Can a structured reduction approach help pregnant smokers move from ambivalence to action?

Somerset Council

Tracey Hellyar – Team Manager and Author

Contents

Section	Page
Introduction	2
Cut Down to Stop in Pregnancy	3
Key findings from the evaluation	3
Definition of comparison cohorts	4
Cut down to stop triage, and pathway allocation	4
Movement between treatment pathways	5
Carbon Monoxide monitoring	5
Financial incentives	5
Non-engagers	6
Cut Down to Stop in Smokefree Families	7
Cohort profile and engagement with Cut Down to Stop	7
Service engagement across the eligible cohort	8
Standard Smokefree Families pathway outcomes	8
Client flow, pathway allocation and outcomes	9
Cut Down to Stop engagement, reduction and quit outcomes	9
Referral routes	10
Gestation at referral and quit date, with 12-week CO- verified outcomes	11
Socio-economic status	12
Lower-layer Super Output areas (LSOAs) deprivation profile and core 40 reach	12
Additional needs	14
Smoking status at referral	14
Treatment methods recorded during the cut down to stop pathway	15
Time spent on cut down to stop before setting a quit date	16
Clients who set a quit date	17
Quit outcomes	18
Postnatal and relapse-prevention support	18
Not quit and lost to follow-up	19
Key findings and conclusions	20
Implications for service delivery	21
Limitations	21
Case studies	22
Appendices	24
Bibliography	25

Introduction

Smokefree Families is Somerset's specialist smoking cessation service for pregnant smokers and their families, fully funded by Public Health Somerset Council. Established in 2009, the service became an in-house Somerset Council service in 2025 with the introduction of honorary NHS contracts. The service delivers a comprehensive, NICE-compliant smoking cessation offer with a clear focus on achieving smokefree pregnancies and improving outcomes for women, babies and families. The service provides a wide range of evidence-based interventions, including behavioural support, nicotine replacement therapy, vaping support, financial incentives through voucher schemes, Carbon Monoxide self-monitoring using iCOquit devices, home visits, and support for significant others and household members to quit smoking alongside the pregnant client. As a result of sustained investment and partnership working, Somerset has achieved a substantial reduction in Smoking at the Time of Delivery (SATOD), falling from 18.9% in 2010 to 4.7% in 2026. Whilst this represents significant progress, a proportion of pregnant smokers continue to decline or disengage from traditional cessation support. The Smokefree Families service therefore continues to explore innovative, evidence-based approaches to engage those who are not ready for an immediate quit attempt, ensuring that support remains accessible, personalised and responsive to individual circumstances. The Cut Down to Stop (CDTS) pathway was developed within this context as an additional intervention designed to support pregnant smokers who are willing to change but are not yet ready to quit abruptly.

Implementation of the CDTS pathway did not require additional consent processes, maternity governance approval or changes to existing referral pathways. Through honorary NHS contracts, Smokefree Families practitioners have direct access to BadgerNet and maternity systems, enabling automatic notification of all pregnant smokers and vapers through the Midwifery Single Point of Access (SPA) and early proactive contact. The service is fully integrated within maternity pathways, and the CDTS offer is routinely included within Saving Babies' Lives Care Bundle Element 1 training delivered to midwives, ensuring awareness of the pathway and enabling discussions with women who may be ambivalent about stopping smoking. The model provides multiple opportunities for engagement throughout pregnancy, including initial SPA notification, booking appointments and 12-week scans, helping to ensure that no eligible woman is missed. Access to BadgerNet also enables ongoing audit and quality assurance to confirm that all eligible women have been offered support. In addition, follow-up communications were adapted during the evaluation period, with the third contact text message specifically introducing the CDTS pathway to women who had not engaged with initial contact attempts.

Cut down to stop in pregnancy

The Smokefree Families service is designed to support individuals through a structured, evidence-based approach to achieving smokefree status during pregnancy, with the clear aim of complete abstinence. The standard treatment model prioritises setting a quit date and stopping smoking in one step; however, it is recognised that for some individuals, this approach is not immediately achievable.

Within this context, the CDTS approach has been introduced as an alternative, structured pathway for those who are motivated to change but are not yet ready to commit to quitting completely. Although CDTS is not recommended as a primary approach during pregnancy due to the ongoing risks associated with continued smoking, it can provide a practical and supportive option to maintain engagement with service users who may otherwise disengage from support.

