Health Equity Audit of Stop Smoking Services in County Durham 2023

Durham Insight
Insight & intelligence to inform

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Key Findings

This Health Equity Audit (HEA) shows that there is a higher rate of people accessing and quitting with the Stop Smoking Service in the more deprived areas of County Durham. This demonstrates that the County Durham Stop Smoking Service is contributing to a reduction in health inequalities. It highlights that services are being targeted at our top 30% most deprived communities with both high access and quit rates in these Middle layer Super Output Areas (MSOAs).

The relative inequality gap is larger for access (i.e. setting quit dates) than that in relation to successful 4-week quit outcomes. This highlights the challenge around maintaining smoker engagement and producing a successful quit attempt and is therefore a potential area for improvement.

The findings are both positive for the specialist (Level 3) stop smoking advisors and for the Level 2 advisors who work primarily within pharmacy and GP surgeries. The Specialist Stop Smoking Service (SpSSS) in particular, has demonstrated greater targeting of provision in relation to anticipated need in the 2023 equity profile, for both access and quit rates, compared to the previous equity profiles.

The analysis on the Level 2 service and for pregnant smokers was broadly positive for access. We find that access to services is targeted to the most deprived areas within the county. This is also true for rates of referrals into the service for pregnant smokers. The gradient is less evident for quit rates in the Level 2 service and for pregnant smokers. Indeed, the drop off between access and quit rates is larger in the more deprived areas which is a concern.

Infographic Summary of Key Finding – overall service

Key Findings of Health Equity Audit 2023 (overall service)

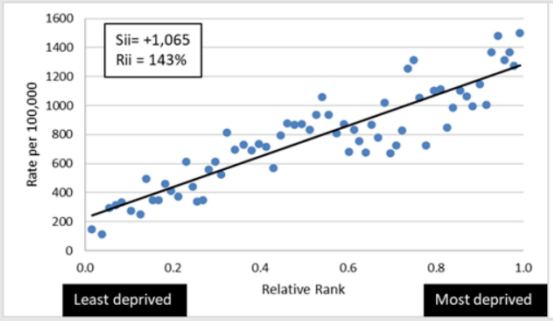
Smoking prevalence in adults (2022): 15.4% ...that's around 65,000 smokers

Smoking related deaths (2017-19): 278/100,000 ...that's around 900 each year

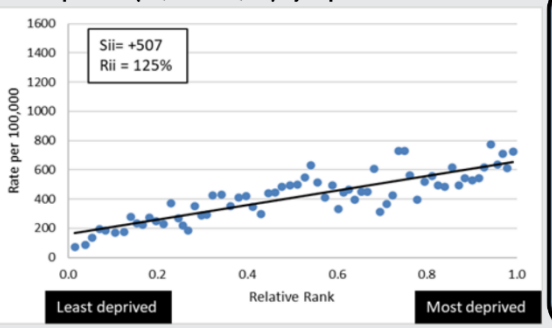
With smoking prevalence being higher in the more deprived areas we analyse access and quit rates at a small area geography to understand how the stop smoking services is contributing to reducing health inequalities.

- Higher rates of people accessing the service and quitting smoking in the more deprived MSOAs
- Both Riis (access and quit) are positive and large reflecting need

Access rate (19/20 – 21/22) by deprivation

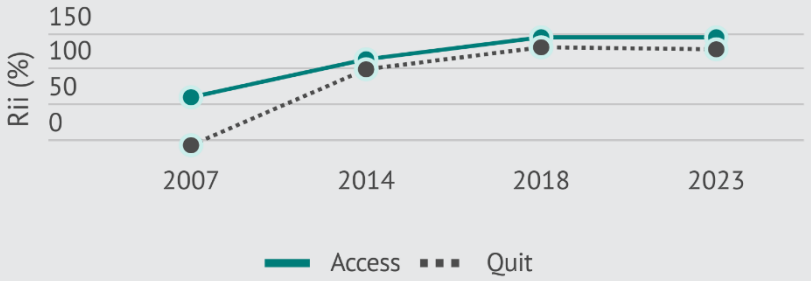


4-week quit rate (19/20 – 21/22) by deprivation



- The Rii gap is shallower for quits reflecting the challenge of quitting
- The service is contributing to reducing health inequalities

Riis for access and quit from previous HEAs, 2007 to 2023



Comparison to previous HEAs

The distribution relative to need has been maintained over time

Wider context

Positive findings given triple challenge of change of provider, the C-19 pandemic and cost of living increase

KEY: Arrow indicates trend over time | Circles indicate significance compared to England: Higher, Similar, Lower | Rii: Relative Index of Inequality is the size of the gap between least and most deprived areas expressed as a %

Infographic summary of key findings – pregnant smokers

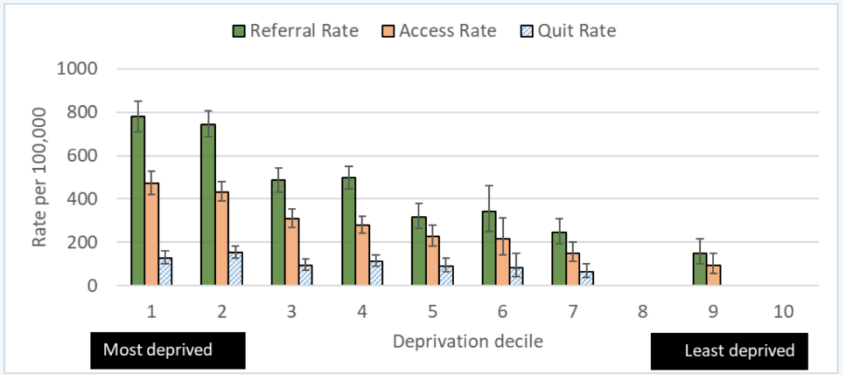
Key Findings of Health Equity Audit 2023 (pregnant smokers)

Smoking at time of delivery (21/22): 14.6%
...that's around 1 in 7 women

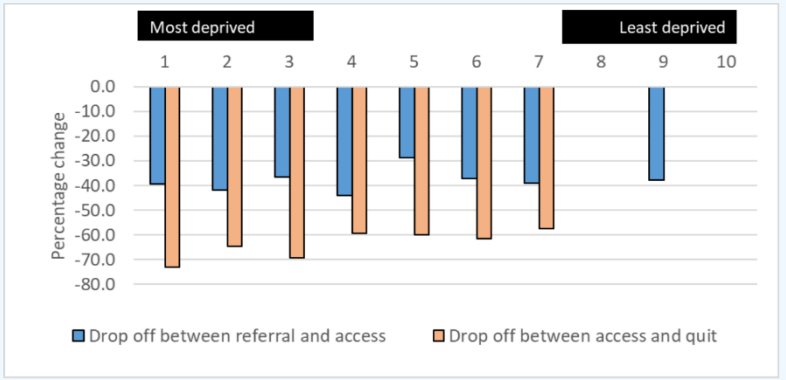
Premature births (2019-21): 1,204/1,000
...that's around 400 each year

Due to low numbers at small area geography, it was not possible to calculate the Rii in the analysis of pregnant smokers. Inequality is examined by deprivation decile instead.

Referral, access 4-week quit rate (19/20 – 21/22) by deprivation decile



Drop off percentage change (19/20 – 21/22) by deprivation decile



- Clear evidence of higher referral and access rates in most deprived areas
- Little evidence of targeting by need for quit rates which demonstrates achieving 4-week quits for pregnant smokers is challenging
- The drop in rate at each stage between referral and quit is significant in the more deprived areas

- The drop off between referral and access is similar across the deciles
- The drop off between access and quit rate is larger in the more deprived areas

KEY: Arrow indicates trend over time

Circles indicate significance compared to England: Higher, Similar, Lower

Recommendations of Health Equity Audit 2023

Introduction

Aims

Smoking is recognised to be the single biggest cause of preventable illness and death in the UK and there exists huge inequalities in smoking prevalence and smoking related deaths. Around 1 in 6 adults smoke (15.4%) in County Durham and this is significantly higher than England.

The purpose of this Health Equity Audit (HEA) is to assess whether the Stop Smoking Service in County Durham is having an impact on health inequalities and identify how services are delivered relative to deprivation levels across the county. The aims are to:

1. assess equity of access and outcomes for people using the service between April 2019 and March 2022.
2. To provides a comparison with three previous audits conducted in 2007, 2014 and 2018.

