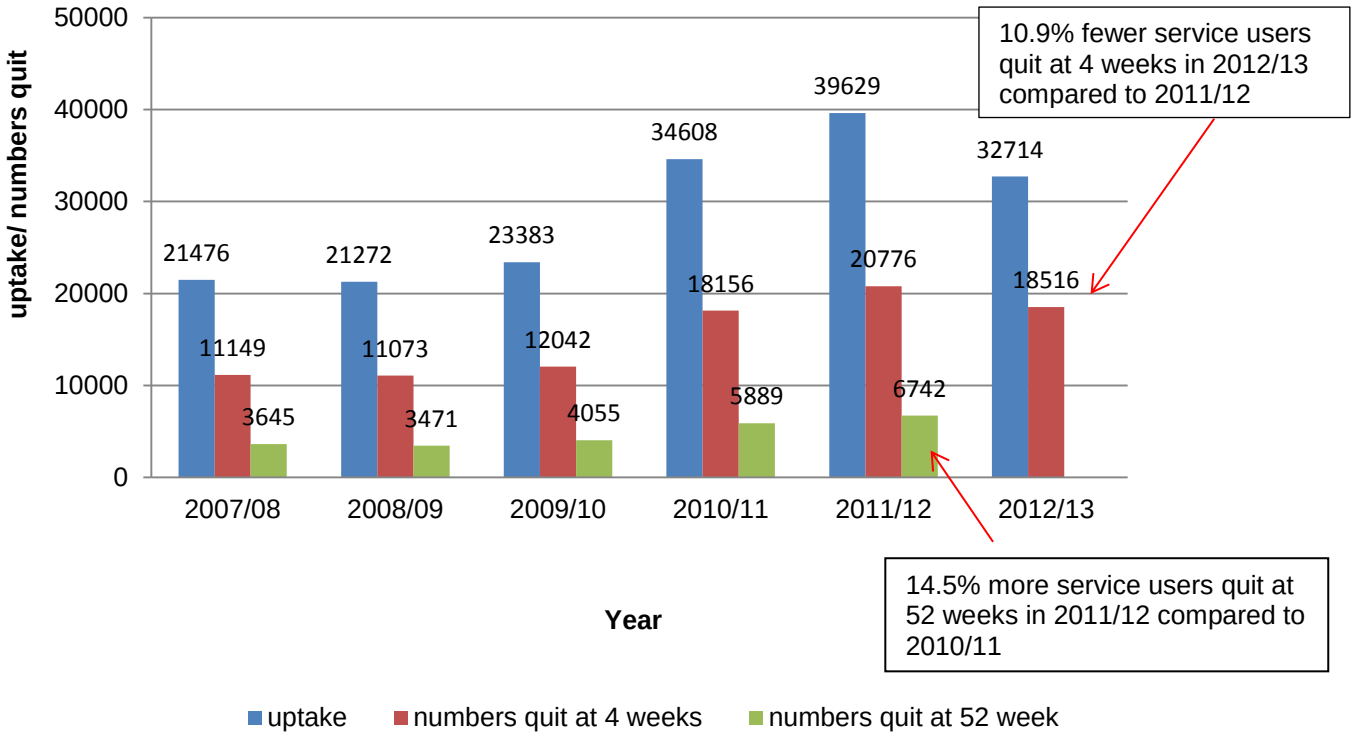
Successful quit attempts

Figure 5.1 shows the trends in service uptake and numbers of clients quitting at 4 and 52 weeks over the previous 6 years. In line with the uptake pattern (shown in chapter 4) the number of clients' quit at four and fifty two weeks increased from 2007/08 until 2011/12 with a small decrease in the number of clients quit at 4 weeks in 2012/13, a factor which could be explained by the decreased service uptake within this year.

Although the most recent data (12/13) showed the actual number of clients quitting at 4 weeks has declined, the actual quit rate has increased. Therefore, the number of clients quit at four weeks in 2012/13 (n=18,516) was only 10.9% lower than that observed in 2011/12 (n=20,776), despite the 17% drop in overall service uptake. This 10.9% drop in number of clients quit at 4 weeks did not, therefore, meet the target of a 2% year on year increase in number of clients' quit at 4 weeks set within the service framework documents.[28-30]

The actual number of clients who quit at 52 weeks (2011/12 registrations) was 6742, a figure 14.5% higher than the previous year (n=5,889) and thereby exceeded the target specifying a 2% year on year increase in number of clients' quit at 52 weeks set within the service framework documents. [28-30]

Figure 5.1 Service uptake, four and fifty two week quitting activity 2007/08-2012/13[xviii]



[xviii] 2007/08-2011/12, uptake and number of clients quit at 4 and 52 weeks have been taken from refreshed system downloads in 2013. Figures may, therefore, vary from that published within the DHSSPSNI annual smoking cessation reports.[21-26]

Four and 52 quit rates

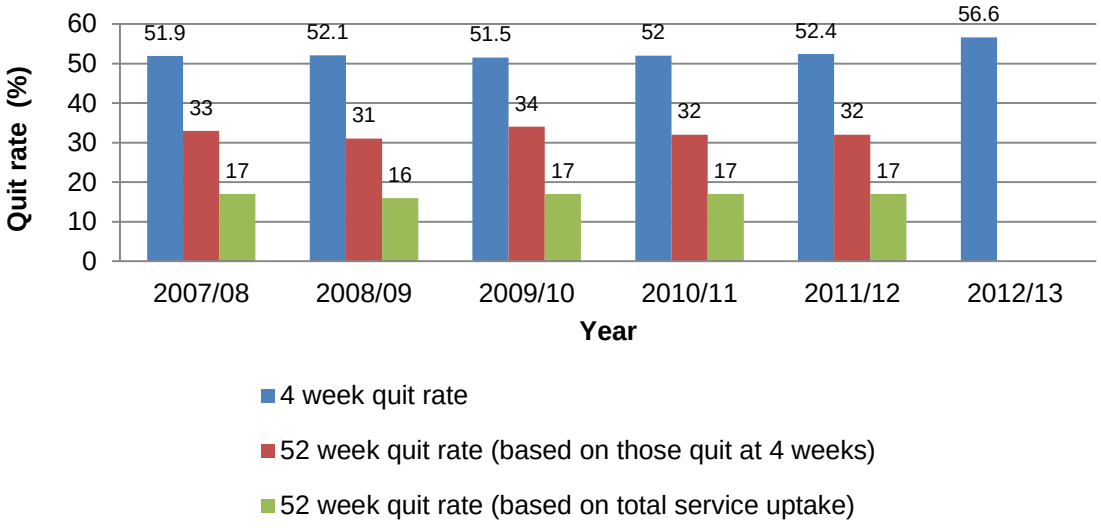
Figure 5.2 shows the 4 and 52 week quit rates from 2007/08 to 2012/13. Four week quit rates remained relatively static from 2006/07 to 2011/12 at around 51-52%. However in 2012/13, the 4 week self-reported quit rate rose to 56.6% (n=18,516).

This increased quit rate in 2012/13 may be owing to the introduction of a new self-monitoring tool which allows providers to easily view their service uptake and 4 week quit rates on the online monitoring system. This coupled with the introduction of a quality improvement scheme for pharmacy services (the main source of client uptake) during this period may have accounted for the increased 4 week quit rate in 12/13. Further information on the development of the self-monitoring scheme and quality improvement programme will be further discussed in chapter VII.

Of the 56.6% (n=18,516) of clients who quit at 4 weeks, 75% of these clients' (n=13,904) had a carbon monoxide validation test conducted of which 98.9% (n=13,753) verified the clients' non- smoking status. This resulted in an overall validated quit rate in 2012/13 of 42.0%, a figure higher than that recorded in 2011/12 (37.6%).

In contrast 52 week quit rates shown in Figure 5.2 have remained relatively static over the previous six years at around 31-34% for all those who had quit at 4 weeks and 16-17% for all those who had initially registered with the services.

Figure 5.2 Four and 52 week quit rates, 2007/08- 2012/13



UK comparison of four week quit rates

Wales[xix] had the highest four week quit rates (57.3%) followed by Northern Ireland (56.6%), England (52%) and finally Scotland had the lowest quit rates (38.1%) [32-34]

While Wales had similar 4 week quit rates to Northern Ireland, the numbers accessing the service in Wales were considerably lower (7,061) than that in Northern Ireland (32,714).

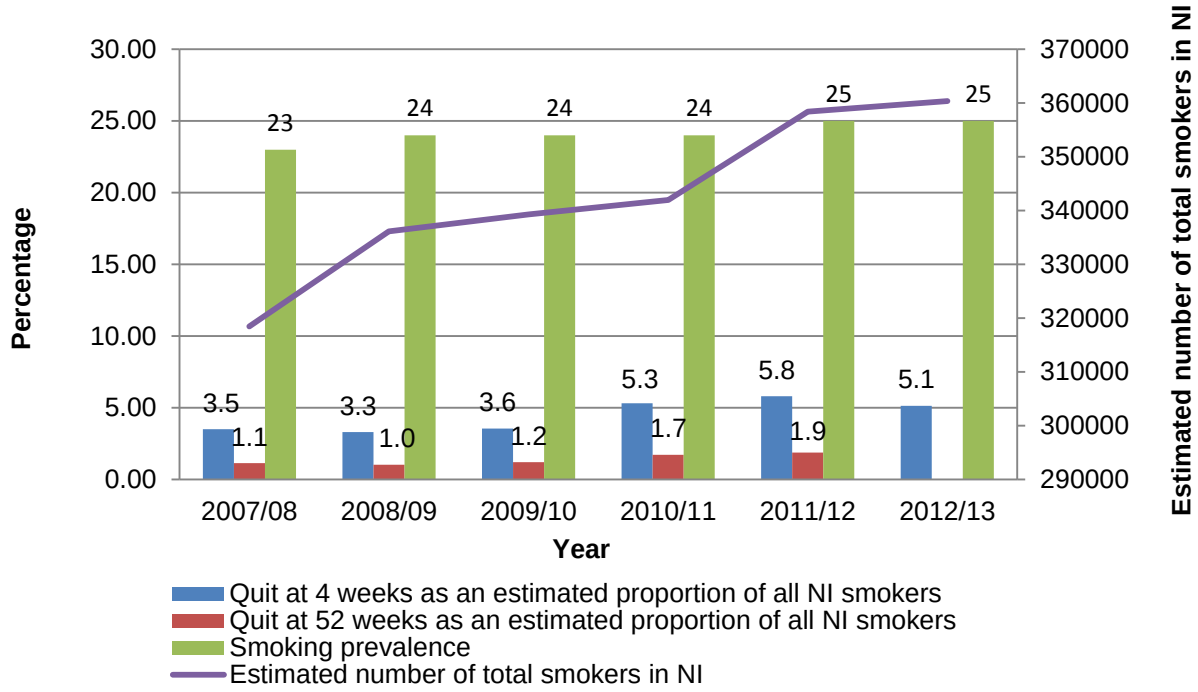
[xix] The four week quit rate within the Stop Smoking Services in Wales is based on the latest published data 2011/12.

The impact of Stop Smoking Services on tobacco prevalence

While the Stop Smoking services have supported an increasing proportion of smokers to quit at 4 week and 52 weeks during the previous six years (see Figure 5.3), the relative prevalence of tobacco smoking has remained relatively static over this period (23-25%).

While the services have aided approximately 23,800 clients to quit smoking for 52 weeks since 2007/08, it is thought the absolute number of smokers in NI has increased by around 40,000 during this time as a result of continual influx of new young people becoming adult smokers and overall population growth, a fact which has, therefore, counteracted the positive impact of the services.

Figure: 5.3 The impact of Stop Smoking Services at a population level

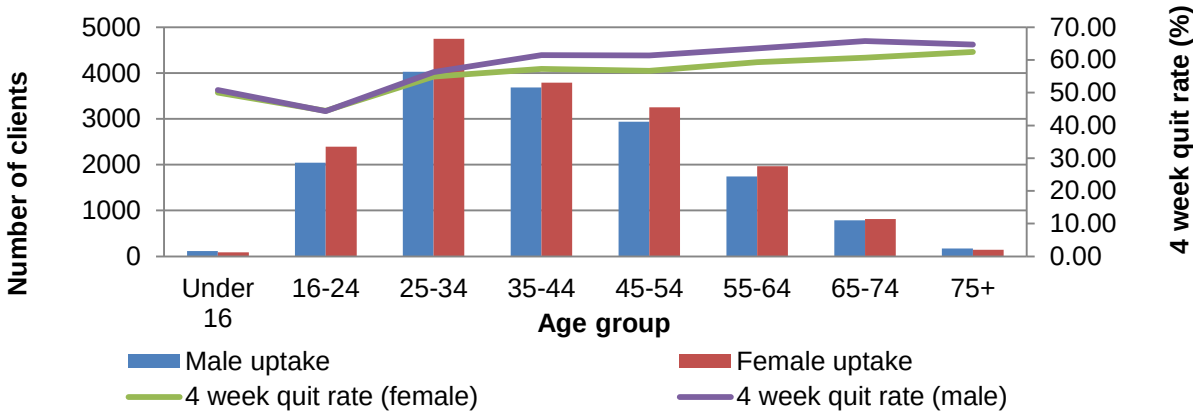


Factors associated with quitting

Impact of gender and age

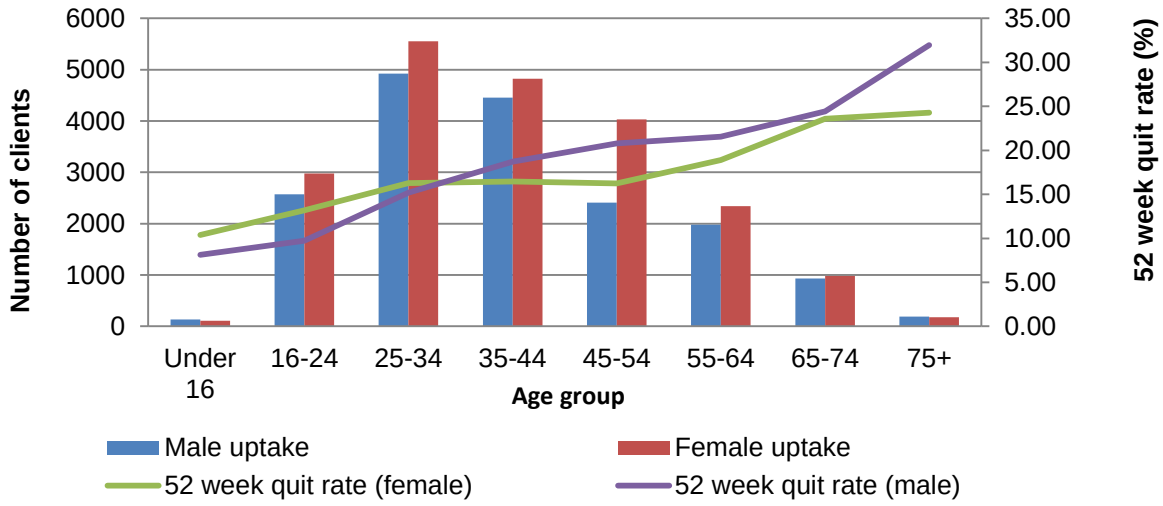
Although female uptake was higher among the majority of all age groups, overall male quit rates at 4 weeks (58.2%, n=9035) were higher than female 4 week quit rates (55.1%, n=9,480). This pattern appeared consistent throughout the age groups although was more pronounced in those aged 25 and over (see Figure 5.4). A trend was also observed with 4 week quit rates increasing with age.

Figure 5.4: Service uptake and 4 week quit rate by gender and age 2012/13



Overall, gender differences in 52 week quit rates were not evident with quit rates of 32.4% for women (n=3,476) and 32.5% for men (n=3,266) (if calculated from only those who quit at 4 weeks). [xx] However, when 52 weeks quit rates were examined by age, male quit rates tended to be higher in those over 35 while female quit rates tended to be higher in those under 35, thereby, counteracting any overall gender differences (see Figure 5.5)

Figure 5.5 Service uptake and 52 week quit rate by gender and age 2011/12



[xx] 52 week quit rates equate to 17.5% for men and 16.6% for women when calculated from all those who set a quit date with the services.

Previous use of services

Quit rates at 4 weeks showed those who had previously used the services had a slightly higher quit rate of 58.9% compared to 55.8% for those who had not previously used services. Nevertheless, at 52 weeks any differences in quit rates (calculated from all those setting a quit date) were eliminated (16.7% for those who had previously used services and 17.3% for first time service users).

Cigarette consumption and quitting

The number of cigarettes a client smokes and hence possible nicotine addiction is an important factor to consider when examining quit rates. As shown in Table 5.2, a trend was observed with 4 and 52 week quit rates being lower among the heavier smokers despite greater numbers of this group accessing the services.