The CDTS programme offers a structured period of gradual reduction in tobacco use, supported by behavioural interventions and, where appropriate, nicotine replacement therapy (NRT) or a vape, with the explicit goal of achieving complete abstinence within a defined period. Evidence-based guidance suggests that this reduction phase should typically take place over a six-week period, allowing sufficient time to build confidence, develop coping strategies, and move towards a quit date while maintaining momentum.

This evaluation explores whether a structured CDTS programme can effectively support pregnant individuals who are not ready to stop smoking immediately. Specifically, it considers whether CDTS can:

- Maintain engagement with those unable or unwilling to set an initial quit date.
- Build trust and strengthen the therapeutic relationship with practitioners
- Increase motivation and confidence to quit.
- Enable individuals to set and achieve a quit date within six weeks.

In addition, the evaluation will consider the role of NRT / vapes within this approach, both during the reduction phase to support withdrawal management and following the achievement of a quit date, where up to a further 12 weeks of treatment may be provided as part of the standard programme.

This evaluation aims to determine whether CDTS can function as an effective engagement and transition tool, supporting individuals to move from ambivalence to action, while still maintaining a clear focus on the overarching goal of complete smoking cessation in pregnancy.

Key findings from the evaluation

The evaluation findings provide an overview of how the CDTS pathway was used in practice, including levels of engagement, progression to a quit attempt, quit outcomes and the characteristics of clients accessing the pathway.

- Forty-nine pregnant clients were recorded as using CDTS.
- Thirty-five clients set a quit date, representing 71.4% of the cohort.

- Twenty-seven clients achieved a CO-verified 4-week quit outcome (55.1%).
- Twenty-five clients achieved a CO-verified 12-week quit outcome (51%).
- The largest socioeconomic groups were Home Carers (Unpaid), Never Worked or Unemployed for Over One Year, and Routine and Manual Occupation, showing that CDTS is reaching groups where health inequalities may be more pronounced.
- Many clients presented with multiple additional needs, including poor mental health, long-term health conditions and previous substance use.
- CDTS was used across light, moderate, and heavy smokers, showing that readiness to quit is not solely determined by baseline smoking level.
- Eight clients were recorded as Not Quit or Lost to Follow-Up (LTFU) at 4 weeks, representing 16.3% of the cohort.
- Eight clients were recorded as Not Quit and two as Lost to Follow-Up (LTFU) at 12 weeks, representing 20.4% of the cohort.

Definition of comparison cohorts

Throughout this report, the term *standard cohort* refers to pregnant clients who entered the standard Smokefree Families treatment pathway during the same evaluation period and were ready to agree a quit date without first entering the CDTS pathway. Where analysis uses the full eligible population or broader service activity data, this is described as the *wider Smokefree Families cohort*. Comparisons presented within this evaluation are descriptive and should not be interpreted as demonstrating statistically significant differences between groups.

Cut down to stop triage, and pathway allocation

All referrals received by Smokefree Families enter the service through the same referral process and undergo an initial triage conversation to assess smoking behaviour, motivation to quit, engagement and readiness for change. Following assessment, clients are allocated to the most appropriate pathway based on their individual circumstances and willingness to engage with smoking cessation support. Those who are ready to quit are offered the standard Smokefree Families pathway, including behavioural support, pharmacotherapy and an agreed quit date.

For clients who express a desire to change but are unwilling or unable to commit to an immediate quit attempt, the CDTS pathway is offered as an alternative route into support. CDTS provides a structured reduction programme supported by behavioural interventions, nicotine replacement therapy and/or vaping products where appropriate, while maintaining complete smoking cessation as the overall goal.

During triage, clients are advised that CDTS is intended to support progression towards a quit attempt rather than ongoing smoking reduction. The aim of working towards a quit date within six weeks is discussed at the outset and presented as a shared treatment goal. Practitioners work collaboratively with clients to agree realistic reduction targets, review progress regularly

and build confidence towards a future quit attempt whilst maintaining engagement with support.

Movement between treatment pathways

Pathway allocation was not intended to be fixed. Clients entering the CDTS pathway remained within the structured reduction programme until a quit date had been agreed and reached. Once a quit date had been achieved, clients transferred onto the standard Smokefree Families treatment pathway and received the same ongoing behavioural support, pharmacotherapy and follow-up as other clients undertaking a quit attempt. Within this evaluation, 35 of the 49 clients (71.4%) progressed to setting and reaching a quit date and therefore transitioned onto the standard treatment pathway. No clients within the evaluation period were recorded as moving from the standard Smokefree Families pathway onto the CDTS pathway. Future data collection could record pathway transitions more systematically, including the reasons for transfer and subsequent outcomes.