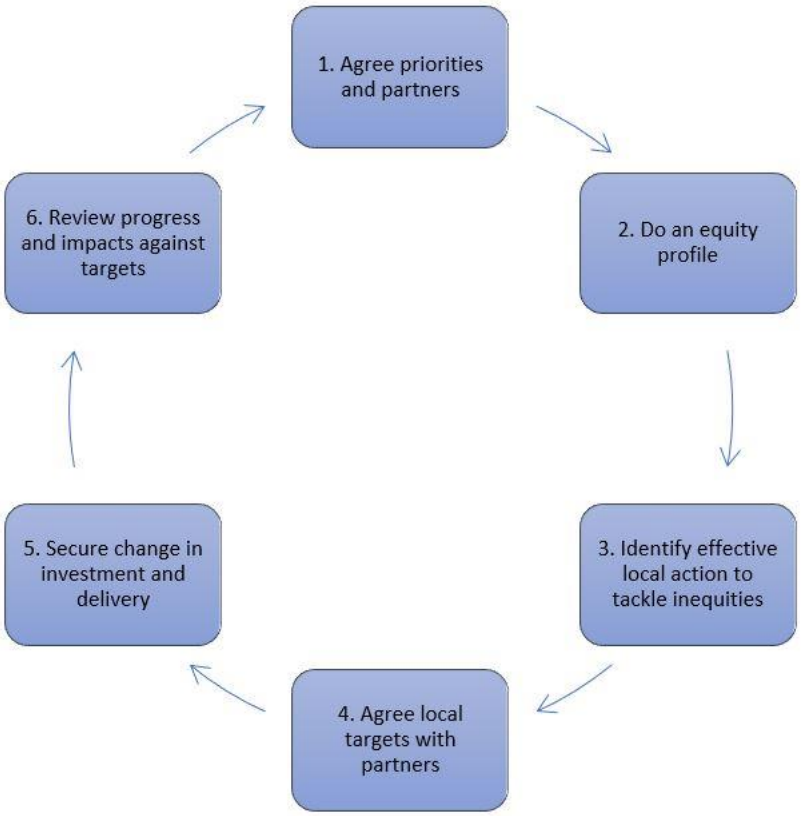
What is Health Equity Audit?

Health Equity Audit (HEA) is a form of needs assessment. HEA is concerned with how causes of ill health, access to services or health outcomes are distributed within a population and systematically reviews this distribution for the presence of inequity. The ultimate aim of HEA is to distribute resources relative to need.

HEA is an important tool to use when considering how to reduce health inequalities and inequities through the provision and planning of local services and this is its purpose in this HEA. The audit identifies how fairly stop smoking services (in terms of access and outcomes) are distributed relative to deprivation levels within County Durham.

HEA is a cyclical process as illustrated in figure 1. The first output of a health equity audit is the production of a health equity profile. This should identify and quantify both the need and any existing inequality. A health equity profile only becomes a HEA once the cycle is complete i.e. once changes in resource allocation have been made and outcomes of this change have been reviewed. This process should normally take no less than three years.

Figure 1: The HEA cycle. Source: OHID (2020)

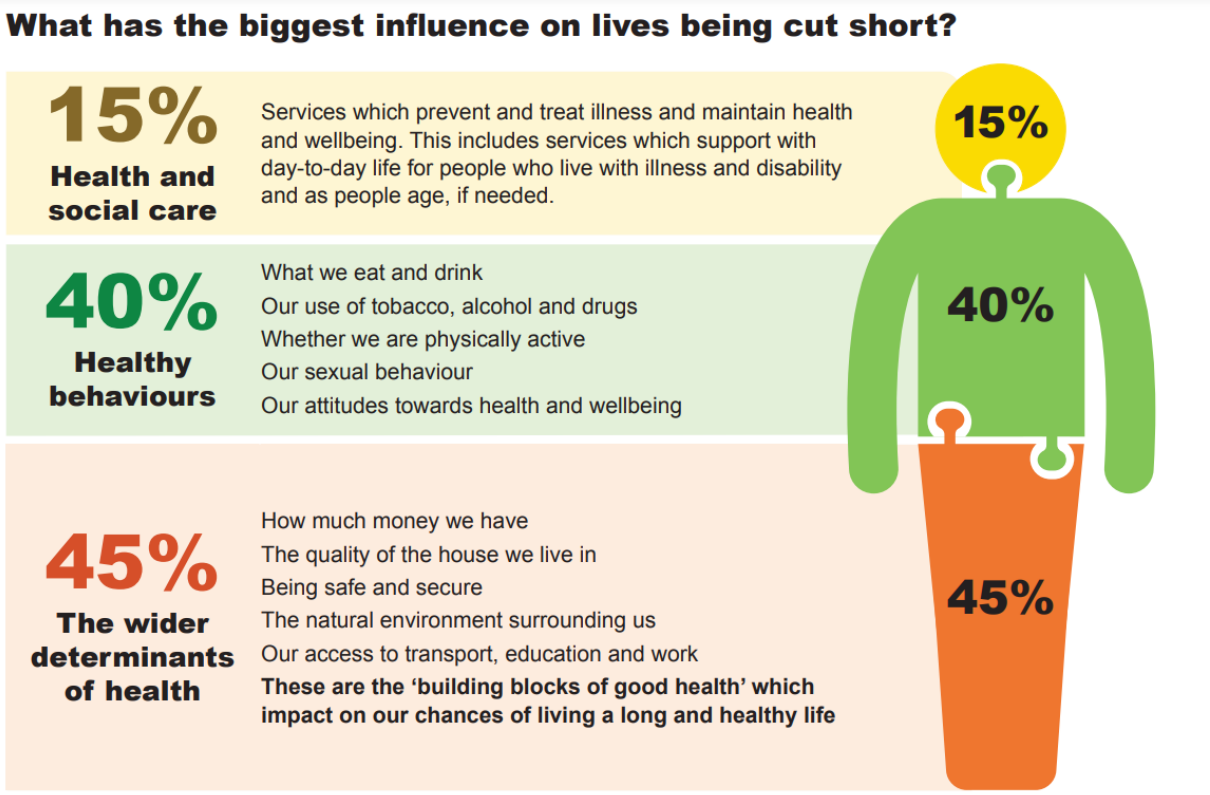


Health inequalities and the wider determinants of health

Health inequalities are disparities between population groups that are systematically associated with socio-economic and environmental factors. Often these inequalities are geographical with health status or outcomes worse in more deprived areas (the social gradient); they can also be experienced by different groups of people, for example the young and elderly, veterans or homeless people. Such variations in health are avoidable and unjust.

The health inequalities are the result of a complex relationship between our genes, and the broader factors of health care, our behaviours and the wider determinants of health. Improvements in health outcomes, cannot be made without action in these wider determinants. In Figure 2 below we show an estimate of the contribution that these wider factors have on health and wellbeing and ultimately lives being cut short. What happens within an individual's social context, the early years, education, income, skills development, employment and work all impact on their health and length of life, more so than access to and quality of health care and behavioural risk factors.

Figure 2: Infographic showing the impacts on the health and wellbeing of the population. Source: County Durham Health and Wellbeing Board (2023)



McGinnis, J.M., Williams-Russo, P. and Knickman, J.R. (2002) cited in The King's Fund (n.d.). Time to Think Differently. Broader determinants of health: future trends. Available at: https://www.kingsfund.org.uk/projects/time-think-differently/trends-broader-determinants-health (Accessed: 9 March 2023).

Inequalities in smoking prevalence

There is a strong link between cigarette smoking and poverty[1]. Smoking is far more common among people with lower incomes. Across England smoking prevalence of people living in the most deprived areas is 16.9% compared to 10.5% for those living in the least deprived (OHID 2023). Whilst this granularity of data has not been published at local authority or modelled at MSOA level for several years, we would expect to see a similar social gradient in County Durham, if not more so given higher overall prevalence and greater levels of relative deprivation. In County Durham the socioeconomic group with the highest prevalence is the routine and manual workforce; data from 2021 shows a prevalence of 29.2% which is significantly higher than both regional and national figures. In comparison managerial and professional workers have a smoking prevalence of 11.3% locally (OHID 2023).

Smoking pulls the most disadvantaged further into poverty. Action on Smoking and Health (ASH) latest estimates are that the average smoker spends £2,000 per year on cigarettes, which is driving 25,000 households locally into poverty (ASH 2022). Whilst saving money can be a motivation for giving up smoking, money worries and struggles can make healthy behaviours more difficult to achieve.

National and local context

Smoking and health

Across England approximately 64,000 people are killed each year by smoking and 2 out of 3 smokers will die from smoking unless they quit (Khan 2022). In 2019, 35% of all deaths from respiratory diseases and 25% of all deaths for cancers, were estimated to be attributable to smoking (NHS Digital, 2020).

Smoking during pregnancy can cause serious pregnancy-related health problems. These include complications during labour and an increased risk of miscarriage, premature birth, stillbirth, low birth-weight and sudden unexpected death in infancy.

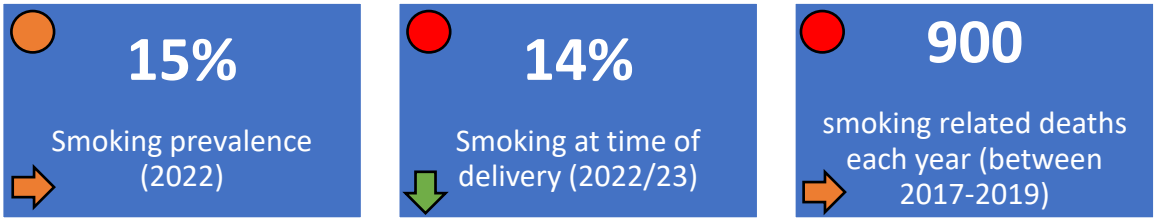
In June 2022 Dr Javed Khan published an independent review on the government's ambitions to make England smokefree by 2030. It was found that England will miss this target by at least 7 years. It was found that to reach these targets "England needs to accelerate the rate of decline of people who smoke by 40%" (Khan 2022).