Table 5.2 Four and 52 week quit rates by tobacco consumption

Cigarette consumption per weekday/ weekend day	4 week quit rates (%) by weekday consumption	4 week quit rates (%) by weekend day consumption	52 week quit rates (%) by weekday consumption	52 week quit rates (%) by weekend day consumption
Less than 10	57.5	57.14	37.6	38.3
10-19	56.7	58.28	33.7	35.5
20-29	57.2	57.46	30.7	31.1
30-39	54.3	53.83	29.5	29.5
40 or more	51.1	51.77	28.6	27.3

Pharmacotherapy support

Pharmacotherapy can be used as an intervention in smoking cessation treatment, however, not all smokers use pharmacotherapy in their attempts to give up smoking. The use of pharmacotherapy interventions can influence the chances of success in smoking cessation and NICE guidance advocates the use of such treatments to assist quit attempts.[14, 49-53]

Within Northern Ireland, the Quality Standards note that advice on therapeutic interventions such as NRT, Bupropion (Zyban) and Varenicline (Champix) should be provided during smoking cessation sessions with clients.[31]

Table 5.3 details the use of the three pharmacotherapies utilised within the NI Stop Smoking Service, and the four and 52 week quit rates for those using pharmacotherapy. In 2011/12 and 2012/13 four week quit rates were above the average for those using pharmacotherapy. For example in 2012/13 four week quit rates ranged from 68.2%-76.6% compared to the average quit rate of 56.6%.

Likewise, 52 week quit rates were higher than the average (17%) if a client used NRT (20.0%), Bupropion (24.0%) or Varenicline (28.8%) to aid their quitting attempt.

Table 5.3 Quitting activity by pharmacotherapy type

	Use of pharmaco-therapy 2012/13 (n,%)	Number quit at 4 weeks (4 week quit rate) 2012/13	Use of pharmaco-therapy 2011/12 (n,%)	Number quit at 4 weeks (4 week quit rate) 2011/12	Number quit at 52 weeks(52 week quit rate)* 2011/12	Number quit at 52 weeks(52 week quit rate)**2011/12
NRT	24,557 (75.0%)	16,746 (68.2%)	30157 (76.1%)	18962 (62.9%)	6061 (32.0%)	6061 (20.0%)
Champix	1729 (5.3%)	1324 (76.6%)	2238 (5.6%)	1642 (73.4%)	539 (32.8%)	539 (24.0%)
Zyban	36 (0.1%)	25 (69.4%)	59 (0.2%)	40 (67.8%)	17 (42.5%)	17 (28.8%)

*52 week quit rates calculated from only those clients quit at 4 weeks.
**52 week quit rates calculated from all clients who set a quit date with the services.

Smoking behaviour among those who have not quit

In 2012-13, 26.5% of clients had not quit smoking at 4 weeks, a figure slightly lower than last year when 31% of clients reported not quitting smoking.

More females (27.6%) than males (25.3%) did not quit at 4 weeks, however greater numbers of young people (aged under 16, 37.4% and 16-24; 31.6%) had not quit at 4 weeks compared to 24.3-26.5% of all other age groups.

At the 52 week assessment stage, 27.7% of those who had quit at 4 weeks were not able to maintain a quit attempt to 52 weeks (females 28.4%, males 26.8%) with little variation observed by age group.

Cutting down on cigarette smoking

Those clients' who had not quit at 4 weeks (26.5%, n=8,674) were asked about their current smoking habits. In 2012/13, 59.6% (n=5,171) of all those who had not quit smoking at 4 weeks self-reported cutting down on the amount of cigarettes smoked equating to 15.8% of all those who registered with the services.

In 2011/12, 3,906 (68.0% of service users who had not quit at 52 weeks (n=5,745) cut down on cigarette consumption) equivalent to 9.9% of all users who set a quit date with the services.

No differences were noted in the gender or age group of those who reported cutting down at 4 or 52 weeks. However, those clients' who smoked least were more likely to report cutting down smoking at the 4 and 52 week assessment stage (See Table 5.4).

Table 5.4: Proportion of clients cutting down on cigarettes by cigarette consumption

	Less than 10 (%)	10-19(%)	20-29 (%)	30-39(%)	40+(%)
2012/13 4 week assessment (n=5,171)	63.9	59.5	62.0	58.6	56.8
2011/12 52 week assessment (n=3,906)	73.6	69.4	65.9	65.4	67.0

Re-joining the service

In 2012/13, 3,329 (38%) of the 8,674 clients who had not quit at 4 weeks reported they hoped to re-join the Stop Smoking Services to make a renewed quit attempt. The profile of those wanting to re-join the service is shown below in Table 5.5. A higher percentage of males, those aged 35-54, those under 16 and heavier smokers (20+ per day) wished to re-join the service, a possible indication of their continued dedication to quit smoking.

No information is collected on whether an individual who had not quit at 52 weeks wished to re-join the Stop Smoking Services.

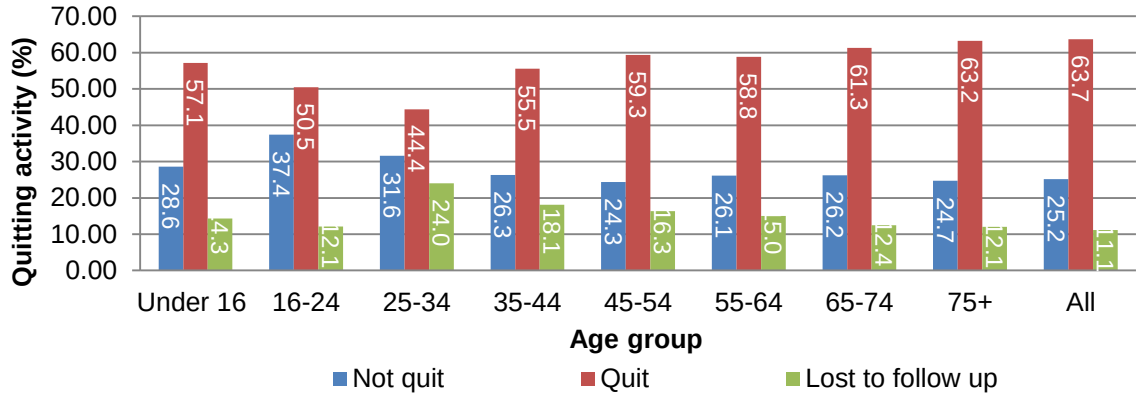
Table 5.5: Profile of service users wanting to re-join the service

	Percentage of non–quitters wishing to re-join the Stop Smoking Services (%)
Gender	
Female	37.6
Male	39.3
Age group	
Under 16	50.7
16-24	31.9
25-34	38.6
35-44	40.1
45-54	41.6
55-64	39.2
65-74	35.7
75+	31.7
Number of cigarettes consumed per weekday	
less than 10	35.7
10-14	36.1
20-29	41.0
30-39	37.2
40 or more	39.6

Client follow-up

In 2012-13, 16.9% of all clients were lost to follow up at 4 weeks with rates similar between the genders (16.5% females, 17.2% males). The number of people lost to follow up at 4 weeks tended to decline with age from the age of 25 onwards (see Figure 5.6).

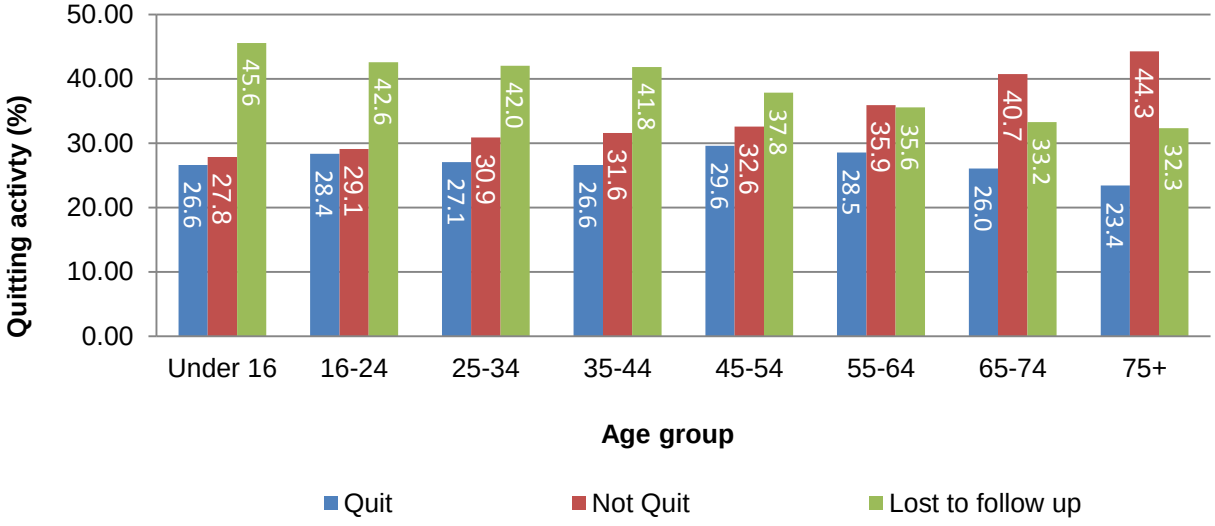
Figure 5.6: Quitting activity at 4 weeks by age group



The Quality Standards document indicates providers should endeavour to follow up those clients who have quit at 4 weeks, at the 52 week assessment stage. Overall 39.9% of clients were lost to follow up at the 52 week stage, 39.2% of females and 40.7% of males.

Figure 5.7 shows a clear age gradient exists with the proportion of clients lost to follow up at 52 weeks declining with age. Of concern, however, those aged 16 or under, through to the 45-54 age group had more clients' lost to follow up than had successfully quit.

Figure 5.7: Quitting activity at 52 weeks by age[xxi]



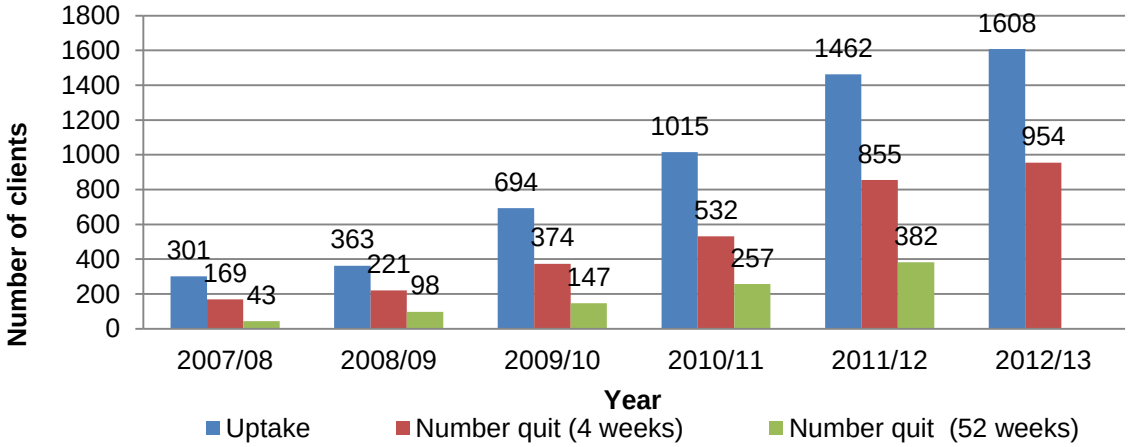
[xxi] Activity at 52 weeks is calculated based on only those quit at 4 weeks.

The priority groups

Pregnant women

In line with the increased uptake of services by pregnant women, the numbers of pregnant women quitting at 4 and 52 weeks has continued to increase. (See Figure 5.8). In 2012/13, there was a11.6% increase in the numbers quit at 4 weeks and in 2011/12 a 48.6% rise in the numbers quit at 52 weeks illustrating effective engagement with this key target audience.

Figure 5.8: Uptake and numbers of pregnant women quitting at 4 and 52 weeks



Alongside the increased uptake of services by pregnant women quit rates have remained consistently high over the period 2007/08-2012/13 (see Table 5.6). In 2012/13, 59% of pregnant women attending Stop Smoking Services reported having quit smoking at their four week follow-up appointment, while 27.5% of pregnant smokers did not quit at 4 weeks and 13.1% were lost to follow up (results not shown).

The 4 week quit rate among pregnant women in Northern Ireland (59%) is much higher than that observed within the Stop Smoking Services in England (47%) and Scotland (33.5%). [32-33]

The quit rate at 52 weeks was 44.7% based on those reviewed at four weeks, equating to 26.1% of overall client registrations, a figure which has increased substantially since 2007/08 (25.4% based on number quit at 4 weeks and 14.3% based on all service uptake).

Table 5.6: Four and 52 week quit rates in pregnant smokers 2007/08-2012/13

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
4 week quit rate	56.2	60.9	53.9	52.4	58.5	59.3
52 week quit rate[xxii]	25.4	44.3	39.3	48.3	44.7	-
52 week quit rate[xxiii]	14.3	27.0	21.2	25.3	26.1	-

[xxii] 52 week quit rate based on only those clients who reported being quit at 4 weeks
[xxiii] 52 week quit rate based on all clients who registered with services

The impact of services on the NI population of pregnant smokers

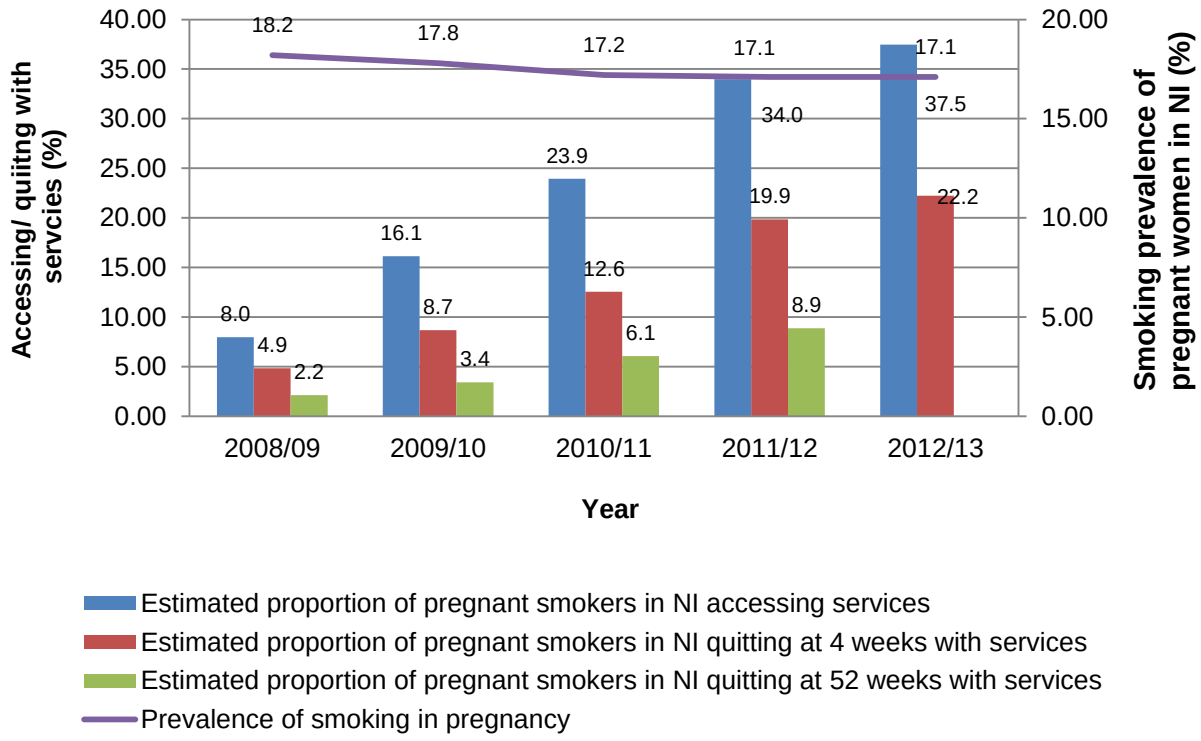
Prevalence of smoking in pregnancy has, remained relatively static over the previous five years (17-18%).[45] However in contrast to the growing number of smokers in the population (observed in Figure 5.3), the absolute number of pregnant smokers has remained relativity unchanged during this period at around 4,300.[45]

Although a portion of these pregnant smokers may be women who have smoked throughout multiple pregnancies many of this population will be generated from the general population of female smokers' and is therefore composed of a continually changing population of women. It is, therefore, unlikely that population changes in smoking in pregnancy will occur until the overall prevalence of smoking in women of child bearing age also declines.

Using the current data systems, it is not feasible to determine whether a pregnant smoker who has engaged with the services during their first pregnancy remains a smoker in subsequent pregnancies. Until such a system is devised it is not possible to directly determine the full impact of the services on smoking in pregnancy.

Despite this, Figure 5.9 shows the proportion of all NI pregnant smokers accessing and quitting smoking using the Stop Smoking Services has grown substantially from 2007/08. In 2012/13 the services aided 22.2% of all pregnant smokers in NI to quit at 4 weeks with the latest 52 weeks results showing the services supported 8.9% of all pregnant smokers in NI to quit at 52 weeks.

Figure 5.9 The impact of Stop smoking services on the NI population of pregnant smokers



Deprivation and pregnancy

Uptake by pregnant women was mainly concentrated within the two most deprived MDM quintiles (55%). However, service data, has shown 4 week quit rates in all but the least deprived Quintile (43.75%) were above that required within the Quality Standards (see Table 5.7). This rate may be lower in the most deprived quintile due to the smaller numbers within this group. A similar pattern was evident in 2011/12 with 52 week quit rates (see Appendix 4, for details).

Table 5.7 Uptake and four week quitting activity among pregnant women during 2011/12 by deprivation quintile

Deprivation quintile	Service Uptake	Quit successful % (n)	Quit unsuccessful % (n)	Lost to follow up % (n)
1 (most deprived)	316(27.5%)	51.90 (164)	31.65(100)	16.46(52)
2	315 (27.4%)	51.11(161)	32.38(102)	16.51(52)
3	229 (19.9%)	53.71(123)	30.57(70)	15.72(36)
4	194(16.9%)	55.67(108)	26.80(52)	17.53(34)
5 (least deprived)	96 (8.3%)	43.75(42)	32.29(31)	23.96(23)
Unknown*	458	356	88	14
TOTAL	1608	59.33	27.5	13.1

*458 pregnant women did not provide a valid postcode and therefore could not be classified within a deprivation quintile.