Carbon Monoxide monitoring

Within CDTS, practitioners explore smoking triggers, routines and barriers to change, monitor progress and provide ongoing behavioural support. Carbon Monoxide (CO) monitoring is used both as a supportive behavioural tool during the reduction phase and to verify smoking cessation outcomes. During this phase, practitioners interpret CO readings alongside self-reported cigarette consumption, smoking patterns and the timing of the most recent cigarette. Clients are advised that a single CO reading reflects recent exposure to CO and does not provide a direct measure of cigarette consumption over time. Practitioners therefore avoid using isolated CO readings as evidence that a client has failed to make progress and instead use trends over time and the wider clinical discussion to support motivation and behavioural change. CO readings are also used to verify successful quit outcomes at both the 4-week and 12-week outcome points in line with standard service practice.

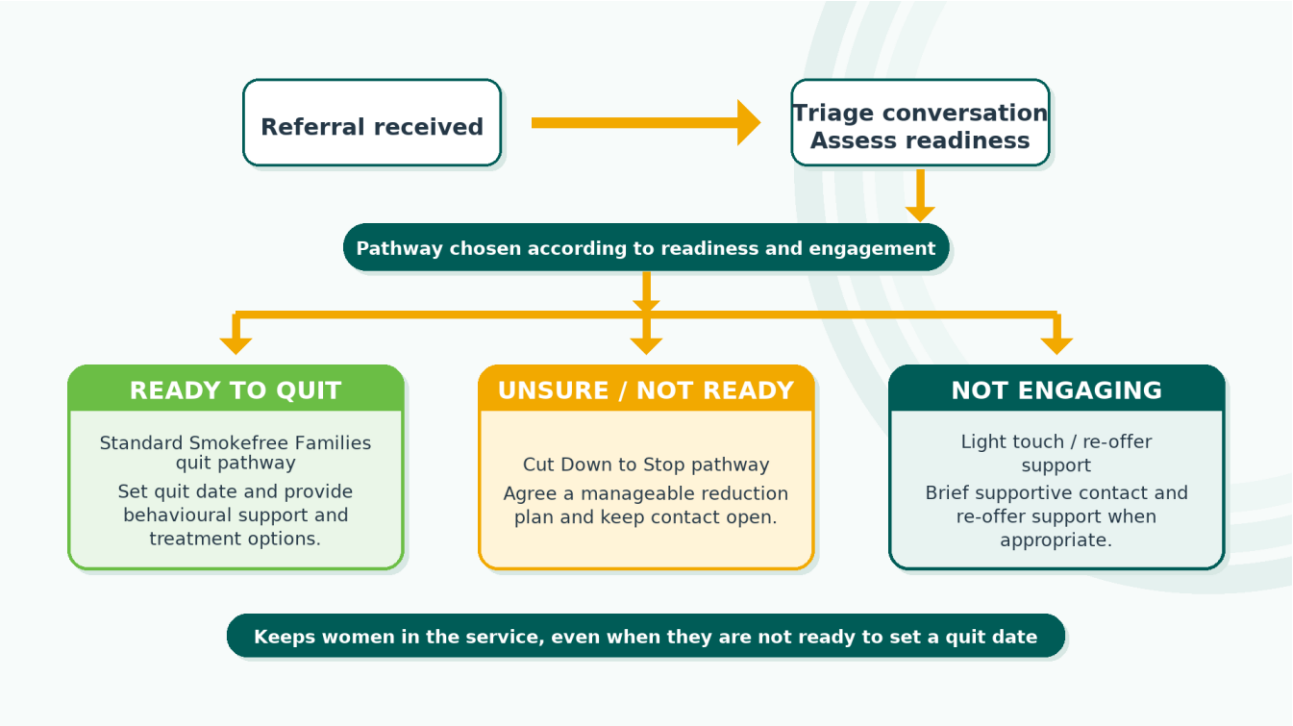
Financial incentives

Somerset Council has continued to use its established local incentive scheme, which has operated since 2009. Clients received a £20 voucher at their first face-to-face appointment. Clients entering the CDTS pathway did not receive additional incentives solely for reducing their smoking. Eligibility for further vouchers was linked to progression to a quit attempt and achievement of CO-verified quit outcomes in accordance with the standard Smokefree Families incentive schedule. Incentives therefore formed part of the wider Smokefree Families treatment offer rather than a separate component of the CDTS intervention.