[1] There are also high smoking prevalence rates amongst individuals with mental health problems and people who misuse drugs and alcohol however this is outside the scope of this HEA which aims to assess services in relation to deprivation.

The tobacco control challenge in County Durham

The burden of smoking in County Durham is greater than England. The majority of adults do not smoke however in the Local Tobacco Control Profile (OHID 2023), smoking prevalence in County Durham is estimated to stand at 15.4% (2022) which is equivalent to 65,000 adults. This represents a 4.9% decrease from the previous year (16.2%) and is statistically similar to the North East region (13.1%) and the England figure of 12.7%. In the last 10 years there has been little progress made with closing the gap with England (figure 3).

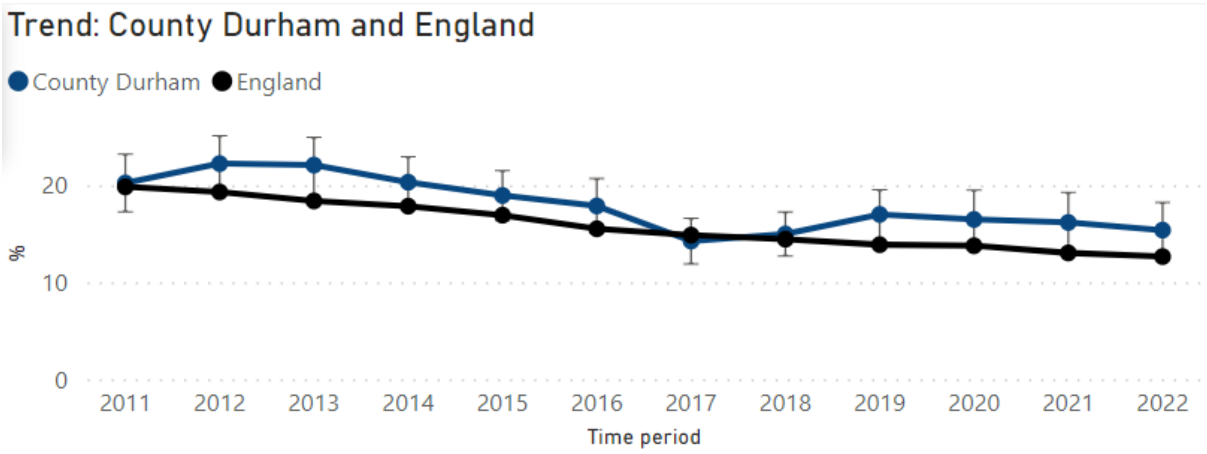
Figure 2: Key tobacco control figures for County Durham. Source: Local Tobacco Control Profiles, OHID.



Key

No significant change	→	Significantly worse than England	●
Decreasing and getting better	↓	Statistically similar to England	●

Figure 3: 10-year trend of adult smoking prevalence, County Durham and England, 2011 to 2022. Source: County Durham JSNAA Tobacco Control, Durham Insight



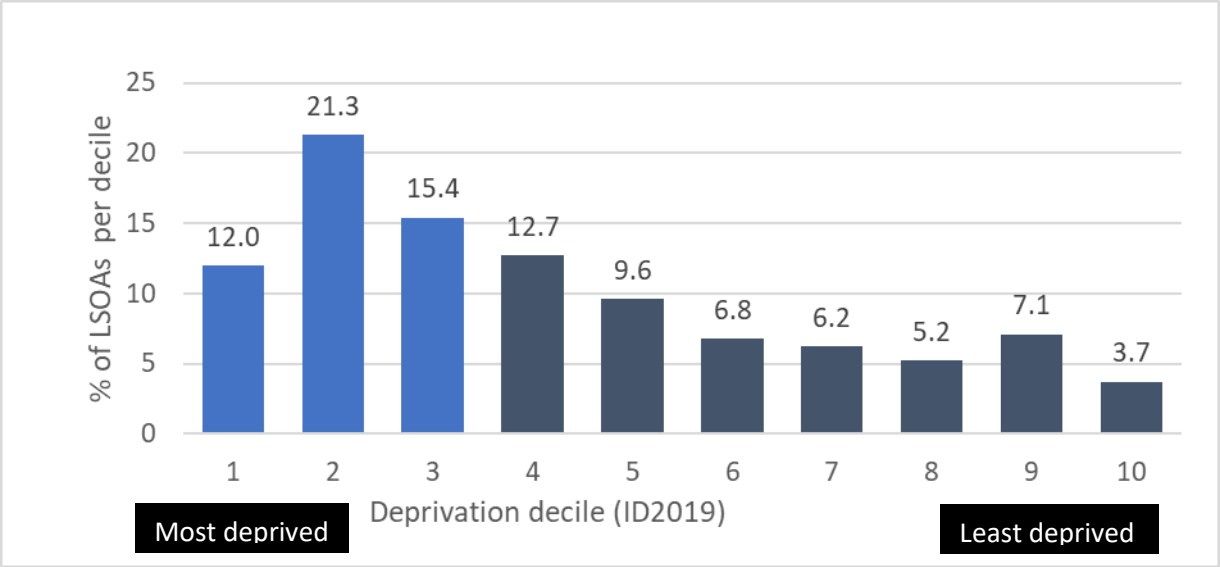
For a detailed report on Tobacco Control in County Durham covering smoking prevalence, benchmarking, attributable deaths, stop smoking services and smoking at time of delivery please visit the Tobacco Control page of County Durham's Joint Strategic Needs and Assets Assessment (JSNAA).

The County Durham Joint Local Health and Wellbeing Strategy (JLHWS) (2023-28) identifies smoking of one of the four biggest contributors to dying early and living in poor health or with illness locally. Making smoking history is a chosen priority area. The County Durham Tobacco Control Alliance will deliver against this priority. The alliance has an ambition to reduce smoking prevalence in the County to 5% or less by 2030, whilst maintaining a focus on key priority groups including pregnant smokers, routine and manual workers and people with serious mental health conditions. This ambition is driven by a vision to achieve a tobacco-free generation.

Deprivation and maps

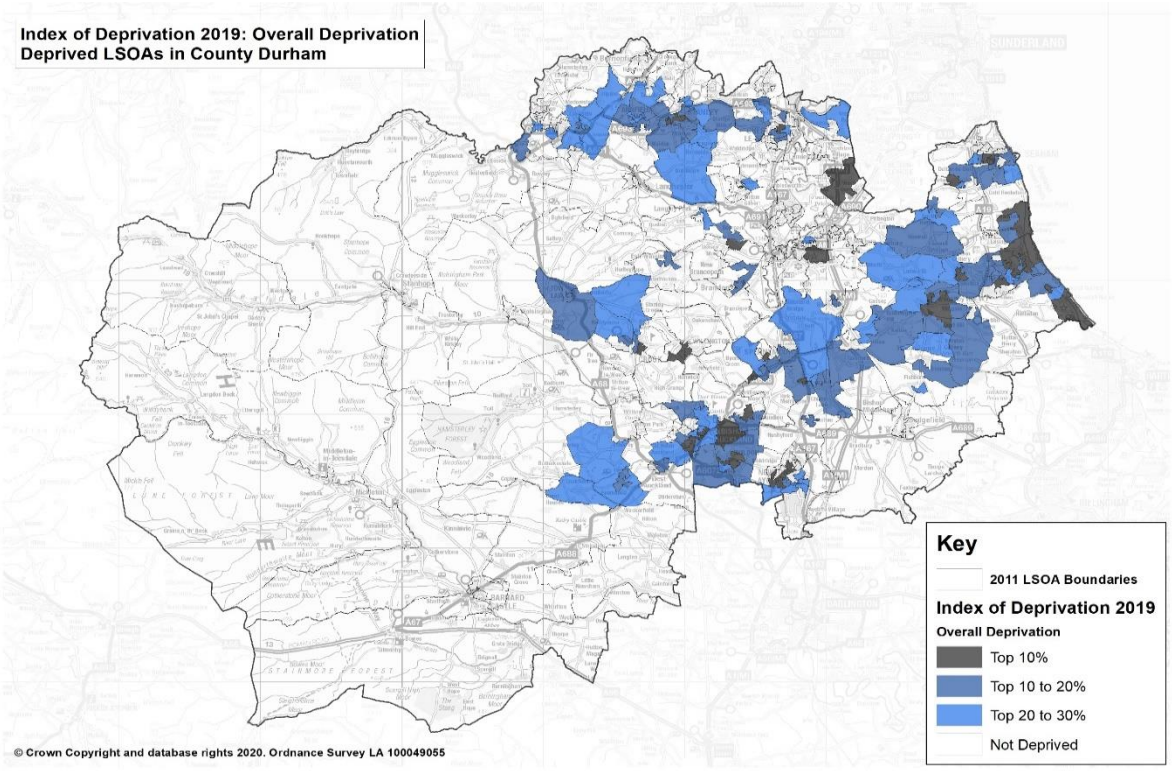
The Index Deprivation (ID) is the official measure of relative deprivation in England. The latest release of the index is 2019 and it is comprised of seven domains of deprivation which, when combined and weighted, form the ID 2019. County Durham is a large and diverse area and experiences higher levels of deprivation than the national average. County Durham is ranked as the 48th most deprived upper-tier local authority out of 151 nationally. It should be noted that pockets of relative deprivation exist across the County, even in more relatively affluent areas such as Durham and Chester-Le-Street. The indices are calculated at Lower Super Output Area (LSOA) level. There are 324 LSOAs in County Durham and almost half (49%, n=158) are in the 30% most deprived nationally (deciles 1 to 3). The proportion in each decile can be seen in figure 4 below. Over 47% of our population live in these relatively deprived areas.