Smoking behaviour among pregnant women who have not quit

In 2012/13, of the 443 pregnant women who reported not being quit at 4 weeks, 84% of these women (n= 373) reported they had reduced their cigarette intake equating to 23.2% of all pregnant smokers setting a 4 week quit date with the services.

Furthermore, 27% (120) of the women who had not quit at 4 weeks in 2012/13 reported they wished to re-join the Stop Smoking Service to make a fresh quit attempt.

Of those pregnant smokers who set a quit date with the services in 2011/12, 40 of the 259 (15%) who had not quit smoking at 52 weeks had reduced their intake of cigarettes equating to 2.7% of all clients' who initially set a quit date.

Routine and manual smokers

In 2010/11 the Stop Smoking Services began to measure the number of routine and manual workers setting a quit date with the services. Figure 5.10 shows the number of routine and manual smokers registering with the Stop Smoking Services as well as the number quitting at 4 and 52 weeks. A 10.8% reduction in the number of clients' quit at 4 weeks was observed despite the overall 18% reduction in service uptake among this group, indicating the Stop Smoking Services are effectively supporting this key priority group.

Figure 5.10: Uptake and numbers of routine & manual smokers quit at 4 and 52 week 2010/11-2012/13

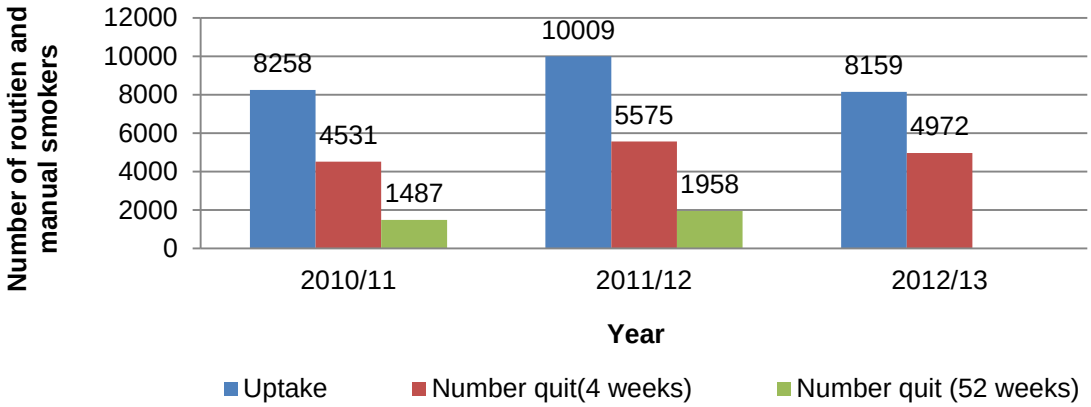


Table 5.9 below highlights the increase in 4 week quit rates among this group, rising from 56% in 2011/12 to 61% in 2012/13 while 52 week quit rates have ranged from 33% in 2010/11 to 35% in 2011/12.

The Stop Smoking Services currently aid over 4% of all routine and manual smokers in NI to quit at 4 weeks and 1.69% of all routine and manual smokers to quit at 52 weeks[xxiv]

Table 5.9 4 and 52 week quit rates for R & M Smokers 2010/11-2012/13.

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	2010/11	2011/12	2012/13
4 week quit rate	55%	56%	61%
52 week quit rate (based on 4 week quitters)	33%	35%	-
52 week quit rate (based on all)	18%	20%	-
Estimated proportion of R & M smokers quitting at 4 weeks	3.91	4.81	4.29
Estimated proportion of R & M smokers quitting at 52 weeks	1.28	1.69	

Smoking behaviour of routine and manual smokers those who had not quit

Of the 1,945 R & M workers who self-reported as 'not quit' in 2012/13, 61% indicated they cut down on smoking (n=1192), equating to 23.8% of all those who set a quit date with the services. 42% of those who had not quit indicated their intention to re-join the services for a further quit attempt.

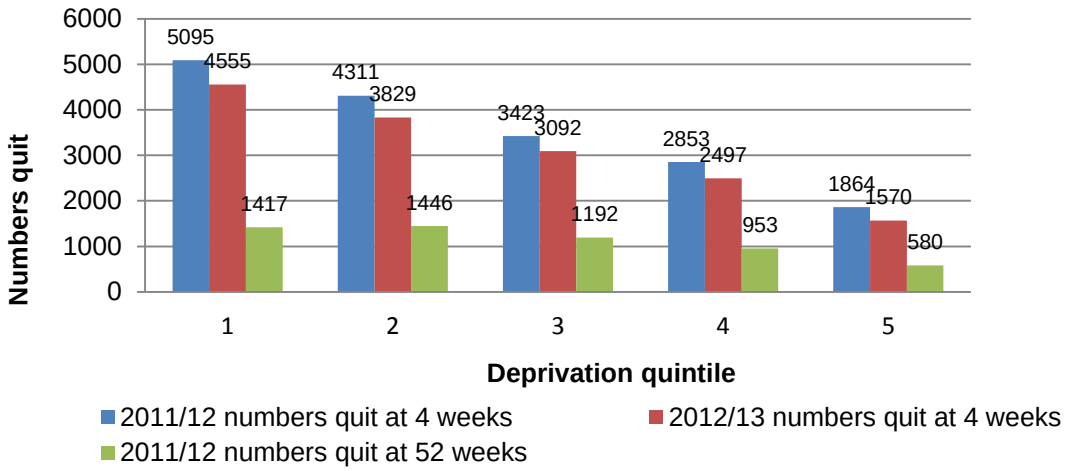
In 2011/12, 499 of the 1,620 people who did not quit at 52 weeks reduced their cigarette consumption (31%) equating to 4.99% of all routine and manual smokers setting a quit date with the services.

[xxiv] Estimated proportion of routine and manual smokers in 2010/11-2012/13 is calculated using the number of routine and manual smokers accessing (or quitting with) the services as the numerator and the estimated number of routine and manual smokers in NI (based on 2011 census data on occupational status and NIHS 2010/11 smoking prevalence) as the denominator. The denominator used in this calculation has not varied over the three years 2010-2013 due to limited prevalence and census data updates within this area.

Deprivation area

The figure below shows the number of clients quit at 4 and 52 weeks by deprivation quintile in 2011/12 and 2012/13. While the greatest numbers of clients that had quit at 4 and 52 weeks were from the most deprived quintile, there has been a decline in numbers quitting within all quintiles. It is however, encouraging that the greatest percentage decrease in numbers quit at 4 weeks occurred within the least deprived quintile (-16%) compared to the 10% decrease in numbers quit observed in the most deprived quintile

Figure 5.11 Numbers quit at 4 and 52 weeks by deprivation quintile 2011/12-2012/13



In spite of Quintile 1 having the greatest numbers of clients quitting, this quintile had the lowest 4 and 52 week quit rates in comparison to the other quintiles (see Table 5.10). Nevertheless the greatest estimated proportion of clients quitting at 4 weeks was in the most deprived quintile (5.87% of all smokers) or in the case of 52 week quit success within the three most deprived quintiles.

Table 5.10 Quit rates and estimated proportion of all smokers (within each quintile) who quit at 4 and 52 weeks

	1	2	3	4	5
4 week quit rate 2012/13	54.15	55.98	57.63	5795	56.82
52 week quit rate (based on 4 week quitters)	27.8	33.5	34.8	33.4	31.1
52 week quit rate (based on all)	13.4	17.5	18.2	18.1	16.9
Estimated proportion of smokers quitting at 4 weeks (2012/13)	5.87	5.09	4.70	4.37	3.43
Estimated proportion of smokers quitting at 4 weeks (2011/12)	5.24	4.52	4.25	3.83	2.89
Estimated proportion of smokers quitting at 52 weeks (2011/12)	1.63	1.71	1.64	1.46	1.07

Children and young people

Table 5.11 shows the quit rates among children and young people (aged 11-16 years old) accessing the Stop Smoking Services have substantially increased in 2012/13 to 44.0% from the 2011/12 figure of 33.7%. Nevertheless the current services only aid around 2% of 11-16 year old (at least weekly) smokers to quit at 4 weeks and <1% of all 11-16 (at least weekly) smokers to quit at 52 weeks.

Table 5.11 Uptake and quitting activity of children and young people (11-16 years old).

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Service uptake	227	320	323	527	557	423
4 week quit rate	26.0	31.0	37.0	32.3	33.7	44.0
52 week quit rate	26.0	33.0	22.0	35.8	28.7	-

VI Geographic variations

Summary

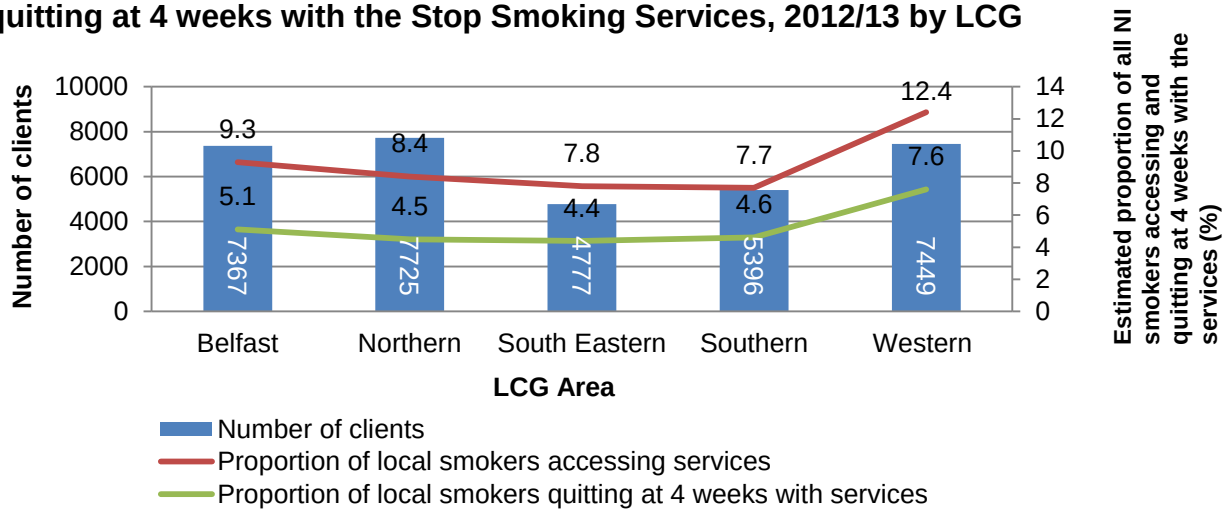
- Belfast, Northern and Western LCG areas each had over 7,000 clients accessing the Stop Smoking Services within their local areas in 2012/13;
- 4 weeks quit rates ranged from 53% in Northern LCG to 61% in Western LCG;
- Overall the services supported an estimated 7.55% of all smokers in Western LCG area and only 4.35% of all smokers in South Eastern LCG area to quit smoking at 4 weeks;
- Quit rates at 52 weeks ranged from 14% in South Eastern LCG to 21% in Western LCG. This resulted in South Eastern LCG supporting an estimated 1.3% of local smokers while Western LCG supported 2.9% of local smokers to quit at 52 weeks.

Overall uptake and four week quit rates by LCG area

The Northern LCG (n=7,725) and Western LCG areas (n=7,449) had the highest client uptake of the LCG areas in 2012/13 while South Eastern LCG had the lowest uptake of clients to Stop Smoking Services in 2012/13 (n=4,777) (see Figure 6.1).

It is estimated that Western LCG engaged with and supported a greater proportion of local smokers (12.3% and 7.6% respectively) than the other LCG areas, while Southern LCG area engaged with the lowest proportion of local smokers (7.7%). [xxv] South Eastern LCG supported the lowest proportion of local smokers to quit at 4 weeks (4.4%) in comparison to the other areas.

Figure 6.1 Overall uptake and proportion of all NI smokers accessing and quitting at 4 weeks with the Stop Smoking Services, 2012/13 by LCG

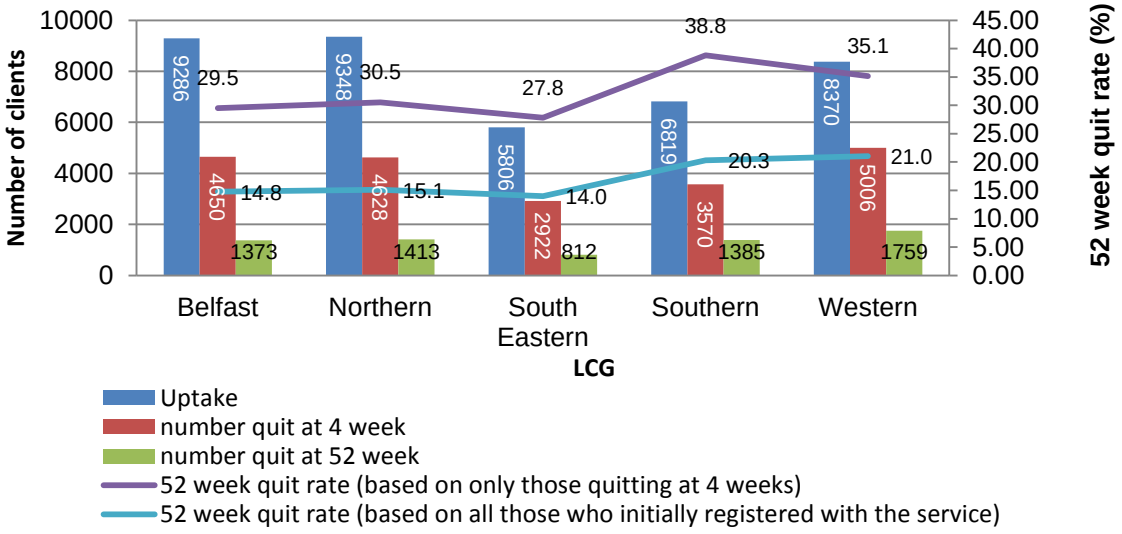


[xxv] Estimated proportion of smokers in each LCG is calculated using the total number of smokers accessing (or quitting with) the services in each LCG as the numerator and the estimated number of total smokers in each LCG NI (based on 2011 census data and NIHS 2011/12 smoking prevalence) as the denominator. 4 week Quit rates: Belfast LCG (54.6%), Northern LCG (53.0%), South Eastern LCG (55.8%), Southern (59.3%), Western LCG (60.9%).

Overall uptake and 52 week quit rates by LCG area

The number of clients quitting at 52 weeks varied considerably by LCG area from 812 in South Eastern LCG to 1759 in Western LCG area. Southern (20.3%) and Western (21.0%) LCG areas had the greatest 52 week quit rates with the remaining three LCG areas (Belfast, Northern and South Eastern) having similar quit rates (14-15%).

Figure 6.2 Uptake, 4 and 52 week quitting activity by LCG.



Western LCG services reached the greatest proportion of local smokers (13.9%) in 2011/12 in comparison to the other LCG areas and also supported the greatest proportion of smokers quitting at 52 weeks (2.9%).[xxvi]

Table 6.2 Estimated proportion of smokers accessing and quitting at 52 weeks with the Stop Smoking Services by LCG area 2011/12

Local commissioning group (LCG) area	Estimated proportion of local smokers accessing service (%)	Estimated proportion of local smokers quitting (at 52 weeks) with service (%)
Belfast	11.8	1.7
Northern	10.1	1.5
South Eastern	9.5	1.3
Southern	9.7	2.0
Western	13.9	2.9
Total	11.8	1.7

[xxvi] Estimated proportion of smokers in each LCG is calculated using the total number of smokers accessing (or quitting with) the services in each LCG as the numerator and the estimated number of total smokers in each LCG NI (based on 2011 census data and NIHS 2011/12 smoking prevalence) as the denominator.

Service uptake and quitting activity of pregnant smokers by LCG

As can be seen from Table 6.3 the uptake, estimated proportion of pregnant smokers accessing services and the four and 52 week quit rates varied considerably per LCG area.

In 2012/13, the Stop Smoking Services engaged with 75% of all pregnant smokers in Western LCG, likewise Northern LCG also delivered services to a high proportion of pregnant smokers (63%). In comparison South Eastern LCG only reached 13% of all pregnant smokers in the local LCG in 2012/13.

All LCG areas with the exception of Southern and South Eastern LCG showed some improvements in the estimated proportion of pregnant smokers the services were reaching over the course of 2011/12-2012/13. However, Southern area showed the greatest improvement in 4 week quit rates during this period.

When 4 week quit rates were examined, Western LCG had the highest quit rates (76%) with Northern LCG the poorest quit rates (47%).

Data for 2011/12 show Western LCG area had the highest 52 week quit rates (44%), followed by Southern LCG area (28%). Belfast and South Eastern LCG had the lowest 52 week quit rates (11% and 14% respectively).