A summary of the Smokefree Families incentive schedule is provided in Appendix 1.

Non-engagers

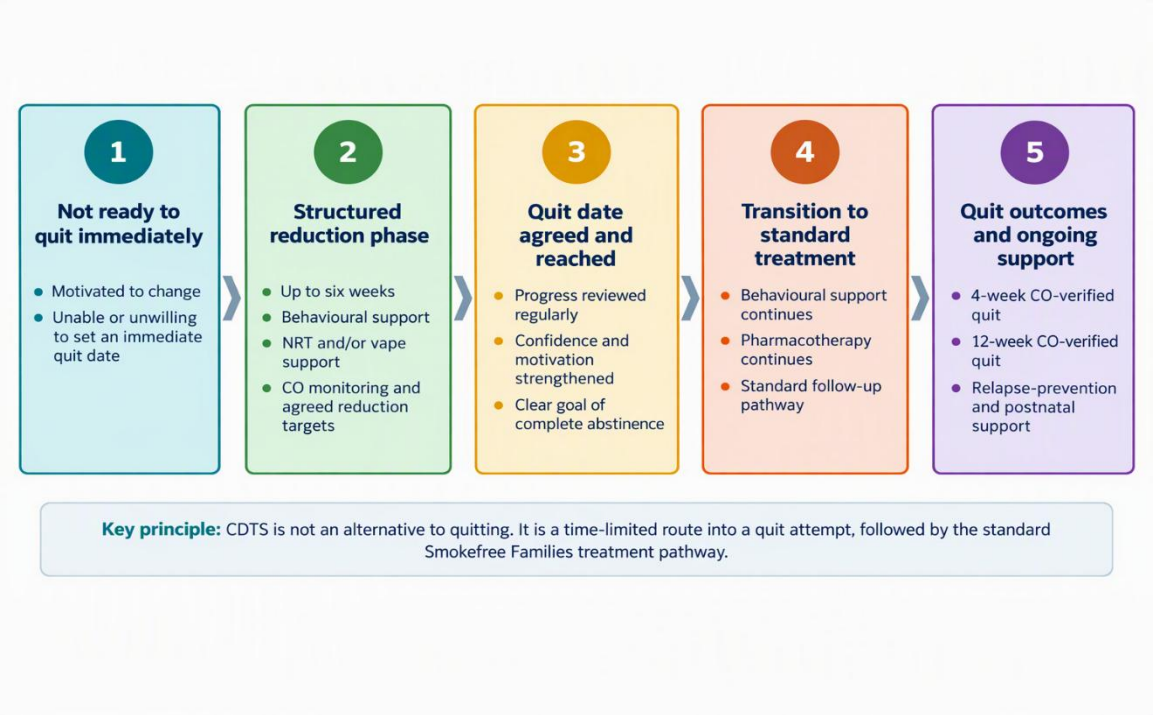
For clients who are not engaging with support, a light-touch approach is adopted to maintain contact and periodically re-offer support. This triage model was designed to ensure that women remain connected to the service, even when they are not ready to set a quit date, reducing the risk of disengagement and creating additional opportunities for progression towards a smokefree pregnancy.



Cut down to stop in Smokefree Families

The CDTS pathway provides a structured, time-limited approach for clients who are not ready to quit immediately, supporting gradual smoking reduction with the aim of progressing to a supported quit attempt and the standard Smokefree Families treatment pathway.

A structured bridge from ambivalence to a supported quit



Cohort profile and engagement with cut down to stop

This evaluation examines service activity between 1 October 2025 and 31 March 2026, during which a total of 307 referrals were received for pregnant smokers. Of these, forty-eight pregnancies did not continue due to miscarriage or termination, and two individuals moved out of the area, leaving a cohort of 257 pregnant smokers eligible for support.

The 48 pregnancies that did not continue were excluded from the evaluation as they were no longer eligible for inclusion within a pregnancy-specific smoking cessation pathway. However, exclusion from this analysis should not be interpreted as indicating that support was no longer offered. In line with standard Smokefree Families practice, ongoing smoking cessation support continued to be available following pregnancy loss or termination where this was wanted by the individual. Information relating to post-pregnancy support was not collected as part of this evaluation and is therefore not reported within the findings.