Figure 4: Proportion of LSOAs in each deprivation level of the ID 2019, County Durham. Source: Deprivation in County Durham, Durham Insight.



The location and distribution of the most deprived areas in County Durham can be visualised in the map (figure 5) below.

Figure 5: Map of LSOAs within County Durham, shaded by ID 2019 top 30% deciles. Source: ONS and DCC Research and Intelligence Team



The stop smoking service in County Durham

Stop smoking services are an important component of our approach to tobacco control. Since April 2013 local authorities have been responsible for commissioning stop smoking services and interventions by allocating spending of their public health grant, although it is not a prescribed function. A service has been commissioned to help residents (and people who work in County Durham) quit smoking locally since then.

The period for this HEA is April 2019 to March 2022 and there has been a change in service provider during this period. Between April 2016 and March 2020, the commissioned service Smokefree County Durham was provided by Solutions4Health. A change of provider occurred from 1st April 2020 onwards, with ABL Health running the service.

ABL Health is responsible for providing highly trained in-house advisers/practitioners to deliver a specialist (level 3) stop smoking service (SpSSS). They are also responsible for engaging, training, contracting with and supporting Level 2 service providers and their advisors. They also offer training regarding smoking harms and second-hand smoke within a variety of settings including schools.

People can access stop smoking services in a variety of settings and a range of intervention types. Setting include amongst others: general practice, pharmacies, community venues, prisons, hospitals, dental settings, schools, workplaces and mental health settings. Intervention types include telephone support and face-to-face-clinics which are usually one-to-one.

During the period of the HEA, ABL embedded specialist advisors into maternity services to provide support to pregnant smokers wishing to quit. This also included providing training to maternity support workers to better identify and support women and their partners who smoke.

The impact of COVID-19 pandemic on the service

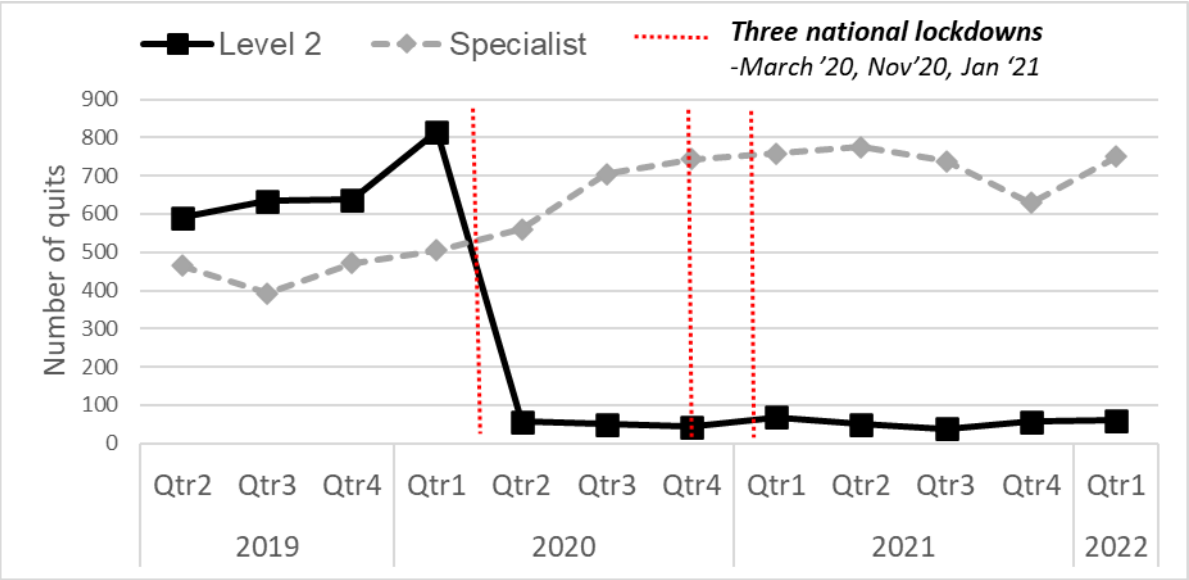
The impact of the pandemic in March 2020 meant that the capacity of stop smoking support based in GP and pharmacy settings (Level 2 providers) declined dramatically as providers had to respond to different priorities and restrictions. This also impact on referrals into the SpSSS as people has less contact with health professionals.

The COVID-19 pandemic also “propelled respiratory disease to the centre of media and public attention” and provided an opportunity to promote stopping smoking as a way for individuals to protect themselves from C-19, their wider health and wellbeing and the NHS (ASH & CRUK, 2021).

Figure 6 shows that in the year 2019/20 the Level 2 service saw a mean of 223 quit dates set each month. For 20/21 this fell to 18 per month and in 2021/22, 17 per month. Conversely, the SpSSS saw their number of quit dates increase.

In 2019/20, the first year of this HEA, the split between quit sets with the Level 2 service versus SpSSS was 59% versus 41%. In the following two years 2020/21 and 2021/22 this changed to 7% versus 81%. The drop off in Level 2 service quit dates caused by the pandemic had an impact on the level of analysis which could be carried out for this HEA. This is described the HEA profile section below.

Figure 6: Number of quit dates set with County Durham Stop Smoking Services, broken down by Level 2 and SpSSS, between April 2019 and March 2022. Source: 1SYSTEM4HEALTH database, DCCPHI.



ABL Health, remained operational and adapted the specialist service throughout the pandemic. In the pandemic years a blended approach to service delivery was adopted to maintain client engagement, mainly involving telephone consultations. Many smokers have stated that they prefer telephone consultations, however the transition to living with COVID-19 from 2022 onwards did enable many more opportunities for face-to-face clinics. These are predominately situated with GP surgeries with the highest prevalence of smoking or within community venues which are close to those surgeries.

Cost of Living and smoking

This HEA must also acknowledge the impact of the rising cost of living experienced in the UK in the latter part of the period of his HEA; late 2021 onwards. Disposable income (adjusted for inflation after taxes and benefits) has fallen, as energy costs, food and housing prices have risen and contributed to rising inflation, outstripping wage increases. In the UK, the price of consumer goods and services rose at the fastest rate in four decades in the year to October 2022. The annual inflation rate reached a 40-year high of 9.6%. More information on the cost of living in County Durham can be found on Durham Insight.

Cigarette smokers often report that smoking helps to relieve feelings of anxiety and stress. The high smoking prevalence among people facing social and economic deprivation suggests that smoking may be used as a self-medicating method of coping with stress. People who experience enduring stress may turn to smoking to cope and may feel that quitting is a low priority, given the rest of life's daily concerns (ASH 2019a and ASH 2019b).

Methods of analysis and data presentation

The equity profile is constructed from an individual, record level data file received from the stop smoking service in April 2023. Two files were requested and received:

1. All quit dates in the date range with the following data fields
    a. Home postcode
    b. Age
    c. Type of intervention accessed
    d. Quit outcome
2. All pregnant smoker referrals made in the date range with the following data fields
    a. Quit date
    b. Fields a. to d. above

The data was taken from web-based patient data management systems used by the two providers Solutions4Health and ABL Health. Patient data is recorded directly into systems by the advisors. This is used to produce reports and for data returns to NHS Digital. The raw data extracted from has been cleansed to remove any incorrect or misleading data. This includes incorrect or incomplete postcodes and extreme ages deemed to be entered in error (aged under 10 for data file 1 and outside of the age range 15-59 years for data file 2).

This HEA profile is concerned with equity for residents of County Durham therefore, only postcodes within County Durham were included. Out of 10,598 quit dates, 10,363 records were used in the analysis (2.2% excluded) and out of 2,129 referrals of pregnant smokers, 2,105 were used in the analysis (1.1% excluded). This is a marked improvement compared to the 2018 HEA where 12% of records were removed. This indicates improved data quality on the part of the service.