Table 6.3: Uptake, estimated access and quitting activity of pregnant smokers using the Stop Smoking Services by LCG

		NI	Belfast	Northern	South Eastern	Southern	Western
2012-13	Service uptake (n)	1608	207	623	97	181	500
	Estimated access (%)[xxvii]	37.5	18.7	63.0	12.8	24.2	75.0
	Number quit at 4 weeks (n)	954	102	292	53	126	381
	4 week quit rate (%)	59.3	49.3	46.9	54.6	69.9	76.2
2011-12	Service uptake (n)	1462	160	551	100	193	458
	Estimated access (%) [xxxi]	34.0	15.0	56.1	13.1	23.5	68.7
	Number quit at 4 weeks (n)	855	69	248	56	115	367
	4 week quit rate (%)	58.5	43.1	45.0	56.0	60.0	84.5
	Number quit at 52 weeks (n)	382	17	97	14	53	201
	52 week rate (%)[xxviii]	26.1	10.6	17.6	14.0	27.5	43.9

[xxvii] Estimated access refers to the estimated proportion of pregnant smokers accessing services and is calculated using service uptake as the numerator and number of pregnant smokers in Northern Ireland taken from Northern Ireland Maternity Service data as denominator.
[xxviii] 52 week quit rate is based on all those who set a quit date.

Service uptake and quitting activity of routine and manual smokers by LCG

Table 6.4 shows the uptake and estimated proportion of routine and manual smokers who have accessed the services as well as the quitting activity of this group at 4 and 52 weeks. Western and Belfast LCG reached the greatest estimated proportion of routine and manual smokers (10.1% and 7.7% respectively), while South Eastern LCG reached only an estimated 5.33% of routine and manual smokers.

Although all LCG areas had a decline in service uptake numbers between 2011/12 and 2012/13, the 4 week quit rates in 2012/13 were higher in all the LCG areas in comparison to 2011/12. Although 4 week quit rates varied between a low of 56.4% in Northern LCG and a high of 66.2% in Western LCG, all LCG areas had quit rates above that required in the Quality Standards.

Only Southern and Western LCG had 52 week quit rates above the 20% recommended within the Quality standards (22% and 23% respectively) while 52 week quit rates in the other LCG areas ranged from 16.0% in Northern and South Eastern LCG areas to 18% in Belfast LCG area.

Table 6.4: Uptake, estimated access and quitting activity of routine and manual smokers using the Stop Smoking Services by LCG

		NI	Belfast	Northern	South Eastern	Southern	Western
2012/13	Service uptake (n)	8159	1687	1869	1035	1551	2017
	Estimated access (%)[xxix]	7.0	7.7	6.2	5.3	6.4	10.1
	Number quit at 4 weeks (n)	4972	992	1055	615	974	1336
	4 week quit rate (%)	60.9	58.8	56.4	59.4	62.8	66.2
2011-12	Service uptake (n)	10009	2091	2424	1257	1968	2269
	Estimated access (%) [xxxi]	8.6	9.5	8.0	6.50	8.23	11.4
	Number quit at 4 weeks (n)	5575	1107	1271	648	1107	1442
	4 week quit rate (%)	55.7	52.9	52.4	51.6	56.3	63.5
	Number quit at 52 weeks (n)	1958	376	387	202	439	554
	52 week rate (%)[xxx]	19.6	18.0	16.0	16.1	22.3	24.4

[xxix] Estimated access refers to the estimated proportion of routine and manual smokers accessing services and is calculated using service uptake as the numerator and number of routine and manual smokers in Northern Ireland taken from 2011 census data and Northern Ireland Health Survey 2010/11 routine and manual smokers prevalence data.
[xxx] 52 week quit rate is based on all those who set a quit date.

Service uptake and quitting activity of 11-16 year olds by LCG

Table 6.6 shows the uptake, estimated access to services and quitting activity of 11-16 year old smokers within the services in 2011/12 and 2012/13. In 2012/13 only 4.4% of 11-16 year olds who smoke (at least once a week) accessed the services, compared to 5.7% in 2011/12 with the wide variations in access evident in 2011-12 still apparent in 2012-13.

In 2012/13, Northern LCG only reached 2.8% of all the estimated local 11-16 years weekly smokers compared to Western LCG who engaged with 9.6% of young weekly smokers. South Eastern LCG not only had the second highest service reach but also had the highest 4 week quit rate (52.6%) of all LCG areas.

The 4 week quit rate in 2012/13 was substantially higher than that observed in 2011/12 (44% in 2012/13, 34% in 2011/12) in all areas with the exception of Western LCG. However, Western LCG area had the greatest success in supporting 11-16 year olds to quit at 52 weeks with a 19% success rate in comparison with the other LCG areas which varied from 3-8%

Table 6.6: Uptake, estimated access and quitting activity of 11-16 year olds smokers using the Stop Smoking Services by LCG

		NI	Belfast	Northern	South Eastern	Southern	Western
2012-2013	Service uptake (n)	423	93	74	78	53	125
	Estimated access (%)[xxxi]	4.4	4.1	2.8	4.6	3.2	9.6
	Number quit at 4 weeks (n)	186	47	23	41	21	51
	4 week quit rate (%)	44.0	50.5	31.1	52.6	39.6	40.8
2011-2012	Service uptake (n)	557	88	115	111	73	170
	Estimated access (%) [xxxi]	5.7	3.8	4.2	6.3	4.4	12.5
	Number quit at 4 weeks (n)	188	26	31	30	21	80
	4 week quit rate (%)	33.8	29.5	27.0	27.0	28.8	47.1
	Number quit at 52 weeks (n)	54	4	9	3	6	32
	52 week rate (%)[xxxii]	9.7	4.5	7.8	2.7	8.2	18.8

[xxxi] Estimated access refers to the estimated proportion of 11-16 year old smokers accessing services is calculated using service uptake as the numerator and number of 11-16 year old weekly smokers (based on smoking prevalence from YPBAS 2010 and 2012 midyear population estimates) as the denominator.
[xxxii] 52 week quit rate is based on all those who set a quit date.

VII Service level variation by provider type

Summary

- 72% of all clients used pharmacy services to support their quit attempt in 2012/13;
- Hospital providers were the only services to show a rise in service uptake in 2012/13 (12%);
- 76% of all providers had an average 4 quit rate of 45% or above, however 46% of GP providers, 18% of pharmacy and community services and 10% of hospital providers had 4 week quit rates of under 45%;
- 30 % of all providers had an average quit rate of above 20% at 52 weeks. However, 70% of GP providers, 76% of pharmacy, 31% of hospital providers and 4% of community services had a quit rate of under 20% at 52 weeks;
- The introduction of a quality improvement programme for pharmacy has resulted in a 5 percentage point increase in the 4 week quit rates of pharmacy services and a 50% reduction in the number of pharmacy providers having a quit rate of under 35% (35% is review rate for services).

Uptake by provider

In 2012/13, pharmacies delivered Stop Smoking Services to 72% of all clients, GP's and hospitals delivered the service to 12% and 11% respectively of all clients, while community providers delivered services to 6% of all clients.

Specifically looking at intake between 2011/12 and 2012/13 (see Table 7.1) the numbers accessing GP services decreased by 30.8%, pharmacies uptake decreased by 18.9%, and community services decreased by 4.5%, however, in contrast hospital services increased by 12% this year.

Table 7.1: Total uptake by service providers 2011/12- 2012/13

Provider type	Uptake 2012/13 (n,%)	Uptake 2011/12 (n,%)	Change in uptake (%)
Pharmacy	23,490 (72%)	28977 (73%)	-18.9
GP	3,862 (12%)	5582 (14%)	-30.8
Hospital sites	3,514 (11%)	3136 (8%)	12.0
Community^	1,848 (6%)	1934 (5%)	-4.5
TOTAL	**32,714**	**39,629**	**-17.0**

^ includes schools and workplaces

Yearly tracking

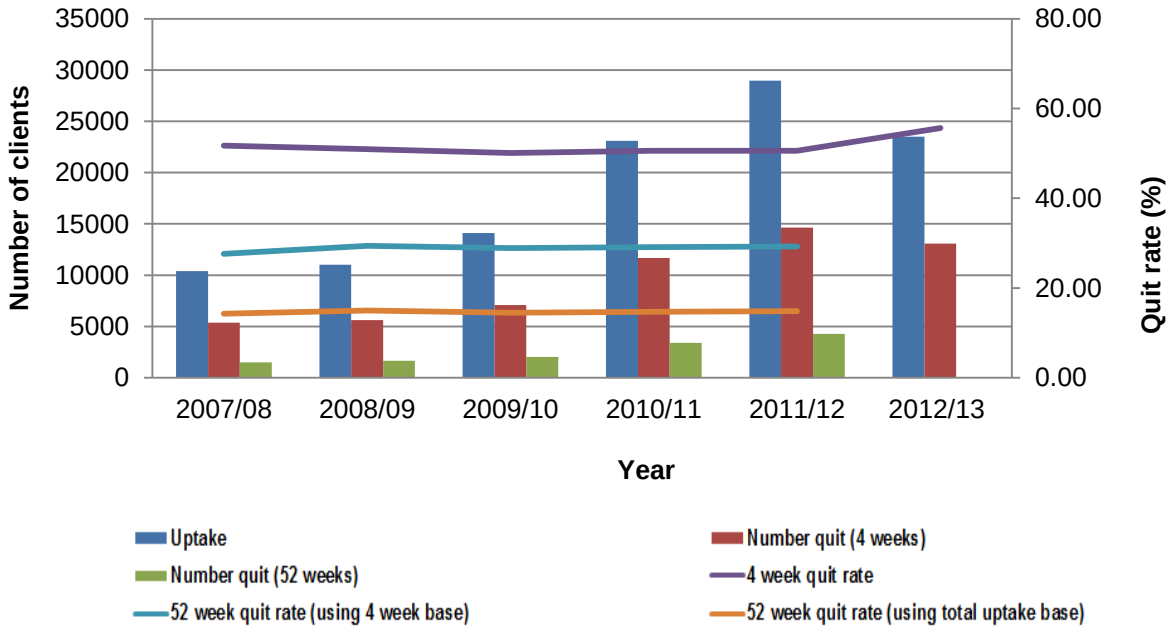
Figure 7.1-7.4 below shows the trend for service uptake, number of clients' quit at 4 and 52 weeks, and 4 and 52 week quit rates over the last six years by service provider. Four and 52 week quit rates of providers will be examined in more detail within the next section.

Pharmacy services

Increasing client numbers have accessed and quit smoking (at 4 and 52 weeks) with pharmacy services during the period 2007/08 -2011/12 followed by a drop in service use and accompanying decline in number of smokers quitting in 2012/13.

Although 4 and 52 week quit rates have on average been maintained over the years 2006/07 - 2011/12 indicating services are maintaining effectiveness in light of increasing service pressures, the quit rate in 2012/13 rose to 56%, a fact which may be partly due to the introduction of a quality improvement process. This process will be discussed further within the next section of the report.

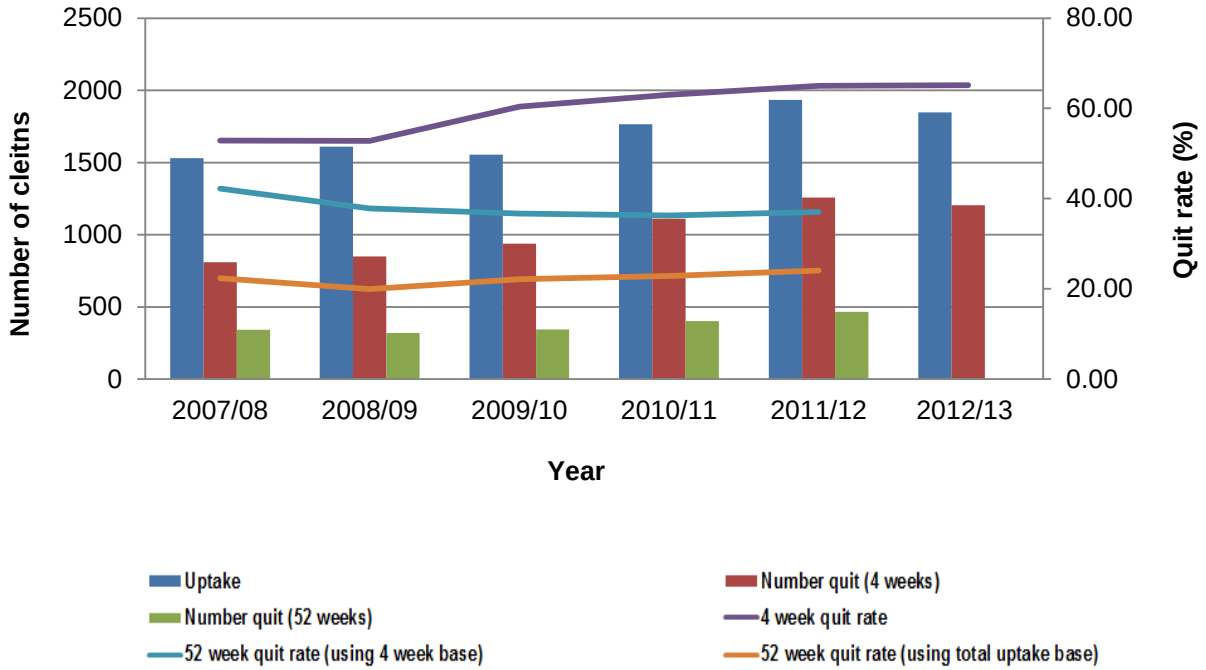
Figure 7.1 Stop Smoking Service uptake and quitting activity within pharmacy services 2007/08-2012/13



Community services

Smaller rises in the number of clients presenting over the years, 07/08 to 11/12, were observed within the community services with only a small (4.5%) drop in service numbers being noted between 2011/12 and 2012/13. From 2009/10 onwards increasing quit rates at 4 weeks within the community sector have led to substantive increases in the numbers of clients who have successfully quit at 4 and 52 weeks.

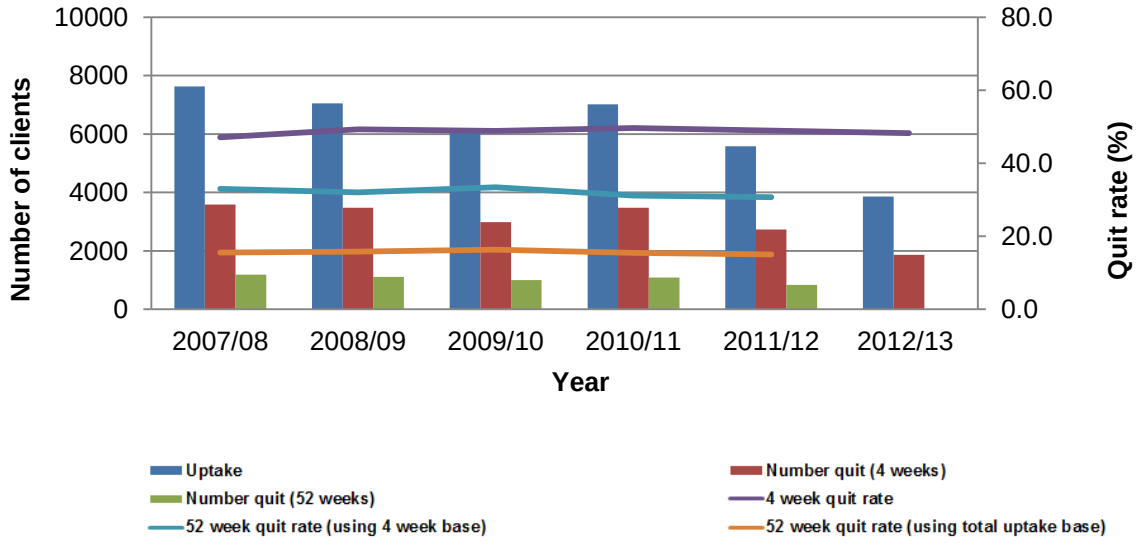
Figure 7.2 Stop Smoking Service uptake and quitting activity within community services 2007/08-2012/13



GP services

In contrast, Figure 7.3 shows uptake and numbers quitting within GP services have shown a steady decline over the last six years with 2012/13 service uptake at nearly half that observed in 07/08. While 4 and 52 week quit rates have been maintained during this time at above the requirements of the Quality standards, the absolute numbers quitting have declined in line with uptake figures.

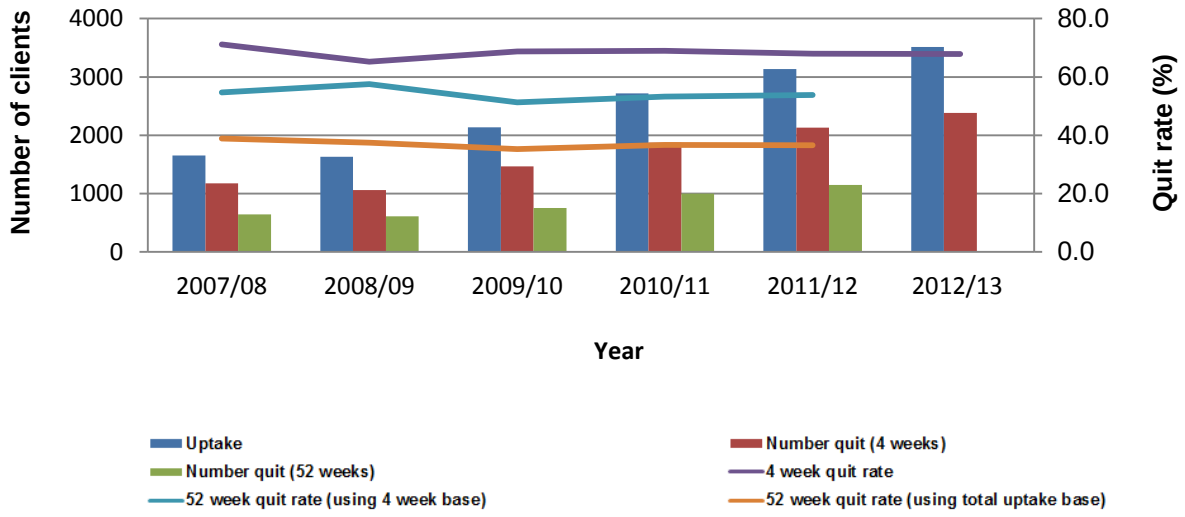
Figure 7.3 Stop Smoking Service uptake and quitting activity within GP services 2007/08-2012/13



Hospital services

Hospitals services in contrast to all other services are the only provider in which service use has grown continuously over the last 6 years with a 12% growth observed this year alone (see Figure 7.4). Despite this heightened service pressure, the effectiveness of these services have been maintained with stable four and 52 week quit rates during this period.