Within this group, forty-nine individuals engaged with the CDTS offer, representing 19% of the eligible cohort. For those who did not wish to set a quit date, commonly reported reasons included previous unsuccessful quit attempts, perceptions of quitting as too pressurised, not feeling ready to stop, a preference to quit on their own terms, a desire to use up existing tobacco, and influence from partners who were also choosing to cut down rather than stop completely.

Overall, these findings highlight the importance of addressing readiness, confidence and external influences when supporting behaviour change during pregnancy.

Service engagement across the eligible cohort (n=257)

Of the 257 eligible pregnant smokers, 101 (39.3%) engaged with the standard Smokefree Families pathway (the standard cohort) and 49 (19.1%) engaged with the CDTS pathway (the CDTS cohort).

Combined, this represents 150 women (58.4%) who engaged with specialist smoking cessation support during pregnancy. Of those who did not engage with a treatment pathway, 16 (6.2%) had already stopped smoking independently prior to contact, 30 (11.7%) declined support, 7 (2.7%) opted out of all contact and 54 (21.0%) could not be contacted despite repeated attempts to engage them. These findings demonstrate that while not all pregnant smokers were ready or able to engage with behavioural support, the service successfully engaged over half of the eligible cohort through either the standard Smokefree Families pathway or the CDTS programme. Together, these pathways provided opportunities for support across a range of readiness levels, highlighting the value of offering both immediate cessation and reduction-based approaches to maximise engagement during pregnancy.

Standard Smokefree Families pathway outcomes

Of the 101 pregnant smokers who engaged with the standard Smokefree Families pathway, 65 (64.4%) set a quit date, 54 (53.5%) achieved a CO-verified 4-week quit outcome and 50 (49.5%) achieved a CO-verified 12-week quit outcome. Comparisons with the CDTS cohort should be interpreted cautiously because clients entering CDTS were specifically identified as not being ready to set an immediate quit date and may therefore have differed in their readiness for behaviour change at the point of engagement. Nevertheless, the similar 4-week and 12-week quit outcomes achieved across both pathways suggest that a structured reduction approach may provide a viable route into successful cessation for women who are not ready to attempt abrupt quitting at first contact.

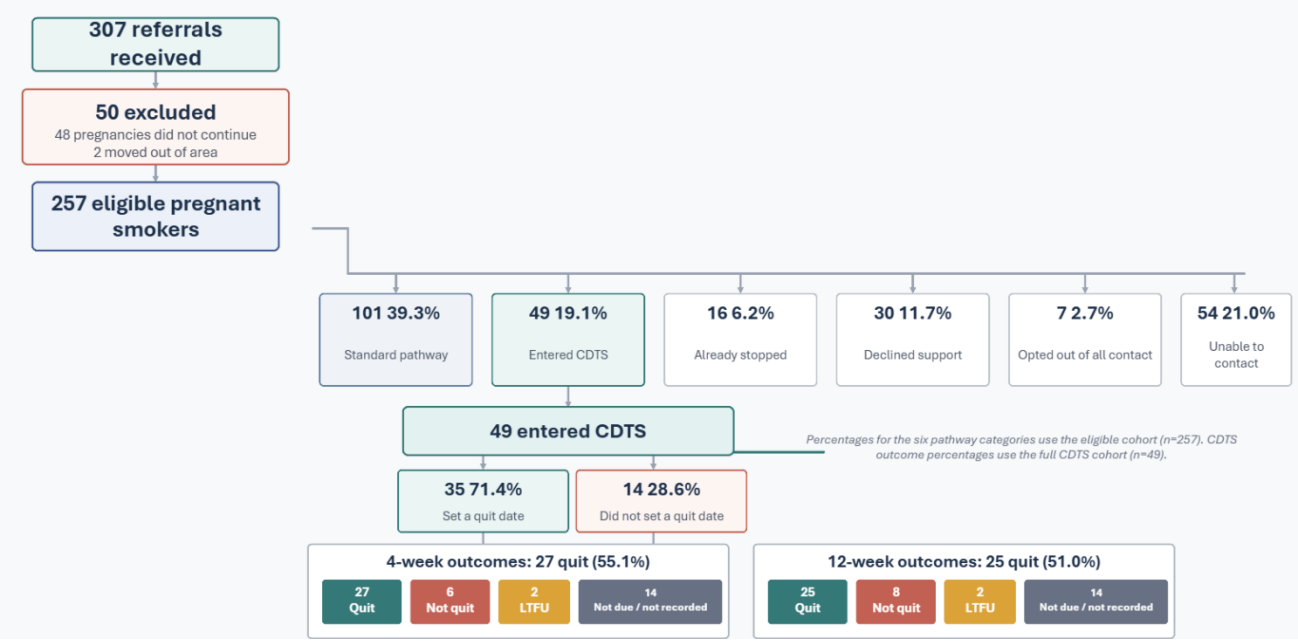
Table 1

Outcome	Standard Pathway (n=101)	CDTS (n=49)
Quit date set	64.4%	71.4%
4-week quit	53.5%	55.1%
12-week quit	49.5%	51.0%