ONS mid-year population estimates for 2020 by quinary age band were used to calculate directly age standardised rates (DASR) per 100,000 population (to the 2013 European Standard Population). DASRs allow comparisons across different populations as they are adjusted to take into account their age structure. The method to calculate DASRs is that "the age-specific rates of the subject population are applied to the age structure of the standard population. This gives the overall rate that would have occurred in the subject population if it had the standard age-profile" (Eayres 2008).

Analysis covers the county level and Middle Super Output Area[2] (MSOA) level. In the previous HEAs additional analysis was provided by the two Clinical Commissioning Groups (CCGs) of North Durham CCG and Durham, Dales and Easington CCG however in 2020 they merged to create County Durham CCG which has the same geographical footprint of County Durham local authority.

Analysis of the age or gender of users has not been undertaken for the purposes of this HEA as the service targets smokers by deprivation. In addition, estimates of smoking prevalence at small area geographies have not been updated since 2014 therefore smoking prevalence has been excluded from this analysis.

The three key outcome indicators in the analysis are:

1. Referral Rate refers to referrals received per 100,000 population (for pregnant smokers only)
2. Access Rate refers to numbers who set a quit date per 100,000 population
3. Quit Rate refers to numbers who had self-reported a successful quit at 4 weeks per 100,000 population

To conduct this HEA profile and compare to previous profiles the Slope and Relative Indices of Inequality are calculated and analysed. Both of these measures quantify the socio-economic dimension to inequalities in health using a linear regression.

The Slope Index of Inequality (Sii) quantifies the absolute inequality gap. The Sii allows the absolute gap between the least and most deprived areas in a given geography to be shown for a particular measure. It takes into account the position of all groups and the population size of each group simultaneously. For example, a Sii of 150 for a quit rate means that the different between the most and least deprived areas is 150 quits per 100,00 population.

The Relative Index of Inequality (Rii) quantifies the relative inequality gap. The Rii is the size of the gap between the least and the most deprived MSOA expressed as a percentage of the overall value for the whole population. This permits comparisons to be made over time.

For this HEA we also present how the size of the gap (Rii) differs between access and quit. The ideal would be for the two Riis to be the same or for the Rii for quit rates to be the highest of the two as this indicates higher quit rates in the more deprived areas.

[2] MSOAs are a Census geography. There are 66 in County Durham with an average population of 8,100 and a range of 4,200 to 16,000.

Stop Smoking Service HEA Profile 2023

The following section describes the results of the 2023 HEA.

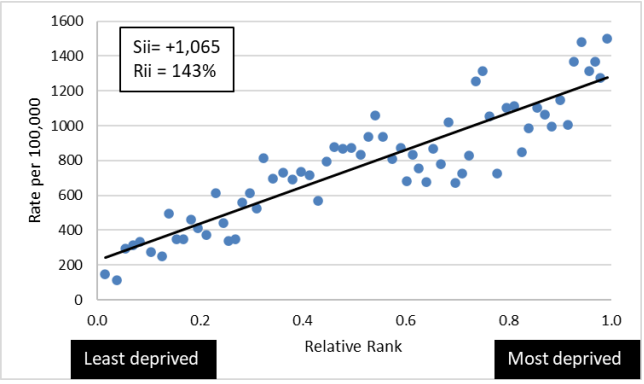
In this HEA it was possible to calculate the Slope and Relative Indices of Inequality for access and quit rates for two groups. Firstly, all people accessing any element of the service and secondly for all people accessing the specialist stop smoking service (SpSS). (n.b. 97% of SpSS quit dates set were in a community venue setting).

Due to small numbers at the MSOA geography, it was not possible to calculate the Rii or Sii for an analysis for the Level 2 service only or for pregnant smokers. Rather, for these subsets of service users, inequality is examined by deprivation decile.

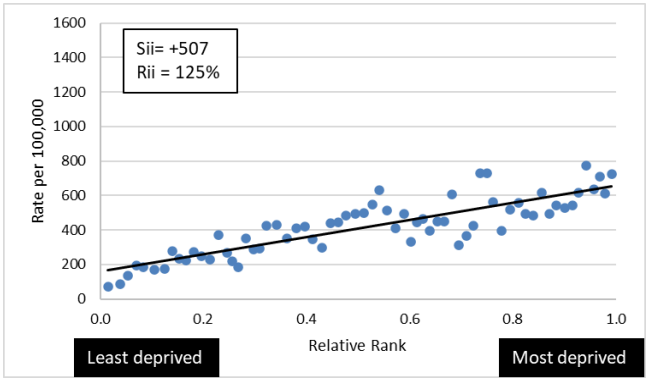
The overall service

Figure 7: Access and 4-week quit success (19/20 – 21/22) DASR per 100,000, whole service, by MSOA and relative rank of deprivation (ID2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI.

Access rate



4-week quit rate



For the whole service, rates accessing and quitting by deprivation are unequal, they are higher in the more deprived areas (Figure 7). The Rii is positive for both rates meaning more people access the service to set a quit date and go onto quit at 4-weeks from the more deprived areas. This indicates that the service is reflecting the anticipated need. The size of both gaps are large which is positive.

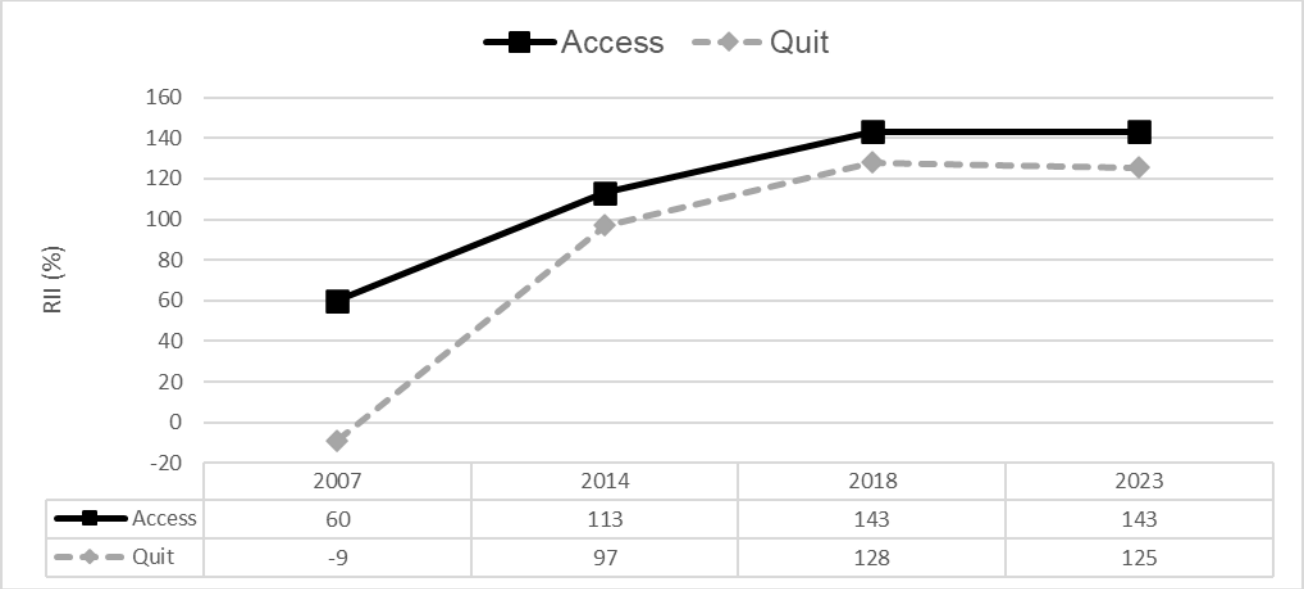
The size of the gaps are both similarly large which is positive. However, the inverse social gradient for 4-week quits is shallower and there is a narrower range of quit rates between least and most deprived areas (the Sii is smaller). This reflects the challenge of successfully quitting smoking. It is a positive finding that the gradient is not flat or reversed (this would be shown in an Rii close to zero or negative) as this could indicate widening health inequalities.

A direct comparison of this HEA with the three conducted previously is necessary to understand fully if the overall stop smoking service is contributing to reducing health

inequalities over time. This analysis ensures that the HEA process is cyclical and gives a good indication if the current approach is effective. This is shown in figure 8.

The change over time is that the Rii for access for County Durham has been maintained at 143% between 2018 and 2023. For quit rate there has been a marginal decline from 128% to 125% but remains higher than the 2007 and 2014 audits.

Figure 8: HEA Riis for access and 4-week quit success, 2007 to 2023, County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI.