Figure 7.4 Stop Smoking Service uptake and quitting within hospital services 2007/08-2012/13.



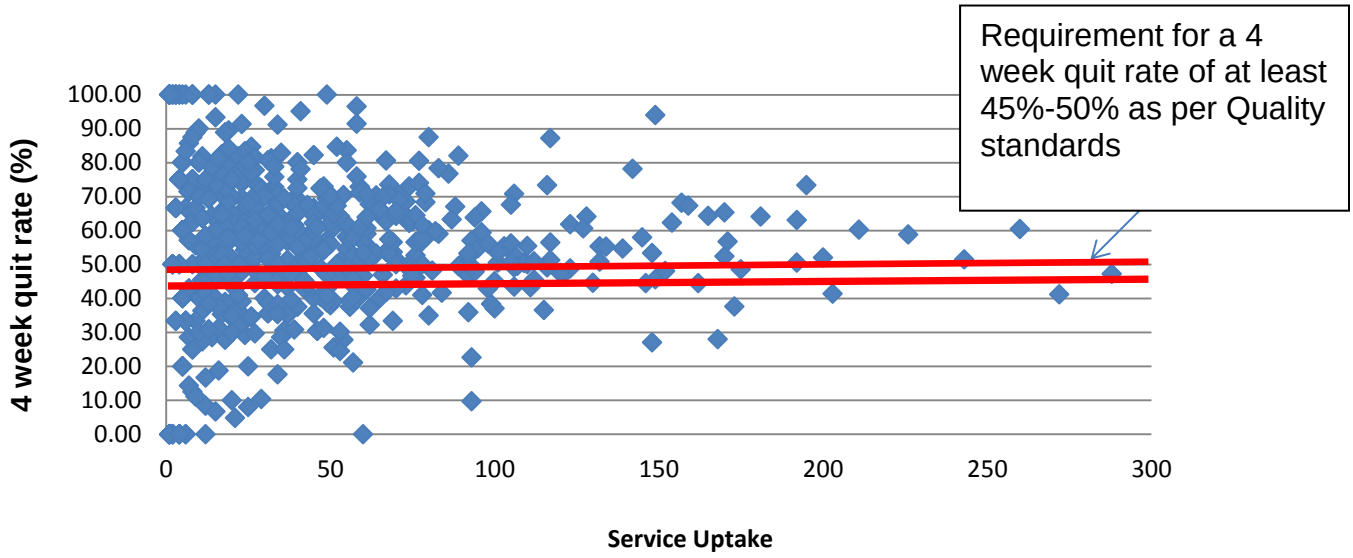
Quit rates by provider type

The Quality Standards document states that service providers should maintain a four week quit rate of at least 45-50%. While the average 4 week quit rate was 56.6%, Figure 7.5 shows a diverse range of 4 week quit rates was evident ranging from 0-100%.

A large cluster of providers (76%) had a 4 week quit rate of 45% or above, however, 24% of providers had quit rates below the required level, 12% of these providers had quit rates of between 35-45% while a further 13% had quit rates of less than 35%.

Uptake was also highly variable between providers with some providers not registering any clients with the Stop Smoking Services while others registered nearly 300 clients with the service.

Figure 7.5: Scatter plot showing service uptake against 4 week quit rate.



Examining four quit rates per quality standard recommendations

As shown in Table 7.2, each provider type maintained an average quit rate at four weeks of above 45%, however, quit rates varied considerably per provider. On average GP practices had the lowest 4 week quit rates (48%) while hospitals and community services had the highest 4 week quit rate (66% and 65% respectively).

The Quality Standards document states that all providers should have a 4 week quit rate of 45-50% and those with a quit rate of under 35% will be subject to review.

As shown in Table 7.2, GP's (46%) were more likely to have quit rates under 45% in comparison to pharmacies (19%) and community services (19%),while hospitals had the smallest proportion of services with a quit rate under 45% (10%).

Table 7.2: Average four week quit rates and percentage of providers with 4 week quit rates below and above the quality standards recommendations by provider type, 2012/13

Provider type	Average 4 week quit rate of provider % (n)*	4 week quit rate of 35% or under %(n)*	4 week quit rate of 35.1% - <45.0% %(n)*	4 week quit rate of 45.0% and over %(n)*
Pharmacy	55.6(445)	7.9 (35)	11.2(50)	80.9 (360)
GP	48.2 (133)	30.8 (41)	15.0 (20)	54.1 (72)
Hospital sites	65.7 (10)	10 (1)	0 (0)	90 (9)
Community^	65.2 (57)	10.5 (6)	8.8 (5)	80.7 (46)
TOTAL	**56.6 (645)**	**13 (83)**	**12 (75)**	**76 (487)**

*n=number of providers,
^ includes schools, healthy living centres etc.

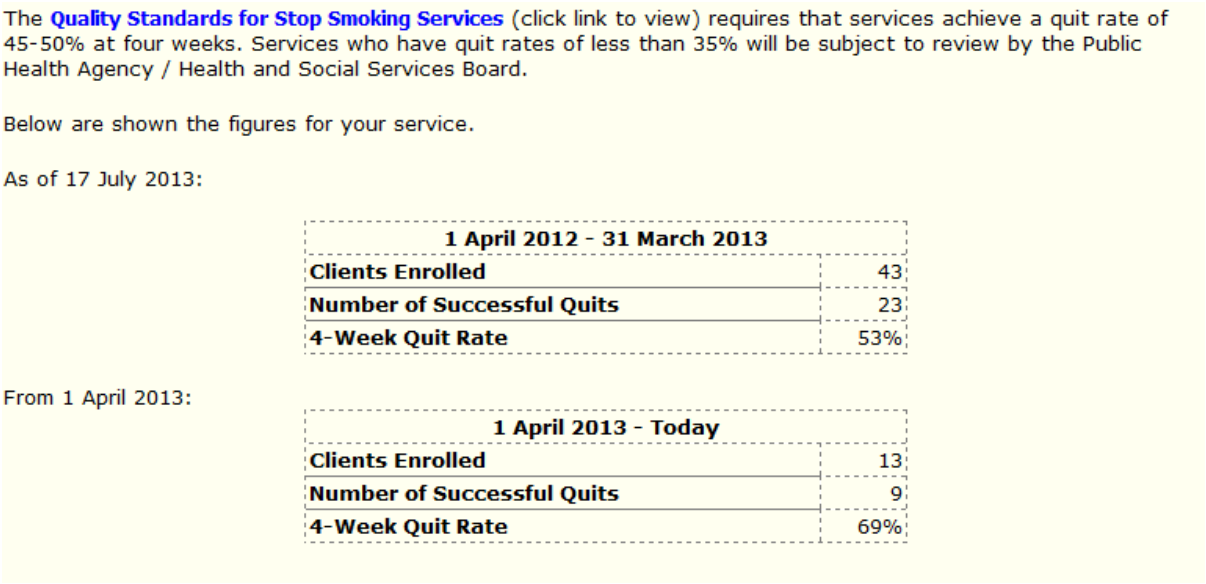
4 week quit rates (above and below the quality standards requirements) are illustrated for each LCG area in maps 5.1-5.5 in Appendix 5.

Quality improvement programme

In 2012/13, a new on-going quality improvement programme was launched for the Stop Smoking Services. As part of this programme a self–monitoring tool was developed and displayed on the web based monitoring system utilised by all service providers. This tool (see Figure 7.6) allows all providers to self-monitor the number of clients registered with their service, the number of clients quit at 4 weeks and the 4 week quit rate of their service in the current and previous year.

Each provider was also provided with online access to the Quality Standards and guidance to help improve the quit rate and overall performance of their service.

Figure 7.6 Online view of service providers self–monitoring tool



The **Quality Standards for Stop Smoking Services** (click link to view) requires that services achieve a quit rate of 45-50% at four weeks. Services who have quit rates of less than 35% will be subject to review by the Public Health Agency / Health and Social Services Board.

Below are shown the figures for your service.

As of 17 July 2013:

1 April 2012 - 31 March 2013	
Clients Enrolled	43
Number of Successful Quits	23
4-Week Quit Rate	53%

From 1 April 2013:

1 April 2013 - Today	
Clients Enrolled	13
Number of Successful Quits	9
4-Week Quit Rate	69%

In addition to the development of a self–monitoring tool a quality improvement support mechanism was developed and piloted with pharmacies as the main service providers of the Stop Smoking Services. This support service was specifically targeted at pharmacies with quit rates of under 35%

This support mechanism involved a number of stages:

- Written notification to all pharmacy providers (prior to implementation of support system) detailing:
  - Explanation of new quality improvement support service;
  - Timelines for commencement of support service;
  - Necessity to ensure all client information is up to date on web based system.

- Written notification to all providers with four week quit rates of 'under 35%' to indicate automatic involvement in support service and
    - Access to an online exercise to self-monitor overall service provision against Quality Standards;
    - Provision of service update training[xxxiii];
    - Mid-year quit rate review;
    - On-going support letters;
    - Opportunity to discuss service delivery with the PHA/HSCB.

The impact of self–monitoring and quality improvement

As can be seen in Table 7.3 the average 4 week quit rates of pharmacy providers increased from 49.9 % reported in 2011/12 to 55.6% 2012/13. This increase in quit rates accounted for the majority of increase in the overall services quit rates. In contrast other provider types did not show this incremental increase. Not only did the average quit rates of pharmacy services increase but the number of services demonstrating quit rates of under 35% halved during the year from 17.0% in 2011/12 to 7.9% in 2012/13.

In contrast to the changes observed in pharmacy, no other providers had any notable changes in average 4 week quit rates or in the number of providers having quit rates of less than 35%.

Table 7.3 Average 4 week quit rates in 2011/12-2012/13 and percentage of providers with quit rates under 35 by provider type 2011/12-2012/13

Provider type	2011/12 Average 4 week quit rate of provider % (n)*	2012/13 Average 4 week quit rate of provider % (n)*	2011/12 Achieving 4 week quit rate of 35% or under %(n)*	2012/13 Achieving 4 week quit rate of 35% or under %(n)*
Pharmacy	49.9% (418)	55.6 (445)	17.0% (71)	7.9% (35)
GP	48.4% (132)	48.2 (133)	28.8% (38)	30.8% (41)
Hospital sites	67.5% (13)	65.7 (10)	15.4% (2)	10% (1)
Community^	65.4% (44)	65.2 (57)	15.9% (7)	10.5% (6)
TOTAL	**51.8% (607)**	**56.6 (645)**	**19.4% (118)**	**12.9%(83)**

*n=number of providers,
^ includes schools and workplaces.

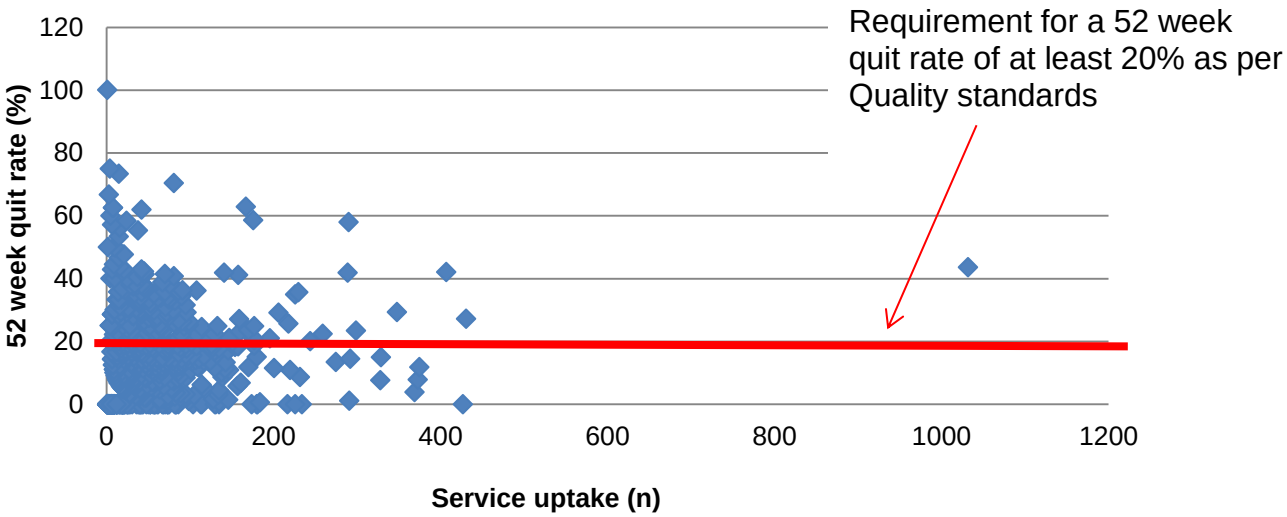
[xxxiii] Providers are required to undertake update training every three years following completion of Specialist training which is required at initial registration of service.

Examining 52 week quit rates per quality standard recommendations

The Quality Standards document states that service providers should maintain a 52 week quit rate of around 20%. While the average 52 week quit rate was 17.0%, Figure 7.7 shows a diverse range of quit rates was evident.

A large cluster of providers (70%) had a quit rate of 20% or below, while only 30% of providers had 52 week quit rates above the required level.

Figure 7.7 Scatter plot showing Service uptake against 52 week quit rate.



As shown in Table 7.4, only hospital and community services attained an average quit rate at 52 weeks of above 20%, however, quit rates varied considerably per provider. On average GP practices and pharmacies had the lowest 52 week quit rates (15% for both) while hospitals and community services had the highest quit rate (26% and 24% respectively).

Of concern 76% of the GP practices delivering Stop Smoking Services had quit rates of under the required 20% as had 70% of all pharmacies delivering services.

Table 7.4: Average 52 week quit rates and proportion of providers with 52 week quit rates below and above the quality standards recommendations by provider type, 2012/13.

Provider type	Average 52 week quit rate of provider % (n)*	Achieving 52 week quit rate of under 20%(n)*	Achieving 52 week quit rate of 20% or above (n)*
Pharmacy	14.8% (423)	70% (297)	30% (126)
GP	15.0% (131)	76% (99)	24% (32)
Hospital sites	26.3% (13)	31% (4)	69% (9)
Community^	24.1% (48)	60.4% (29)	39.6% (19)
TOTAL	**17.0% (615)**	**70% (429)**	**30% (186)**

*n=number of providers,
^ includes schools, healthy living centres etc.

VIII Discussion and recommendations

The impact of services on smoking

In 2012/13, 32,714 smokers engaged with the Stop Smoking Services representing an estimated 9% of all smokers in Northern Ireland, a figure which exceeded the 5% uptake recommendation set within NICE guidance and the Ten Year Tobacco Control Strategy.[7,14]

Research has shown that the chance of permanent cessation is strengthened the longer a quit attempt is sustained with an individual being five times more likely to succeed if they remain quit 4 weeks after initiating quitting.[54] In 2012/13 the services helped 18,516 smokers quit at 4 weeks corresponding to approximately 5% of all adult smokers in NI. This equated to a four week quit rate of 56.6% of all smokers enrolled in the service and was the highest 4 week quit rate observed within the services since 2002/03.

In addition to four week quitting activity, NI Stop Smoking Services are the only national cessation service within the UK to regularly monitor quitting activity of clients up to the 52 week period. From those clients who registered with the services in 2011/12, 6,742 had quit at 52 weeks, representing 17% of all clients enrolled within the services and 1.9% of all smokers in Northern Ireland.

While evidence has suggested that there is a 30% relapse in quitting after 12 months, given the fact that 1.9% of all NI smokers quit at 52 week via the local services this should result in a reduction in smoking prevalence in the long term.[55,56] However, these positive findings are negated by the influx of young people who take up the smoking habit each year coupled with the natural population growth in recent years, facts which have ultimately resulted in an increasing number of adult smokers.

To counteract this growth in smoker numbers, further investment is required within both smoking prevention programmes and treatment services. This would not only, dissipate the continuing number of young smokers adopting the smoking habit but also preserve and enhance the treatment service infrastructure.

Declines in uptake

Over the course of the year, service uptake declined by 17%, a pattern also observed in the Stop Smoking Services in England (11% decline) but not evident in the services in Scotland which has seen a 3% rise in service uptake since 2011/12.[32,33]

The major decline in NI service uptake occurred within the GP (31% decrease) and pharmacy (19% decrease) sectors. In line with this decreased uptake, a lower percentage of clients reported hearing about the services from these two groups of health professionals in 2012/13 in comparison to 2011/12. This may potentially suggest some health professionals are not promoting the Stop Smoking Services to the same extent as had been previously undertaken, a factor which may need further explored.