Client flow pathway allocation and outcomes

Of the 49 clients who entered CDTS, 35 (71.4%) subsequently set a quit date. This shows that a substantial proportion of the CDTS cohort were able to progress from a reduction approach to making a quit attempt.

Cut Down to Stop: client flow and outcomes



Flow of referrals, pathway allocation and outcomes for clients entering the CDTS pathway, 1 October 2025 to 31 March 2026. Percentages for pathway allocation are based on the eligible cohort (n=257), while CDTS outcome percentages are based on the full CDTS cohort (n=49).

Cut down to stop: Engagement, reduction and quit outcomes

The CDTS dataset includes forty-nine pregnant clients who were recorded as using the CDTS pathway. The pathway was used with clients who were not ready to set an immediate abrupt quit date but were willing to engage with structured support to reduce tobacco use, with the overall aim of progressing towards complete abstinence.

The dataset provides a broader picture of engagement and outcomes, including socioeconomic status, additional needs, smoking status at referral, weekly cigarette consumption and reduction, quit-date setting, CO monitoring, CO-verified 4-week and 12-week quit outcomes, and the reason for episode closure.



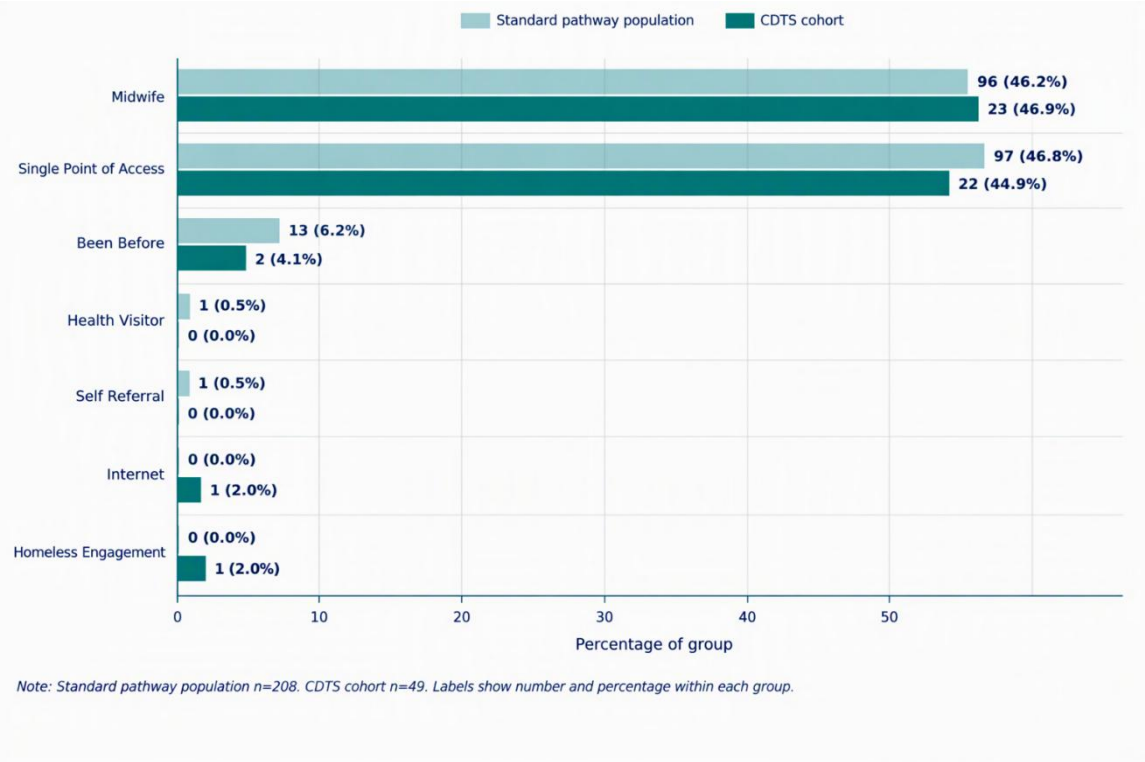
Referral routes

Analysis of referral routes demonstrates that both the CDTS cohort and the wider non-CDTS population were referred predominantly through maternity-related pathways. Within the CDTS cohort, midwives accounted for 23 referrals (46.9%) and the Midwifery Single Point of Access accounted for 22 referrals (44.9%). Within the non-CDTS population (n=208), 96 referrals (46.2%) came directly from midwives, and 97 referrals (46.6%) came via the Single Point of Access. Together, these routes represented over 90% of referrals in both groups, highlighting the crucial role of maternity services in identifying pregnant smokers and facilitating access to support.