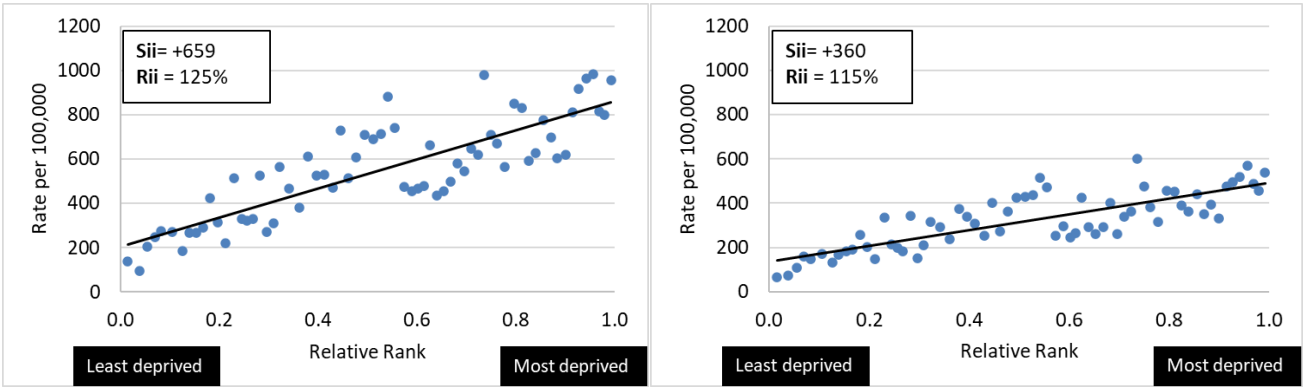


	2007	2014	2018	2023
Access	60	113	143	143
Quit	-9	97	128	125

The Specialist Stop Smoking Service (SpSSS)

Figure 9: Access and 4-week quit success (19/20 – 21/22) DASR per 100,000, SpSSS, by MSOA and relative rank of deprivation (ID2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI**.**

Access rate **4-week quit rate**



N.B. The vertical axis in figure 9 are different to Figure 76.

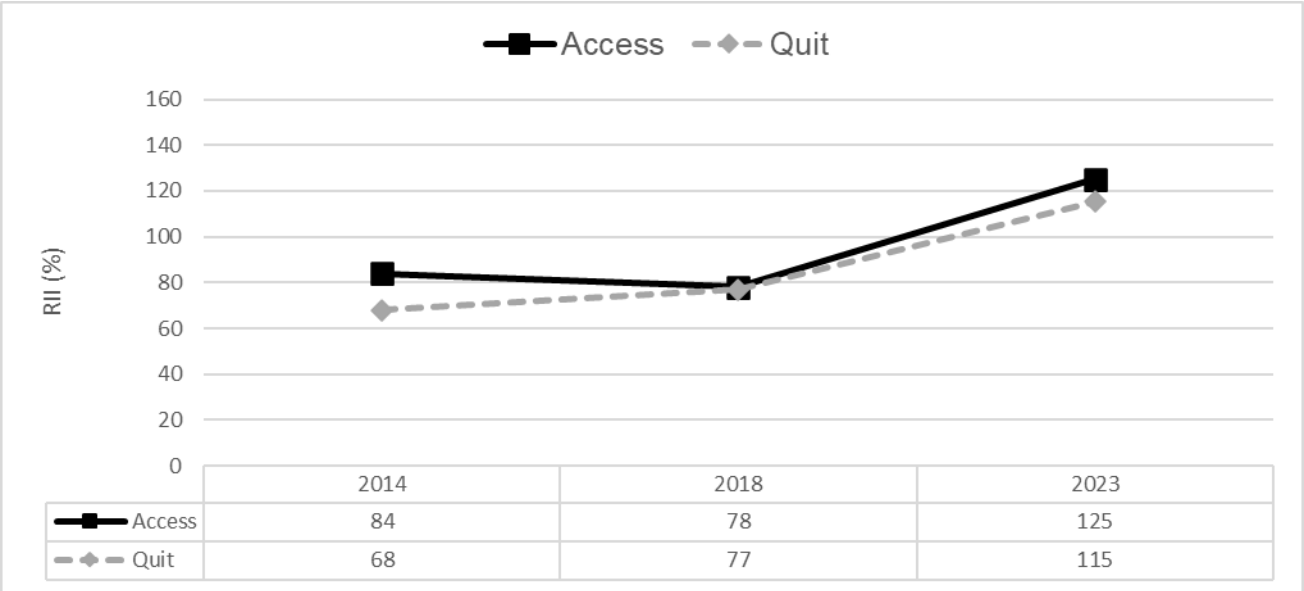
The SpSSS is a subset of the overall service. The analysis of the SpSSS mirrors similar conclusions to that of the whole service, again finding that rates accessing, and quitting are unequal and higher in the more deprived areas. The Rii is large and positive for both rates meaning more people access the specialist service to set a quit date and go onto quit from the most deprived areas compared to the least deprived. This indicates that the service is reflecting need. The size of both gaps are large which is positive

The size of the gaps are both similarly large which is positive. However the inverse social gradient for 4-week quits is again shallower and there is a narrower range of quit rates between least and most deprived areas (the Sii is smaller). This reflects the challenge of successfully quitting smoking even when delivered by a SpSSS. It is a positive finding that the gradient is not flat or reversed (this would be shown in an Rii close to zero or negative) as this would indicate widening health inequalities.

It is not recommended to directly compare the findings of the overall service and SpSSS given the impact of the pandemic on the timeline and level of quits delivered by the different arms of the service during the period of this HEA (see figure 6).

The previous HEAs in 2014 and 2018 calculated Riis for the specialist service and a direct comparison of this HEA with those two is necessary to understand fully if the SpSSS is contributing to reducing health inequalities. Figure 10 shows that the relative index of inequality for access and quits for County Durham has increased between 2018 and 2023. From 78% to 125% for access and from 77% to 115% for quits. These findings are also higher than the 2014 audit. This demonstrates greater targeting of provision in relation to deprivation now compared to 2018 and 2014.

Figure 10: HEA Riis for access and 4-week quit success, 2014 to 2023, County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI.



	2014	2018	2023
Access	84	78	125
Quit	68	77	115

The equity profile of both the overall service and the SpSSS is encouraging both now and in relation to findings of the previous HEAs. The distribution is relative to anticipated need (higher in the more deprived areas). This is an achievement for the service given the triple challenge of change of provider, the C-19 pandemic and cost of living increase.

Level 2 Service

As discussed above, the impact of the C-19 pandemic was a sharp drop off in Level 2 provision from March 2020 onwards (see figure 6). Due to small numbers of quit dates set in some MSOAs (less than 10 over the three years) it was not possible to conduct a regression analysis. This is a weakness as direct comparisons of equity between the SpSSS and Level 2 service cannot be made.

In the three-year period of this HEA there were:

- 3,207 people who accessed the Level 2 service;
    - a rate of 210.0 per 100,000
- 1,289 who quit;
    - a rate of 92.8 per 100,000

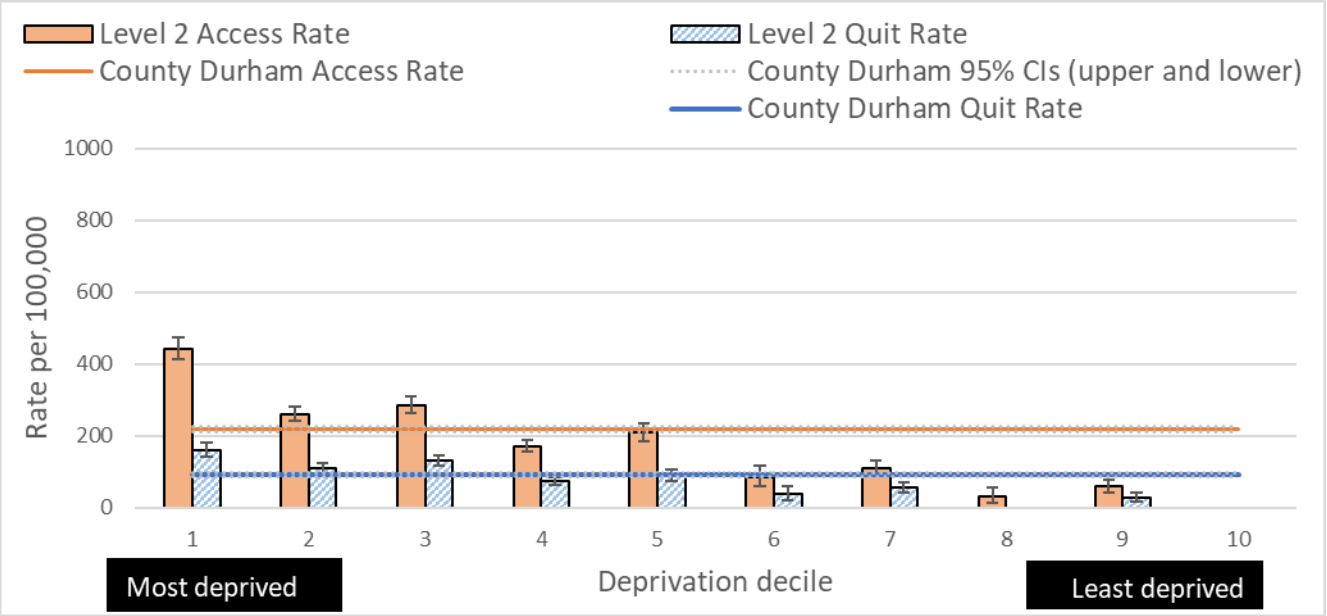
Figure 11 shows a clear inverse gradient for access, where the rate of people accessing Level 2 services is greater in the more deprived areas. This is an encouraging finding.