Nevertheless, service data has also suggested it is not simply an overall decline in service numbers but a change in the type of user engaging with services. An emerging pattern reveals declining numbers of first time service users and increasing numbers of return users are now engaging with the Stop Smoking Services. This potential pattern may be set to continue with 38% of those who had not quit at 4 weeks in 2012/13 stating their intention to re-join the services.

The declining proportion of new smokers registering with the Stop Smoking Services may be indicative of a declining pool of new smokers wishing to engage in services. Although it is unclear the reasons for this, it may speculated that the limited airtime given to a government tobacco control public information campaign in 2012/13 may have somewhat contributed to this down turn in service uptake.

Another possibility for the decline in service use is that smokers are using alternative means to aid their quit attempts. While it is well accepted a large amount of smokers quit unsupported, other novel mechanisms including the use of new self-help resources such as the 'Quit kit' may be being utilised. [57,58]

While the 'Quit kit' self-help resource forms part of the wider tobacco control strategy of the PHA, it is feasible that people are utilising this novel resource as an initial stage in the quitting process instead of directly going to services. Indeed since the launch of this self-help resource in 2011, over 30,000 'Quit kits' have been issued allowing the PHA to engage with many additional smokers above and beyond that already seen within the services.[58]

While the value of this self-help resource is evident given an impact evaluation showed the 'Quit kit' aided 26.5% of users to stop smoking at the 4 week stage, a decline in the uptake of the kit during 12/13 (compared to 2011/12) suggests smokers may be being driven to other quitting sources.[58,59] Although figures are not yet available in NI, studies from elsewhere have suggested that the use of electronic cigarettes (although not yet regulated) may be increasing among smokers.[60] Further investigation of this phenomenon is therefore required in NI, however, even in the absence of such evidence, public health guidance on the appropriateness and the efficacy of e-cigarettes in the quitting process needs to be produced with some urgency given the growing commercial market for e-cigarettes.

Maximising engagement capacity of providers

Until 2011/12 the Stop Smoking Services showed a continuing pattern of growth, however, within the 2012/13 year a decline in growth was noted alongside an increase in four week quit rates. This may provide some evidence to suggest that in the current format services are close to full capacity and a balance needs to be achieved between service uptake and service effectiveness.

There are, however, some key avenues to be explored to maximise capacity of current services. Although the majority of pharmacies (83%) in NI are currently registered to deliver the Stop Smoking Services, the location of the remaining pharmacies not delivering services should be investigated and possibly targeted to deliver services if in an area of need.

In contrast only 38% of GP practices delivered the PHA Stop Smoking Services in Northern Ireland with service uptake declining steadily over the previous six years. The lack of GP practices engaged in the services warrants further investigation, examining why such disengagement exists with the Stop Smoking Services.

Through the Quality Outcomes Framework in Northern Ireland GPs are asked to record '*the percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 27 months'*. [61] There is therefore merit in determining the extent to which GP's have been providing this support as part of routine practice outside of the Stop Smoking Services.

Further opportunities for the expansion of the community services should also be explored at a local level within an array of community organisations or workplaces. Although the community sector currently enrols only around 6% of all clients within the services, the value of this sector providing cessation services should not be overlooked given the high 4 week quit rates achieved to date (65.2%).

In 2012/13, hospital services were the only provider type to show a growth in uptake. Although there is not definitive data on the type of client that accessed stop smoking services via the hospital (with the exception of 27% of clients were pregnant smokers) an assumption may be made that the majority of clients entering services within the hospital setting are patients temporarily in need of bespoke health care. These may relate to pre–operative patients or those with long term conditions which may potentially be related to smoking, therefore, the health impacts of service growth in this area cannot be underestimated.

Future work within hospitals should focus on expanding these key services, ensuring mechanisms are in place to integrate smoking cessation within care pathways. A small number of care pathways should be adopted each year to build up service provision in areas of key need such as cancer, cardiovascular or respiratory care etc. In addition monitoring processes should be in-built into the care pathways. This would aid in ensuring quitting support is not only being offered but to allow the proportion of smokers which are taking up the offers of support to be determined.

To fully integrate smoking cessation within care pathways it is vitally important to ensure all staff possess adequate skills and training to engage with patients on what may be a sensitive subject. It is suggested that Brief Intervention Training and a key awareness of the location and type of service best suited to the individual smokers needs would be necessary at a minimum while motivational interviewing training would also be a key additional skill to engage smokers.

Maximising growth in key areas of need

Service growth at the individual client level needs to be focused on the key priority groups and key performance indicators should be set at a local level to focus local commissioner's priorities towards these key groups.

While success is being achieved in reaching nearly 4 in ten pregnant smokers, given the potential captive audience of this group during the ante-natal period further work should focus on ensuring all staff' in contact with pregnant smokers are trained in,

and confident in, delivering brief intervention advice. In addition mechanisms should be put in place to ensure that all smokers are offered help and support to quit at all opportunities during the pregnancy.

This report has illustrated engagement with the other priority groups is less successful than with pregnant women and further innovative ways to engage routine and manual workers, those living in deprived areas and young people need to be sought. Learning can be gathered from the successes of, for example the Western LCG area that has been shown to be the most successful area in engaging smokers overall and within the key priority groups. Moreover, it would be of benefit to explore the barriers and drivers to service use in the priority groups exploring how services could adapt and be tailored to better suit the smokers needs.

Reaching those who are not engaging

Analysis of engagement has determined that there is high variability in the estimated proportion of the different age groups accessing the services with the oldest and youngest age groups least likely to engage with services. A similar pattern of lack of engagement, of the 16-24 year olds and those over 45 years of age, was found within the 'Quit kit' evaluation. This may suggest these two age groups have either limited motivation to quit or are attempting to quit unaided.

Previous research conducted by the PHA has shown those aged 16-24 have little interest in quitting smoking at this stage of life, thereby this is the most likely the reason for poor uptake among this group.[62] Although anti-tobacco messages have little impact on quitting intention in this young age group, it is important to ensure any anti-tobacco advertising does not inadvertently isolate this group. It is vital that services try to at least maintain current engagement with this age group, exploring the profile and strategies of providers who have had successes in reaching this group to inform best practice. This strategy coupled with a public health focus on prevention of smoking initiation will be a key element in reducing prevalence in the longer term.

However, service data has also highlighted the proportion of smokers attempting to quit with the services decline over the age of 45 and therefore there is warrant in promoting the value of stopping smoking at any stage of life.

In addition, the services have shown to be effective in engaging the greatest proportion of the heaviest smokers (30+ a day) in NI, although 4 week quit rates were lowest in this group an occurrence most likely related to the strength of a client's addiction. Research has shown that the risk of for example cardiovascular disease is high even among light or intermittent smokers, therefore, future efforts need to be made to ensure smokers are aware that the Stop Smoking Services are available to support all those who want to quit smoking, regardless of the amount smoked.[63]

Improving the effectiveness of services

2012/13 has seen the highest 4 week quit rates within the Stop Smoking Services for ten years a figure which may ultimately impact on increased 52 week quit rates in the forthcoming 13/14 year. This increase in quit rates has been generated solely through pharmacy services which not only account for the greatest proportion of

services and clients but is the sector which has been the focus of a new quality improvement process introduced in 2012/13. It is therefore necessary to build upon the success of this process by further supporting services to improve 52 week quit rates given that 297 of the 423 pharmacy services in 2011/12 had 52 week quit rates under the required 20%.

Given the success of the pharmacy scheme, consideration should be given to expanding the initial quality improvement process to the other provider types beyond pharmacy.

Another service area requiring attention is the process and motivation to follow up clients. While the majority of these clients had a follow up attempt made at the 4 and 52 week stage, service providers were not able to make direct contact with 17% of clients at the 4 week stage and 40% of clients at the 52 week stage. Further work needs to be carried out to reduce the numbers of clients who are non-contactable at these key follow up appointments especially given the fact that between 4 and 52 weeks many age groups had more non-contactable follow ups than quitters.

Akin to the findings from service engagement, local data analysis has shown differences in service effectiveness throughout the LCG's. Key learning should be taken from local areas that display the highest quit rates within priority groups exploring the reasons for this success and how this could be reproduced elsewhere.

Conclusion

The Stop Smoking Services have reached a large proportion of NI smokers but services alone cannot impact on smoking prevalence and need to be part of a comprehensive tobacco control programme, alongside prevention and legislative measures. If services are to grow and prosper in a targeted effective manner further investment needs to be made in the service infrastructure alongside a support programme for services to effectively engage and aid smokers quit smoking.

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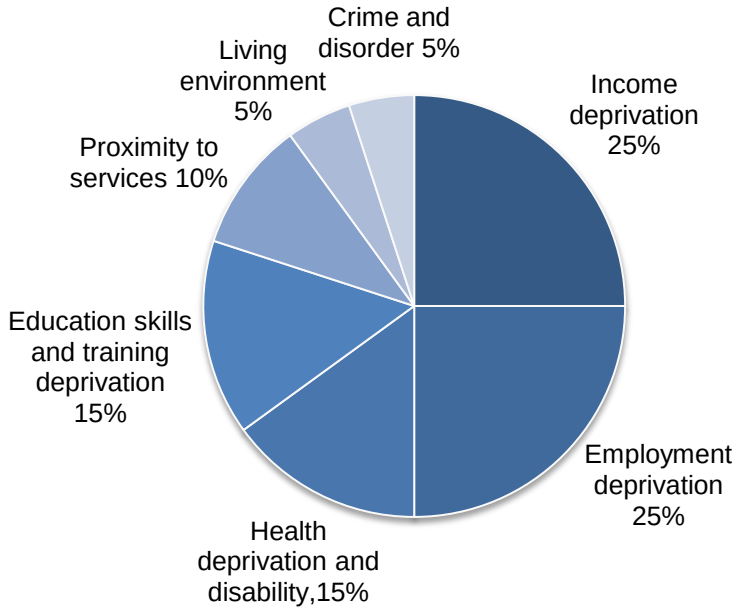
Appendices

Appendix 1

Deprivation assessment methodology

Deprivation level is assessed in Northern Ireland by the use of the Northern Ireland Multiple Deprivation Measure (NIMDM) 2010.[34] This measure examines 7 areas of deprivation which are given individual weights to produce an overall combined measure of deprivation. The composition and attributed weighting of each domain is summarised in Figure 1 below.

Figure 1: Composition and attributed weighting of each domain of the Northern Ireland Multiple Deprivation Measure 2010



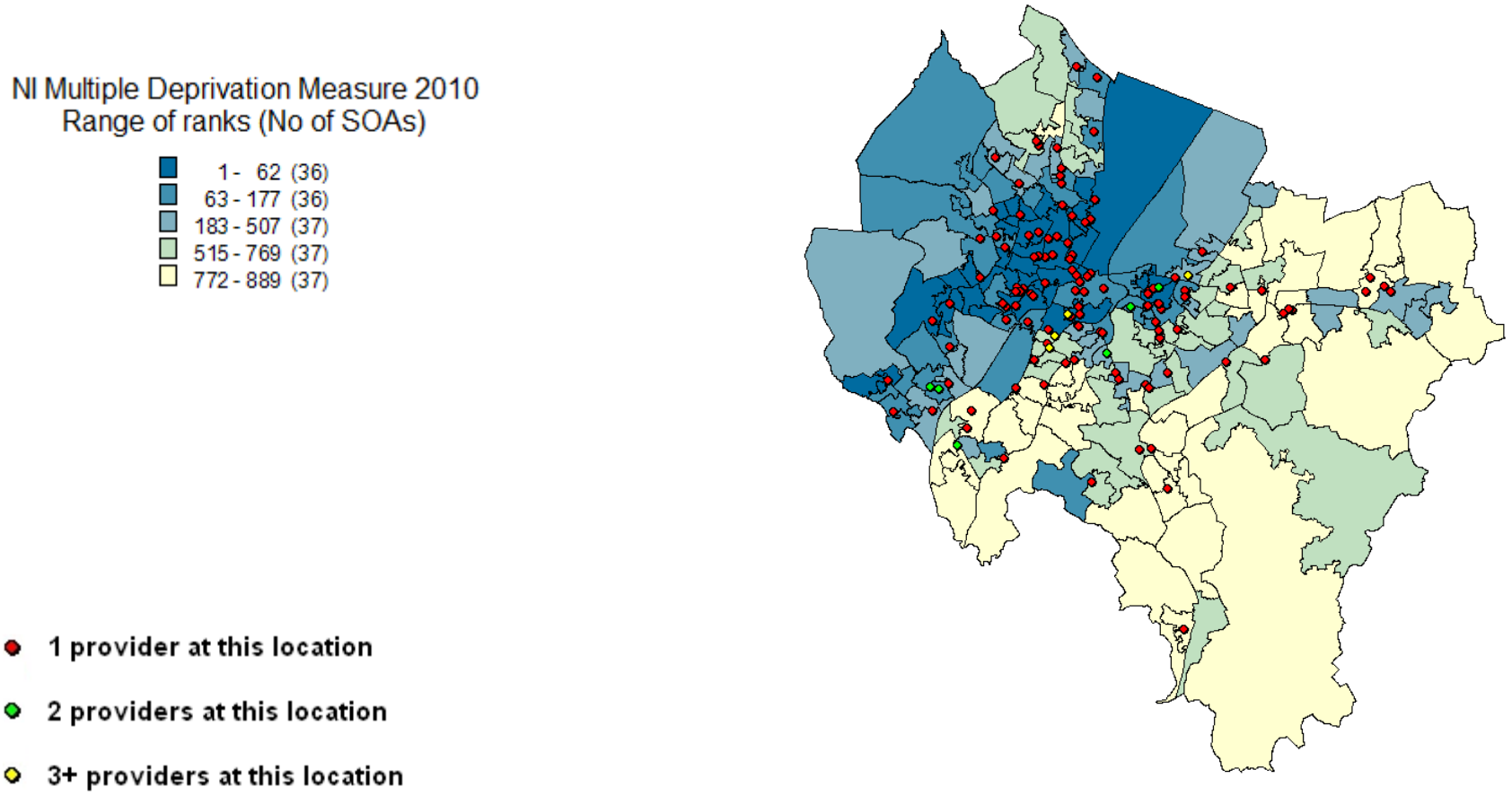
Source: Northern Ireland Statistics and Research Agency, Northern Ireland Multiple Deprivation Measure 2010, NISRA, Belfast, 2010

These deprivation measures have been developed using a range of indicators and are designed to identify small area concentrations of deprivation which are statistically robust at the small area level. The small geographical area used for the NIMDM is the super output area (SOA). Northern Ireland consists of 890 SOA areas, each with an average population of 2,000 people.

[34] Northern Ireland Statistics and Research Agency Northern Ireland multiple deprivation measure 2010. Available at http://www.nisra.gov.uk/deprivation/archive/Updateof2005Measures/NIMDM_2010_Report_Large_Print.pdf. Accessed 12 October 2012.