Other referral routes accounted for only a small proportion of referrals. Within the non-CDTS population, 13 referrals (6.2%) were from clients who had previously accessed the service, whilst one referral (0.5%) was received from a Health Visitor, and one referral (0.5%) was a self-referral. Within the CDTS cohort, two clients (4.1%) had previously accessed the service, while Internet referrals and Homeless Engagement each accounted for one referral (2.0%).

The similarity in referral patterns between the two groups suggests that CDTS was not reaching women through a different referral mechanism. Instead, women entered the service through the same established maternity pathways as the wider Smokefree Families population. This indicates that the difference was not how women were referred into support, but the type of support pathway offered once they had entered the service.

Referral routes for cut down to stop and standard pathway

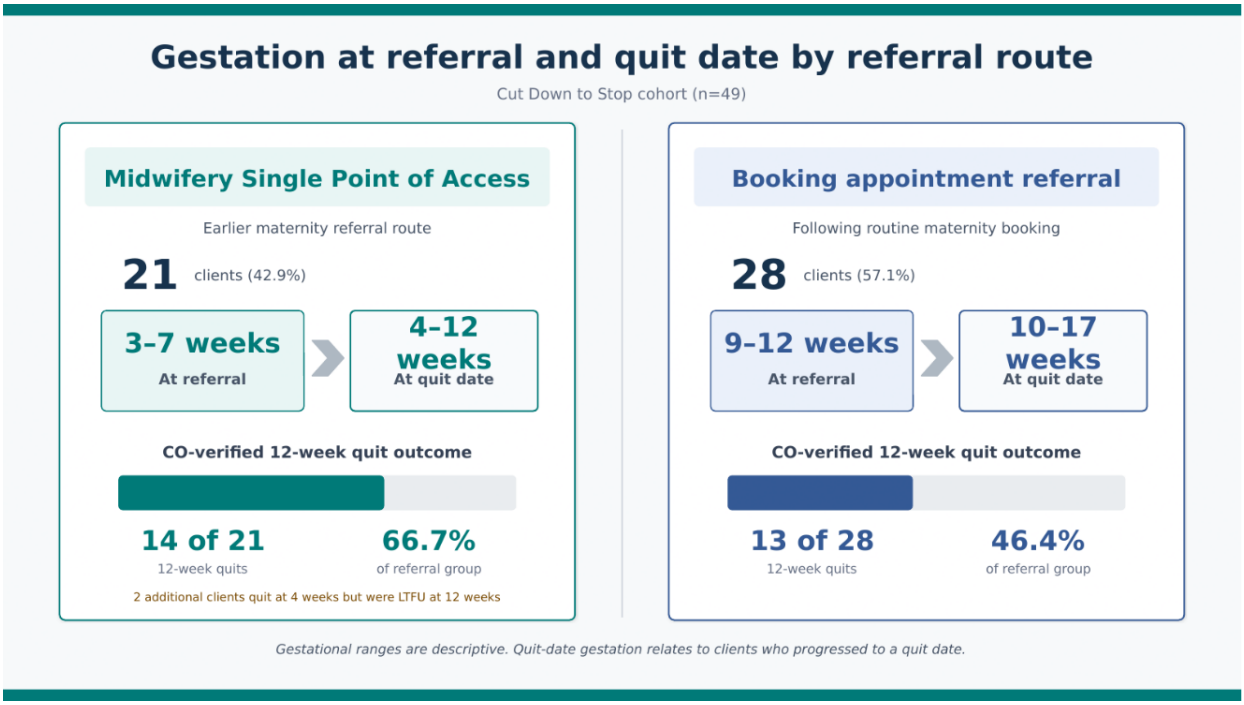


Gestation at referral and quit date, with 12-week CO- verified outcomes

Of the 49 clients who accessed the CDTS pathway, 21 (42.9%) were referred through the Midwifery Single Point of Access at between 3 and 7 weeks' gestation. Among clients in this referral group who progressed to a quit date, gestation at the point the quit date was reached ranged from 4 to 12 weeks. A further 28 clients (57.1%) were referred following their maternity booking appointment at between 9 and 12 weeks' gestation. Among clients in this group who progressed to a quit date, gestation at the point the quit date was reached ranged from 10 to 17 weeks.