Access rates in the 30% most deprived deciles nationally are statistically significantly higher than County Durham as a whole and the lesser deprived deciles 4 to 10.

The gradient is less evident for quit rates. In terms of quit rates, deciles 1 and 3 have statistically significantly higher quit rates than County Durham as a whole and the lesser deprived deciles 4 to 10. Decile 2 has a rate similar to County Durham as a whole and decile 5.

A caveat here is the small numbers of quits dates set with the Level 2 service from March 2020 onwards, just 7% of all quit dates. These findings may therefore not be representative of the service as it recovers from the C-19 pandemic.

Figure 11: Access and 4-week quit success (19/20 – 21/22) DASR per 100,000 for Level 2 service by deprivation decile (ID 2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI**.**



n.b. In decile 10 numbers for access and quits are too small to confidently calculate DASR (<10). This is also the case for quits in decile 8.

Stop smoking service for pregnant smokers

In the three-year period of this HEA there were:

- 2,105 referrals to the stop smoking service for pregnant smokers;
    - giving a rate of 446.2 per 100,000.
- 1,271 people who accessed the service;
    - a rate of 270.0 per 100,000
- 433 who quit;
    - a rate of 92.2 per 100,000

This is shown in Figure 12. There is a statistically significant fall in the rate between each stage of referral, access and 4-week quit. This demonstrates the challenge of engaging pregnant smokers with the service and achieving successful quits.

Figure 12: Referral, access and 4-week quit success (19/20 – 21/22) DASR per 100,000 female populations (15-59 years) for pregnancy service County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI**.**

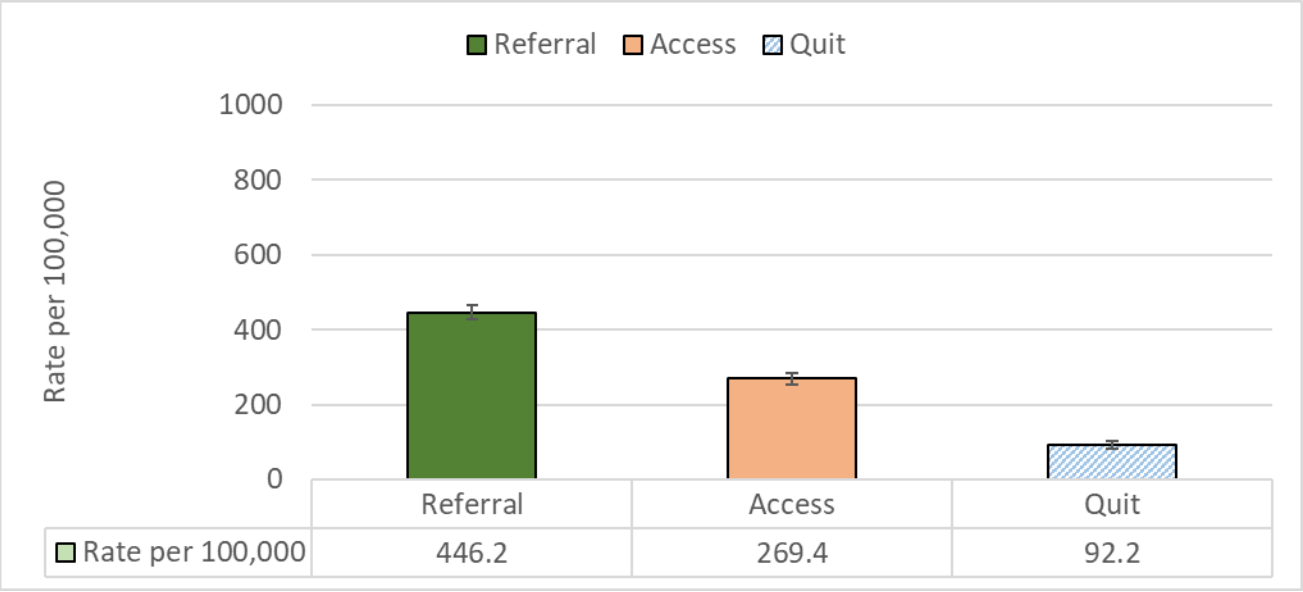
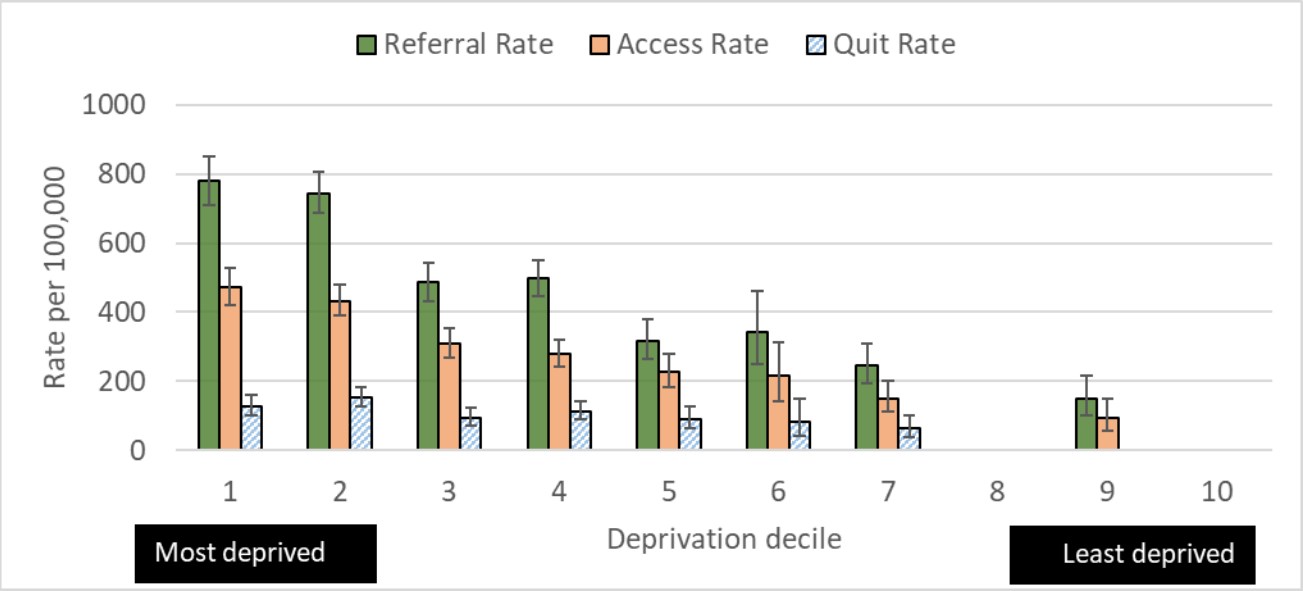


Figure 13: Referral, access and 4-week quit success (19/20 – 21/22) DASR per 100,000 female populations (15-59 years) for pregnancy service by deprivation decile (ID 2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI**.**



n.b. In deciles 8 and 10 numbers of referrals, access and quits are too small to confidently calculate DASR (<10). This is also the case for quits in decile 9.

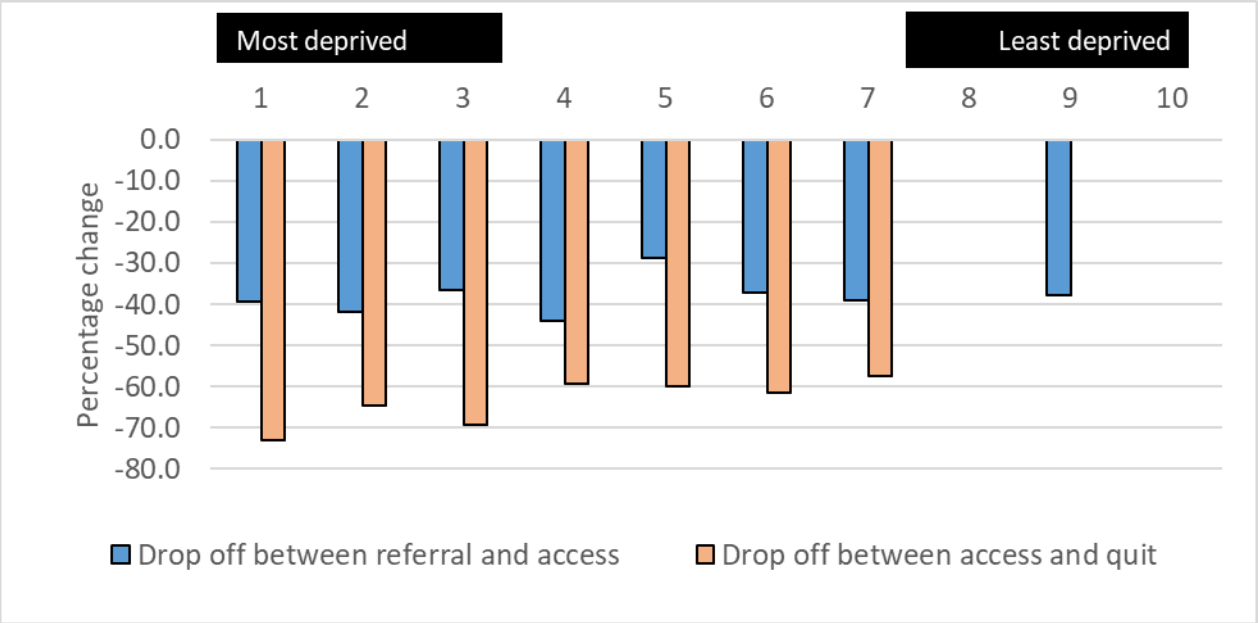
Figure 13 shows is a clear inverse gradient in the referral rate and access rate for pregnant smokers. Referral and access rates are higher in the more deprived areas. This is an encouraging finding. The gradient is less evident for quit rates.