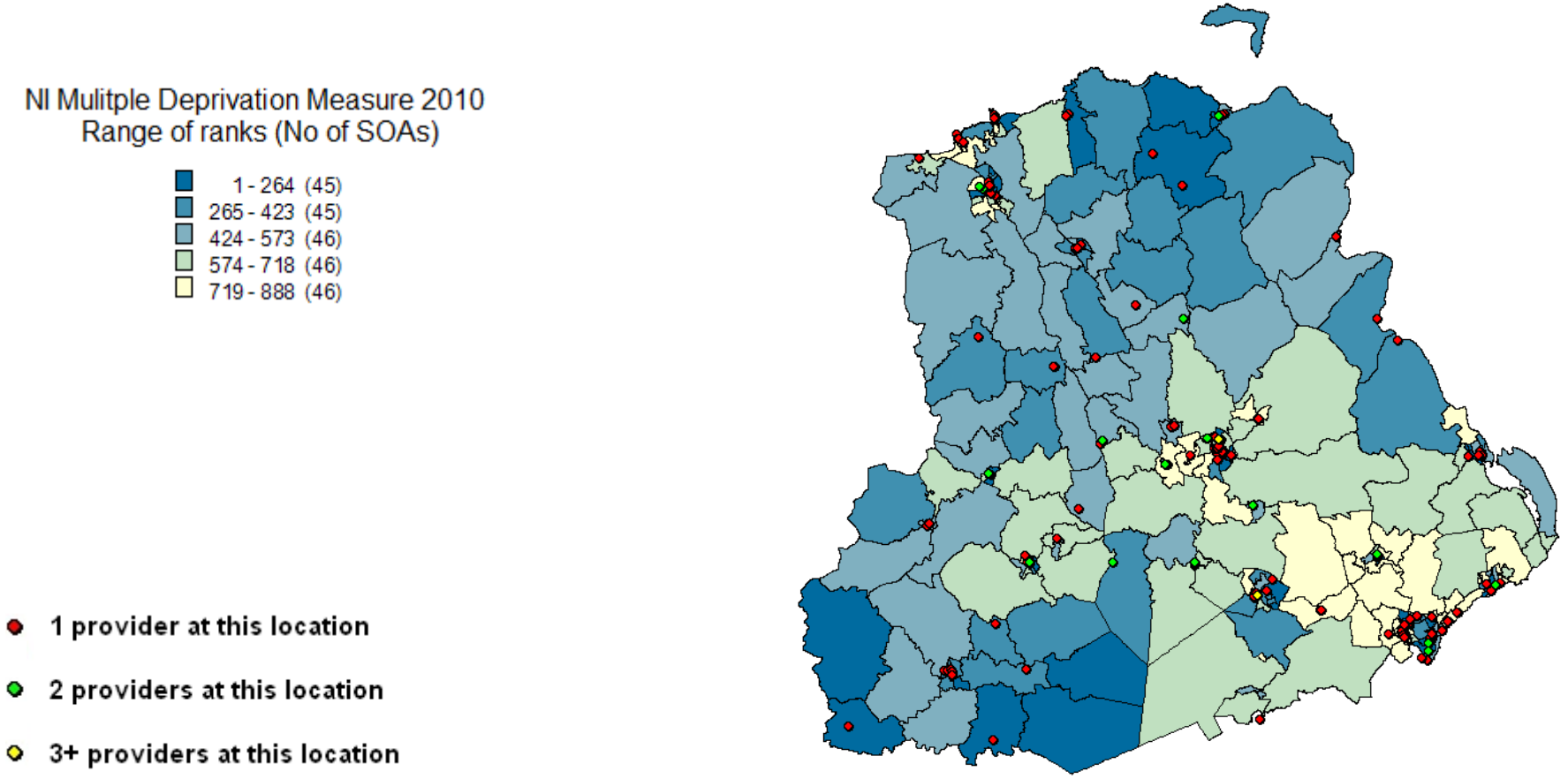
Appendix 2

Figure 2.1 Stop Smoking Service providers by total number of providers at each location across Belfast LCG by super output area* multiple deprivation measure 2010 (MDM)



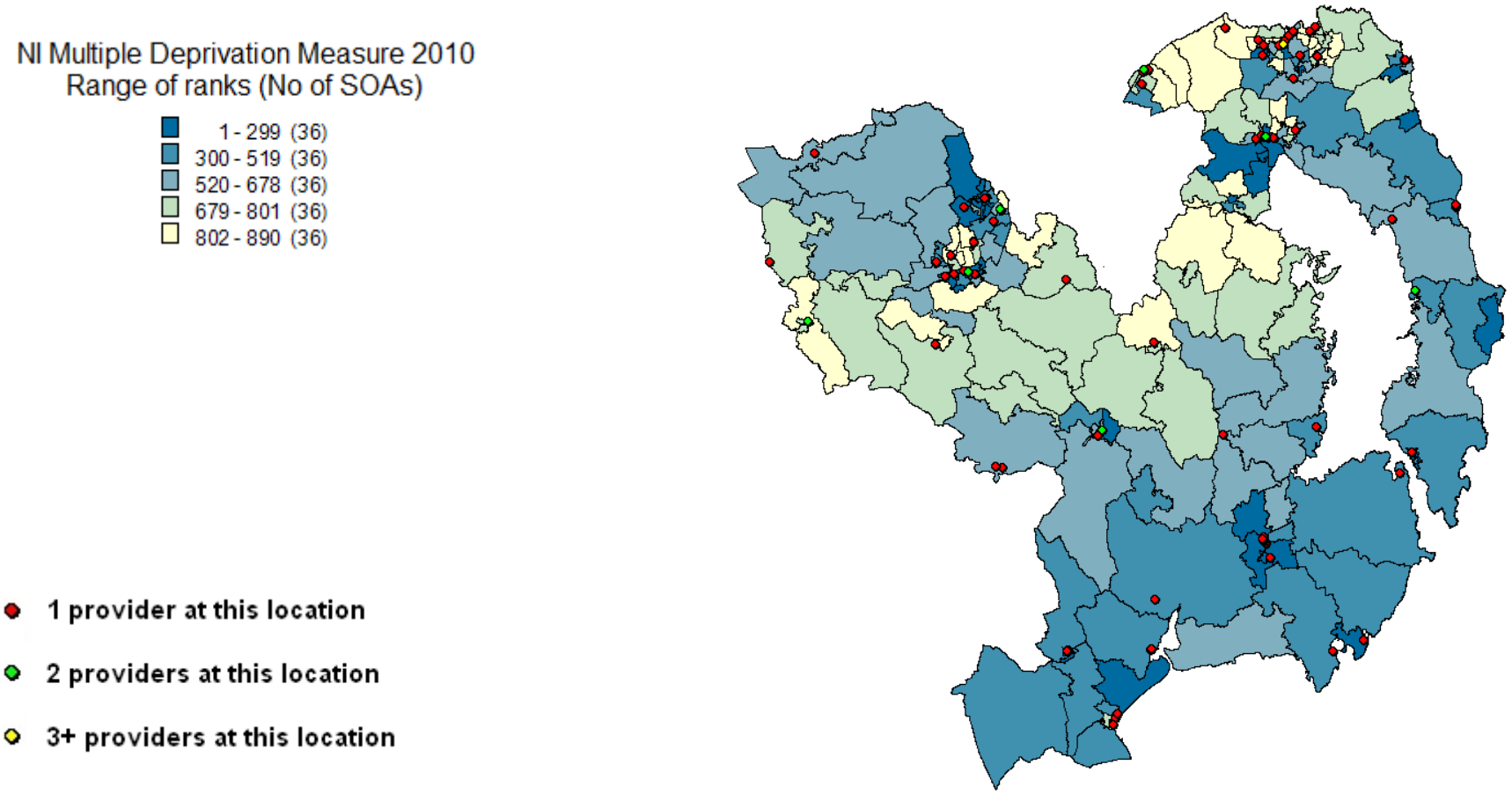
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 2.2 Stop Smoking Service providers by total number of providers at each location across Northern LCG by super output area* multiple deprivation measure 2010 (MDM)



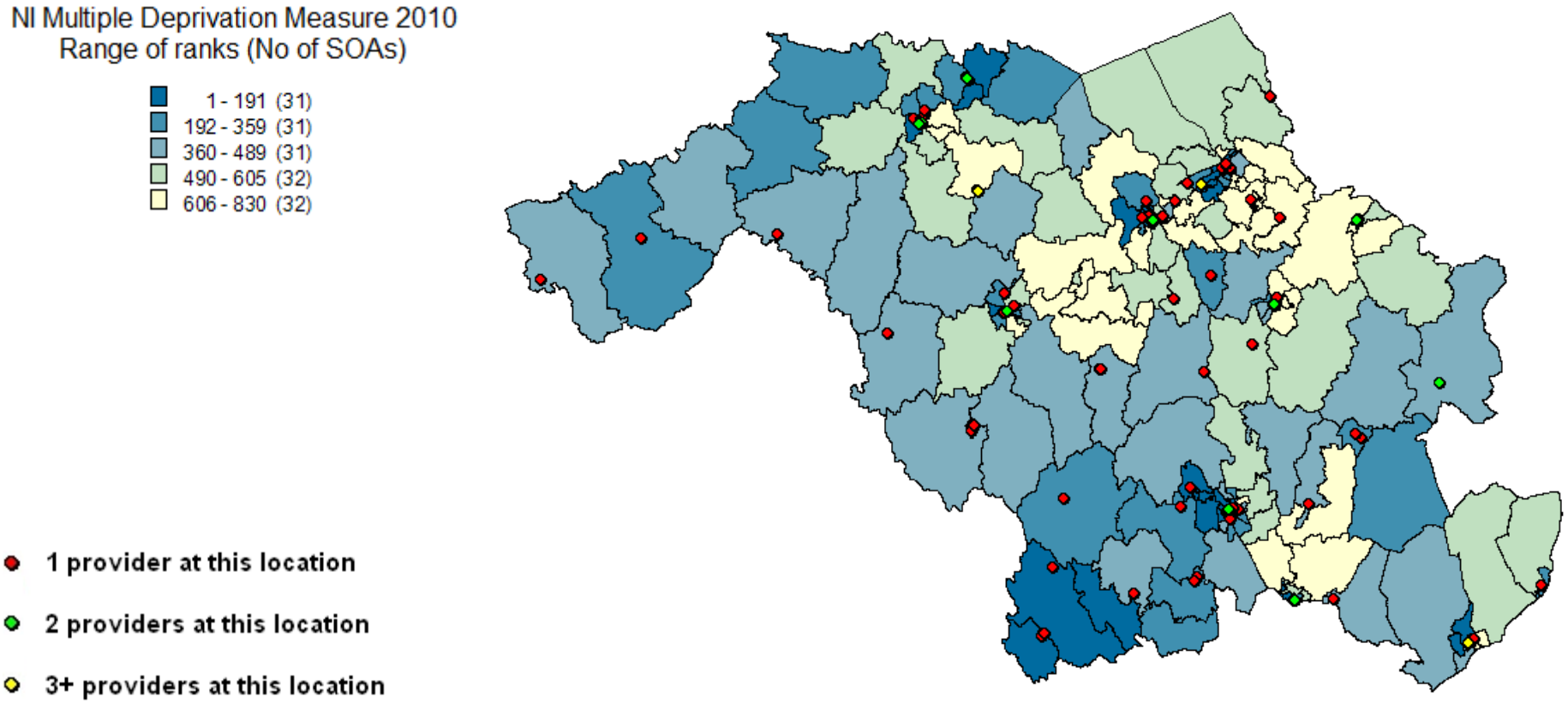
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 2.3 Stop Smoking Service providers by total number of providers at each location across South Eastern LCG by super output area* multiple deprivation measure 2010 (MDM)



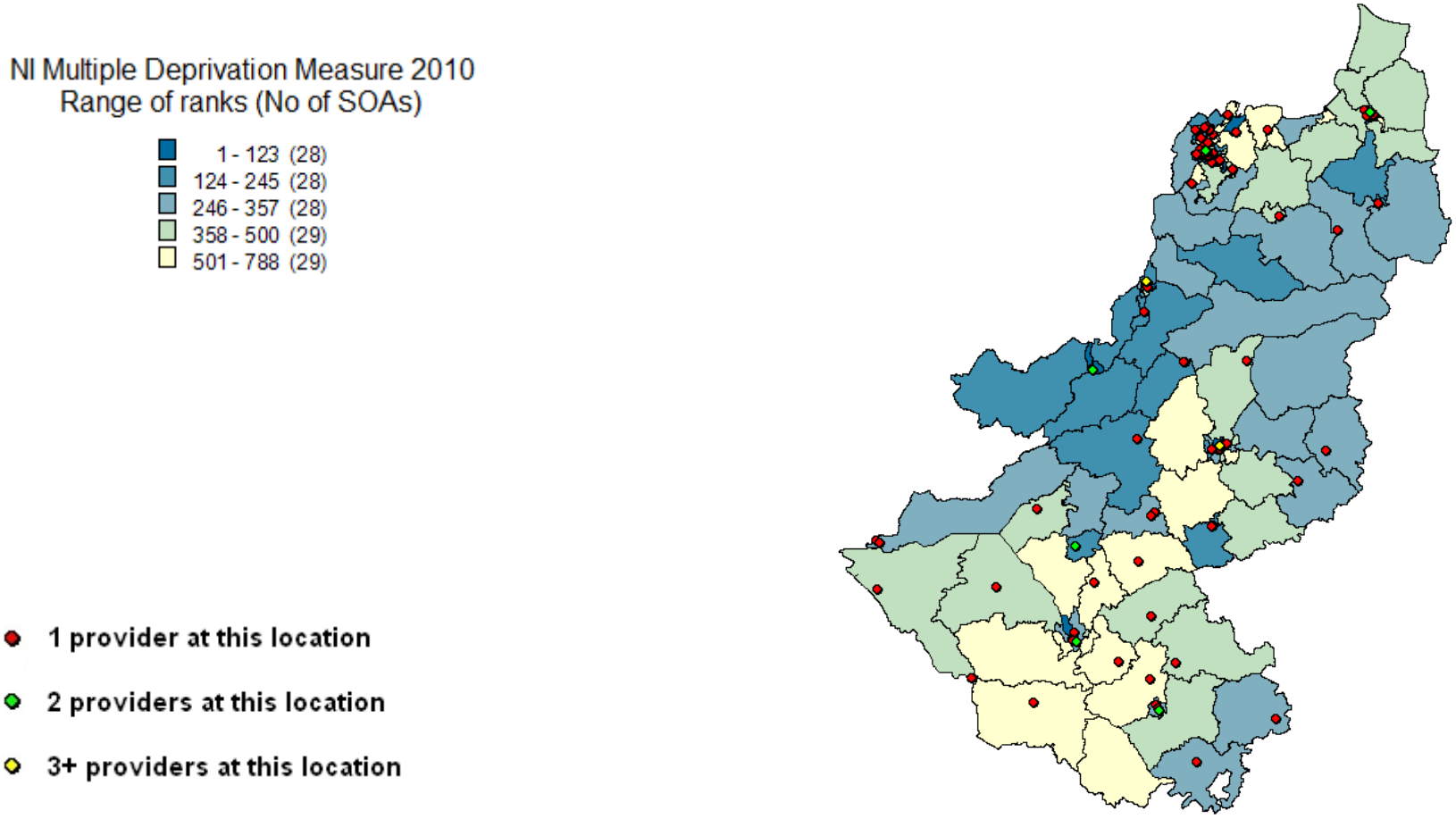
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 2.4 Stop Smoking Service providers by total number of providers at each location across Southern LCG by super output area* multiple deprivation measure 2010 (MDM)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 2.5 Stop Smoking Service providers by total number of providers at each location across Western LCG by super output area* multiple deprivation measure 2010 (MDM)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Appendix 3

Table 3.1 Number of cigarettes smoked per weekday/ weekend day by gender, 2012/13

Number of cigarettes smoked	Female smoking per weekend day	Male smoking per weekend day	Female smoking per weekday	Male smoking per weekday
less than 10	1696	985	2231	1272
10-19	5906	4188	7044	5411
20-29	6308	5910	5917	5977
30-39	2155	2692	1290	1713
40+	1113	1690	708	1107

Appendix 4

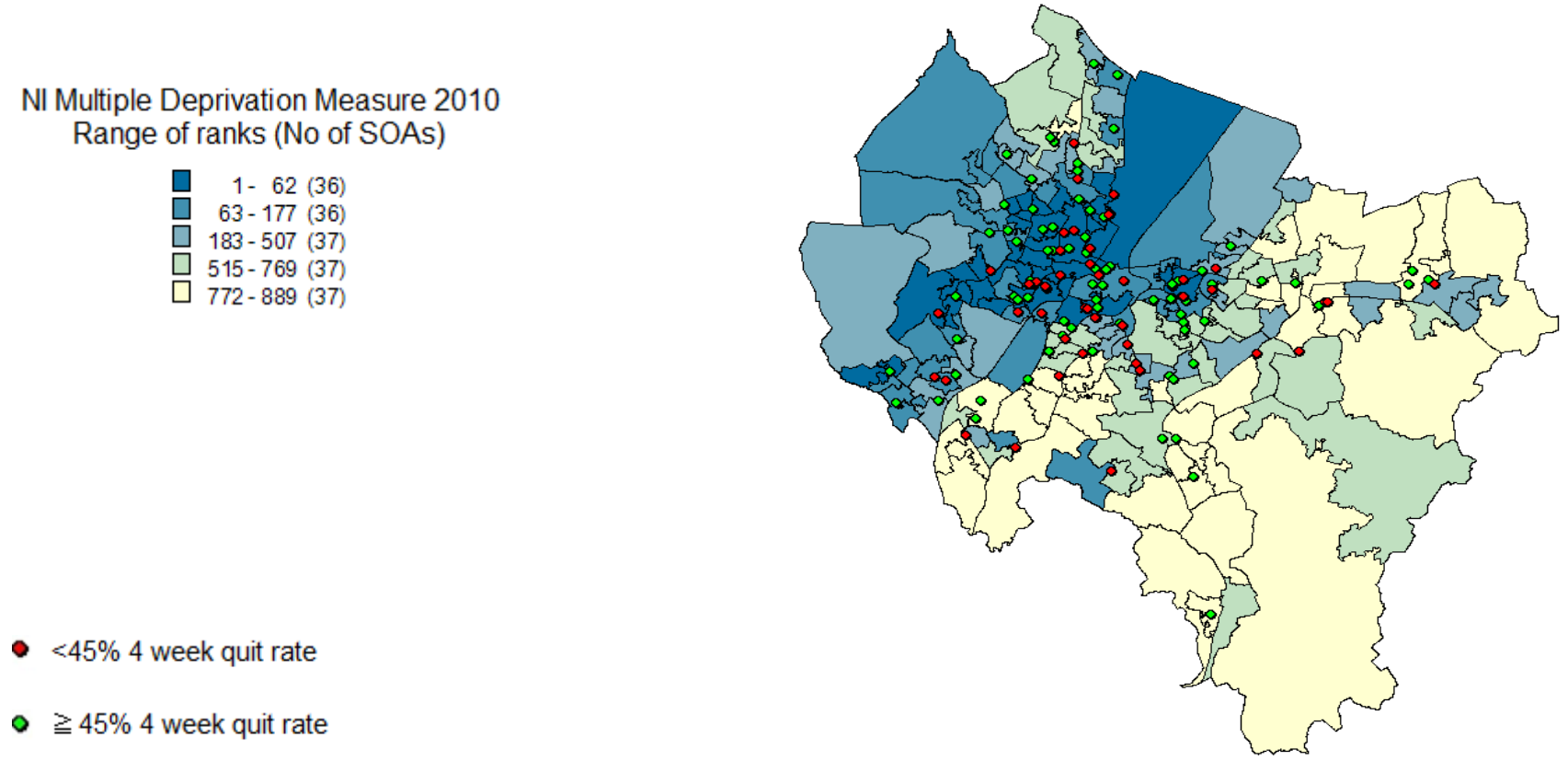
Table 4.1 Uptake, four and 52 week quitting activity among pregnant women during 2011/12 by deprivation quintile