The referral rate access and quit rates in only deciles 1 and 2 are significantly higher than the County Durham rate overall. This suggests that targeting by deprivation in decile 3 is less effective.

In deciles 1 to 4 the there is a statistically significant fall in the rate between each stage of referral, access and 4-week quit. In the lesser deprived deciles to drop off at each stage is not significantly different. The following analysis examines this in greater detail.

In County Durham as a whole, the access rate is 39.6% lower than the referral rate. This percentage change is consistent across the deciles. However, the drop off between access rate and quit rate is more pronounced. Across County Durham, quit rates are 65.8% lower than access rate. In decile 1 this increases to 72.9% compared to 57.3% in decile 8 (figure 14)

Figure 14: Drop off between referral, access and quit, percentage change in DASR (19/20 – 21/22) DASR per 100,000 female populations (15-59 years) for pregnancy service by deprivation decile (ID 2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI**.**



n.b. In deciles 8 and 10 numbers are too small to confidently calculate DASR (<10). This is also the case for quits in decile 9.

These drop off rates are stark at a county level and it concerning concern that the gap between access and quit rates are higher in the more deprived areas.

Conclusion

This report highlights the significant and continued challenge of relatively high rates of smoking prevalence in County Durham. The analysis finds that both the stop smoking service overall and the SpSSS on its own, are contributing to reducing inequalities associated with deprivation. Greater rates of access and 4-week quits successes are observed in the more deprived areas which is relative to need. However, the relative gap is larger for the targeting of access (i.e. setting quit dates) than that in relation to successful 4-week quit outcomes.

Compared to the previous HEA profiles, the stop smoking service overall has maintained and the distribution relative to need which was demonstrated in the 2018 HEA.

The SpSSS on its own has demonstrated greater targeting of provision in relation to need in the 2023 equity profile, for both access and quit rates, compared to both 2018 and 2014.

Whilst it was not possible to perform as comprehensive analysis for the Level 2 service users and pregnant smokers due to small numbers, the analysis conducted was broadly positive for access. We find that access to services is targeted to the most deprived areas within the county. This is also true for rates of referrals into the service for pregnant smokers.

The gradient is less evident for quit rates in the Level 2 service and for pregnant smokers. The analysis finds that achieving successful 4-week quit outcomes is particularly challenging across the range deprivation deciles for pregnant smokers. There is little evidence of an inverse social gradient here. Indeed, the drop off between access and quit dates is larger in the more deprived areas which is of concern.

Coordinated and sustained efforts need to be agreed and implemented by all partners including the local authority, NHS commissioning teams and primary care to facilitate continued improvements in targeted access to stop smoking services to improve outcomes and reduce health inequalities for the resident population of County Durham.

Recommendations

There are four recommendations that have been developed from this Health Equity Audit which are:

1. To celebrate the successes highlighted from the report and better understand how the service has achieved an increase in the number of people accessing the service from our most deprived communities and build on this success.

2. Review how the service can increase the rate of people from Deciles 1-3 who go on to quit at 4 weeks including reviewing the provision offered to this cohort. This should include a review of the quit rate in deprivation decile two for the Level 2 service.

3. Link in with our NHS colleagues as part of the NHS Treating Tobacco Dependency service to share the findings of the Health Equity Audit. Undertake further in-depth work with ICS colleagues to understand how to increase the engagement of pregnant smokers within services and promote a higher quit rate, with a focus on reducing the gap between access and quits in the more deprived areas.

4. To work with ABL Health to explore the access and quit rates for several priority or vulnerable groups including examples such as; those with a registered Severe Mental Illness, those in routine and manual work, those from the LGBTQ+ community, those with a recorded Long Term Condition and Veterans.

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Appendix A

Appendix A shows bar charts of access and 4-week quit rates at MSOA level, for the whole service.

Figure A1: Access (19/20 – 21/22) DASR per 100,000, whole service, by MSOA and broken down by top 30% most deprived or not (ID2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI.

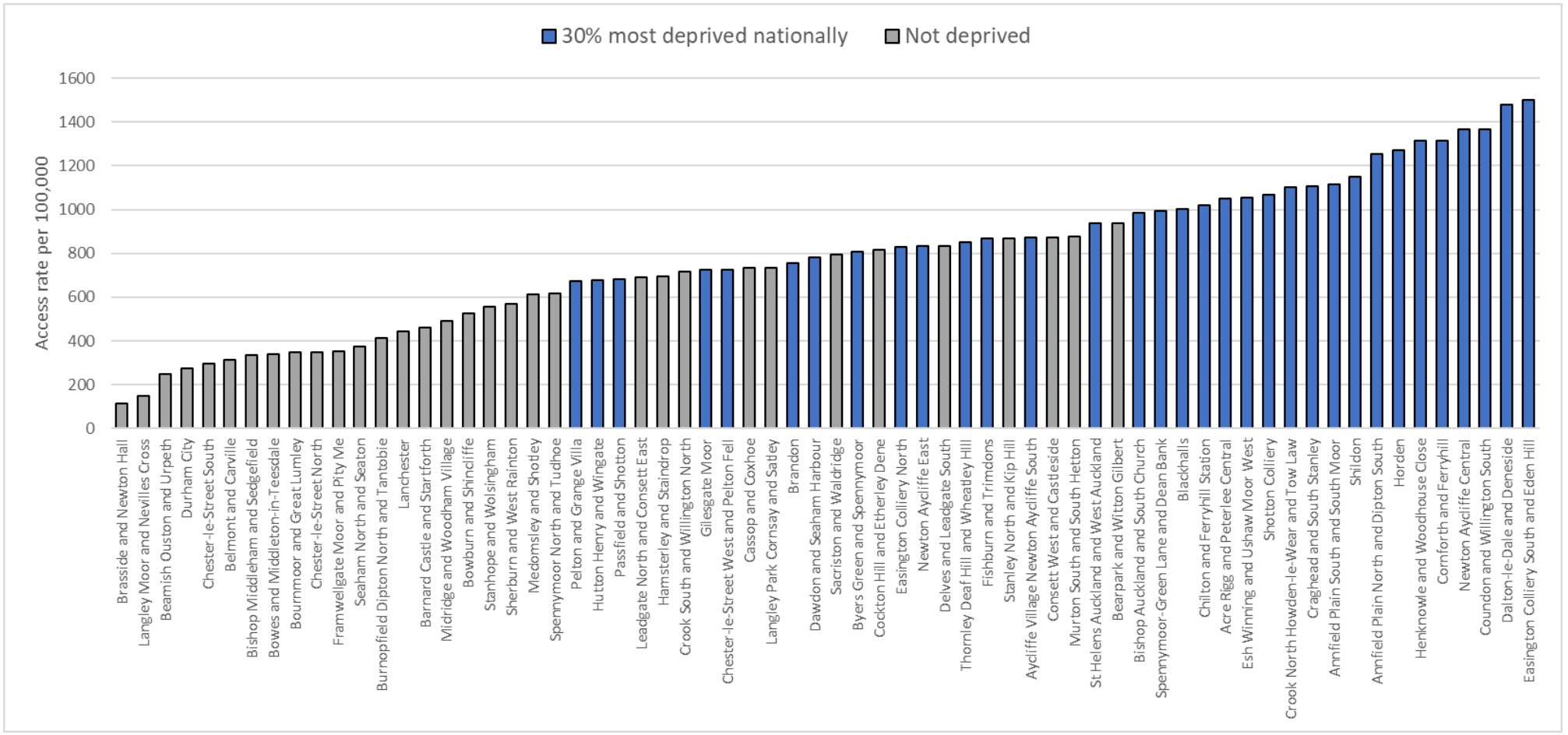

Figure A2: 4-week quit success (19/20 – 21/22) DASR per 100,000, whole service, by MSOA and broken down by top 30% most deprived or not (ID2019), County Durham. Source: 1SYSTEM4HEALTH database, DCCPHI