		4 weeks	52 weeks		
	Uptake	Quit successful n (% quit rate)	Quit successful n (% quit rate)	Quit unsuccessful n (% quit rate)	Lost to follow up n (% quit rate)
1 (most deprived)	309 (29%)	134 (43%)	48(36%)	36(27%)	50 (37%)
2	285 (27%)	143 (50%)	57(40%)	53(37%)	33(23%)
3	207 (20%)	110 (53%)	33(30%)	45 (41%)	32 (29%)
4	179 (17%)	105 (59%)	48(46%)	34 (32%)	23 (22%)
5 (least deprived)	71 (7%)	36 (51%)	8(22%)	16 (44%)	12 (33%)
Unknown*	411	327	188	75	64
TOTAL	**1462**	**855**	**382**	**259**	**214**

*

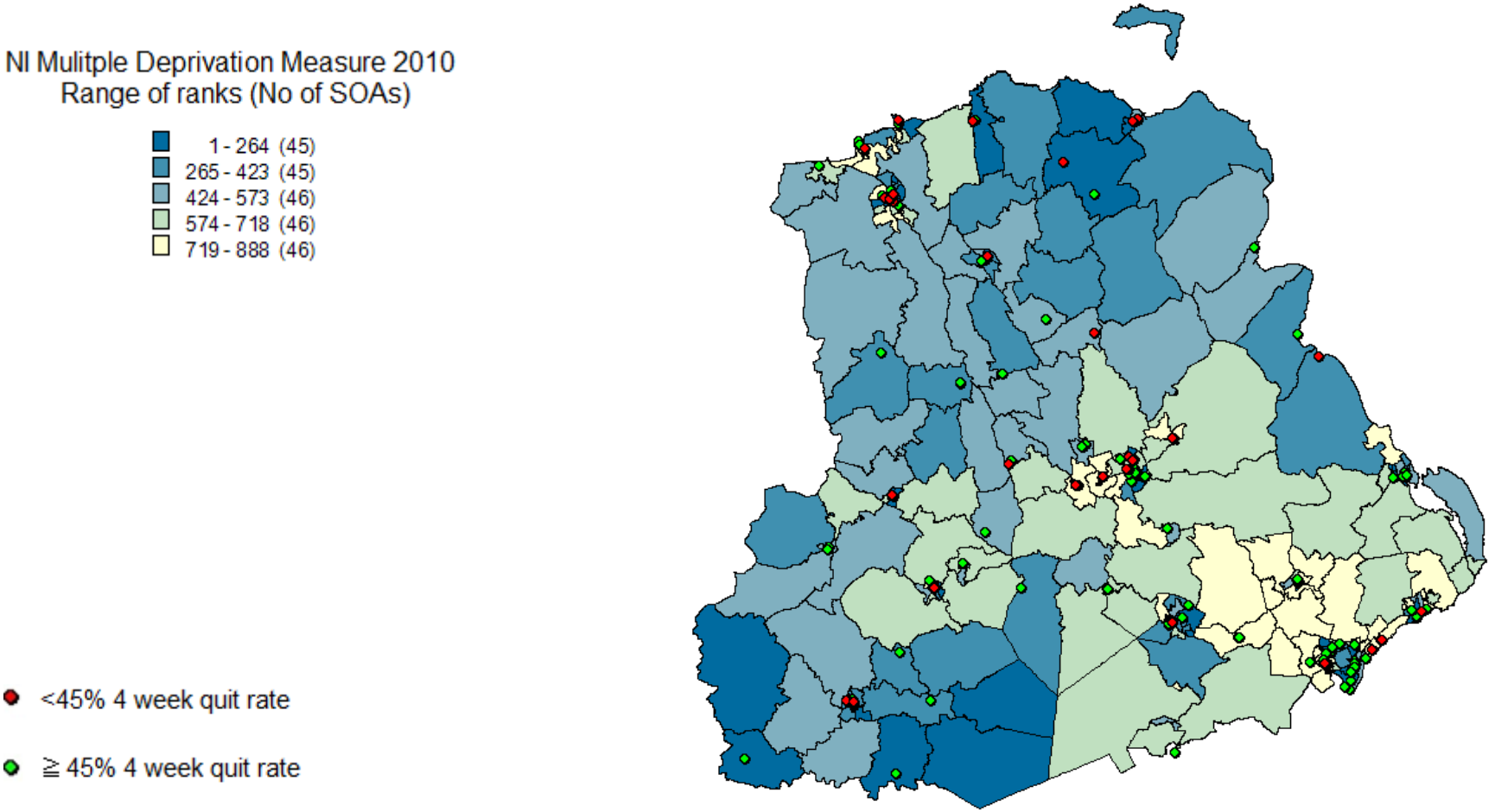
Appendix 5

Figure 5.1 Location of Stop Smoking Service providers by provider 4 week quit rate (<45% & ≥45%) across Belfast LCG by super output area* multiple deprivation measure 2010 (MDM)



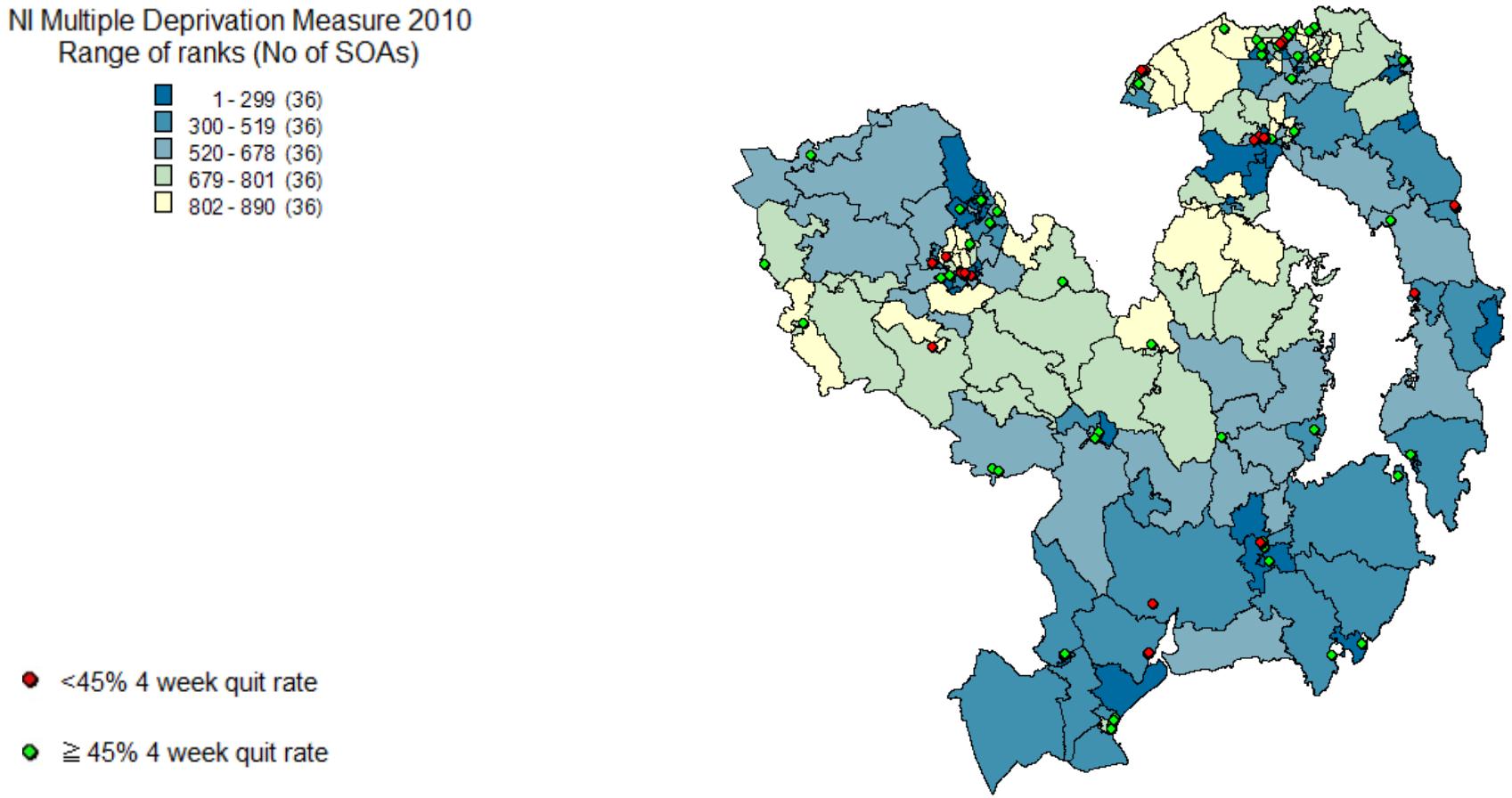
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 5.2 Location of Stop Smoking Service providers by provider 4 week quit rate (<45% & ≥45%) across Northern LCG by super output area* multiple deprivation measure 2010 (MDM)



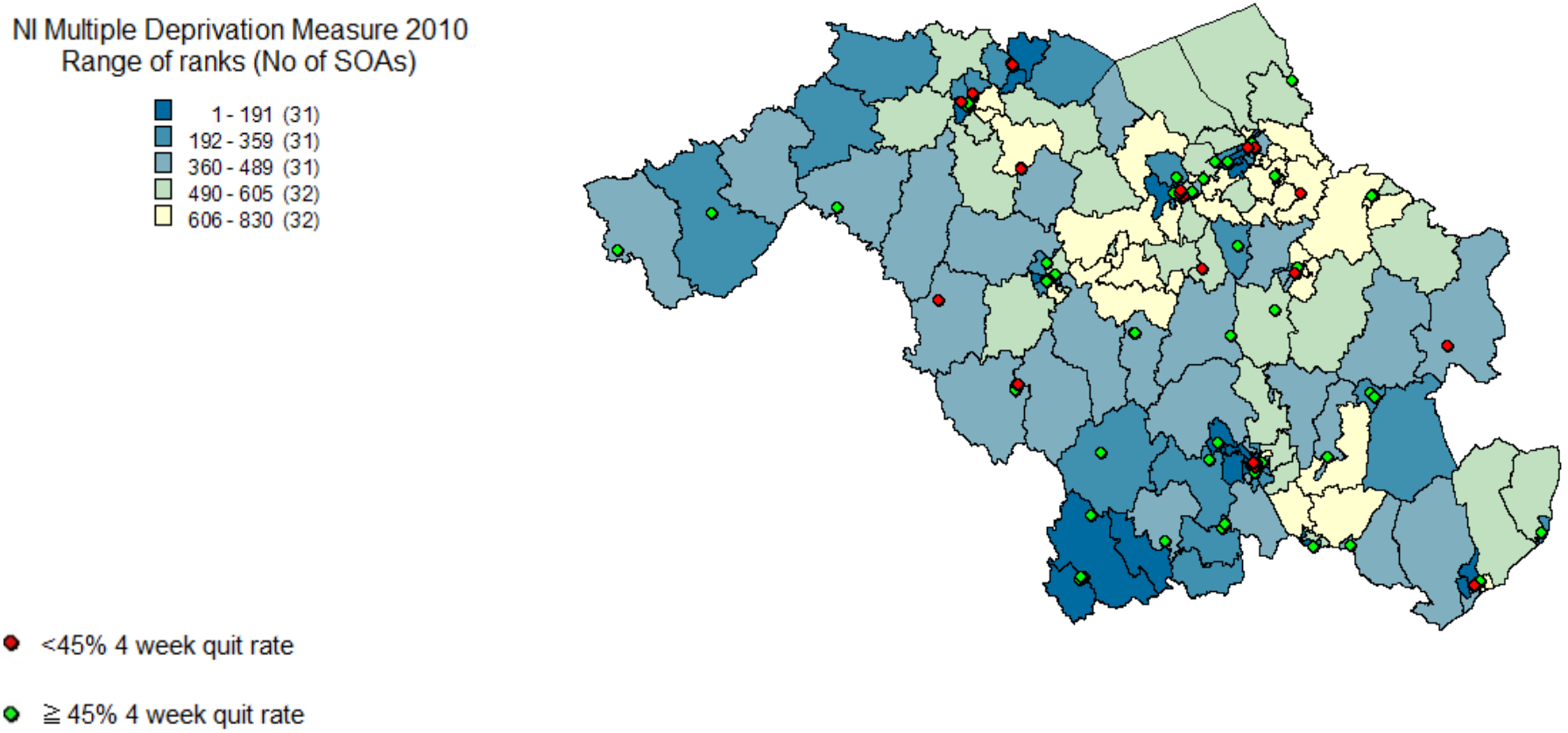
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 5.3 Location of Stop Smoking Service providers by provider 4 week quit rate (<45% & ≥45%) across South Eastern LCG by super output area* multiple deprivation measure 2010 (MDM)



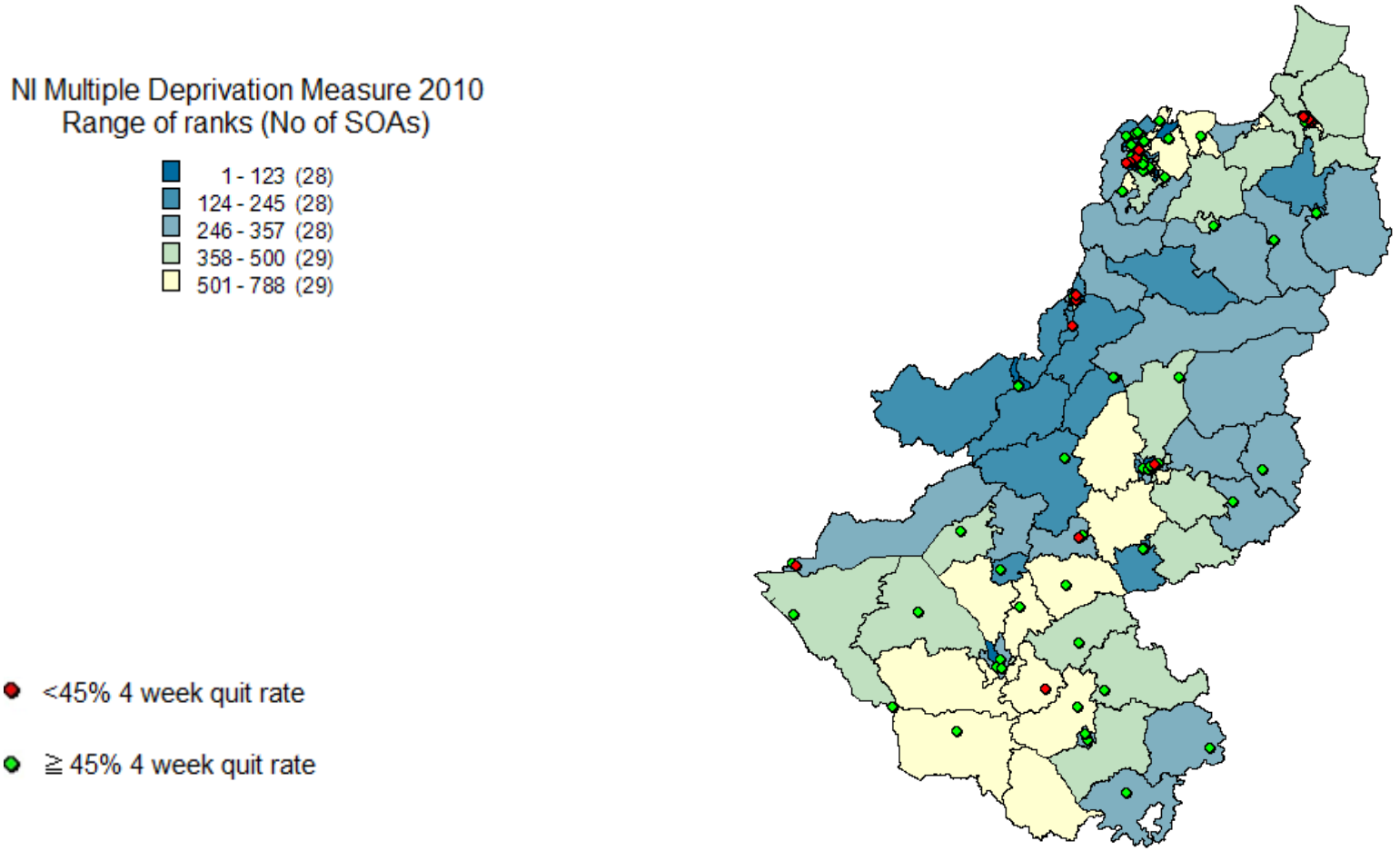
***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 5.4 Location of Stop Smoking Service providers by provider 4 week quit rate (<45% & ≥45%) across Southern LCG by super output area* multiple deprivation measure 2010 (MDM)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**

Figure 5.5 Location of Stop Smoking Service providers by provider 4 week quit rate (<45% & ≥45%) across Western LCG by super output area* multiple deprivation measure 2010 (MDM)



***Super output area: An SOA is equivalent to an electoral ward or sub-division of an electoral ward. Northern Ireland consists of 890 SOAs with an average population of 2,000 people.**