Among clients referred through the Midwifery Single Point of Access, 14 of 21 (66.7%) achieved a CO-verified 12-week quit outcome. A further two clients achieved a CO-verified 4-week quit outcome but were subsequently recorded as lost to follow-up at 12 weeks. Within the booking appointment referral group, 13 of 28 clients (46.4%) achieved a CO-verified 12-week quit outcome.

These findings show that referral and progression to a quit date occurred at different stages of pregnancy according to referral route. The Single Point of Access enabled some clients to be referred and progress to a quit date earlier in pregnancy, while clients referred following their booking appointment entered support and reached a quit date later. However, these findings are descriptive. The evaluation was not designed to determine whether earlier referral or earlier progression to a quit date resulted in improved quit outcomes, and no causal conclusions can be drawn.

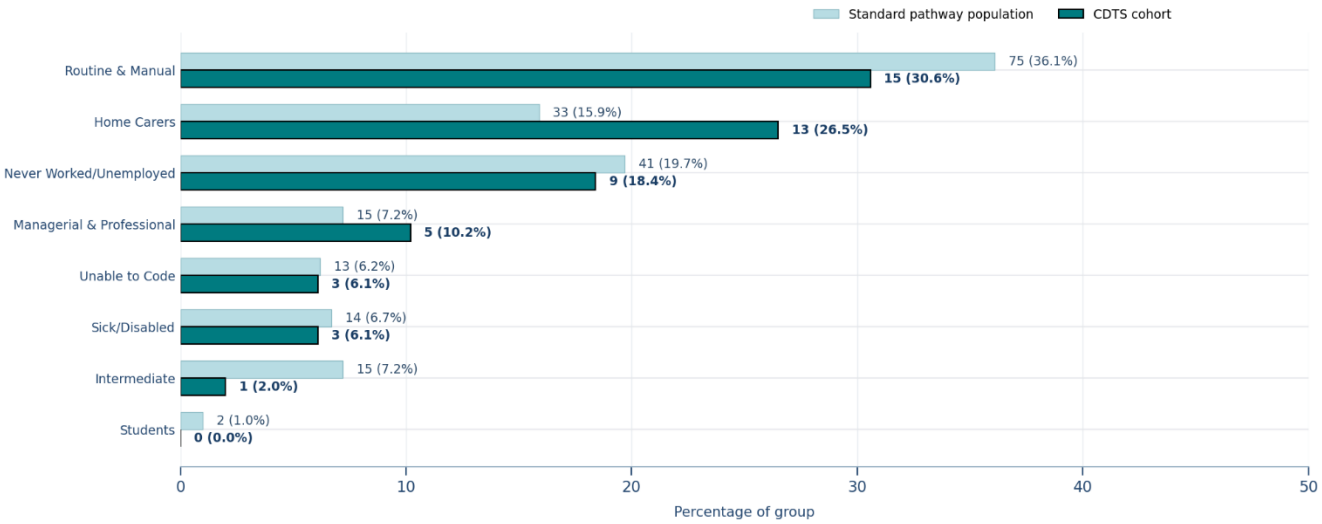


Socioeconomic Status

Comparison of the CDTS cohort (n=49) and the non-CDTS population (n=208) demonstrated broadly similar socioeconomic profiles. In both groups, the largest categories were Routine and Manual Occupations, Home Carers, and those who had Never Worked or were Unemployed. Home Carers represented a higher proportion of the CDTS cohort (26.5% compared with 15.9% in the non-CDTS population), whilst other categories showed relatively minor differences.

Although Home Carers were proportionally more common within the CDTS cohort, the overall socioeconomic profiles were broadly similar. This suggests that CDTS was not attracting a substantially different population from the non-CDTS population but may have provided an alternative route into support for women who were not ready to engage with an immediate quit attempt. As this was a descriptive evaluation and no statistical testing was undertaken, these findings should be interpreted with caution.

Socio-economic status by treatment pathway



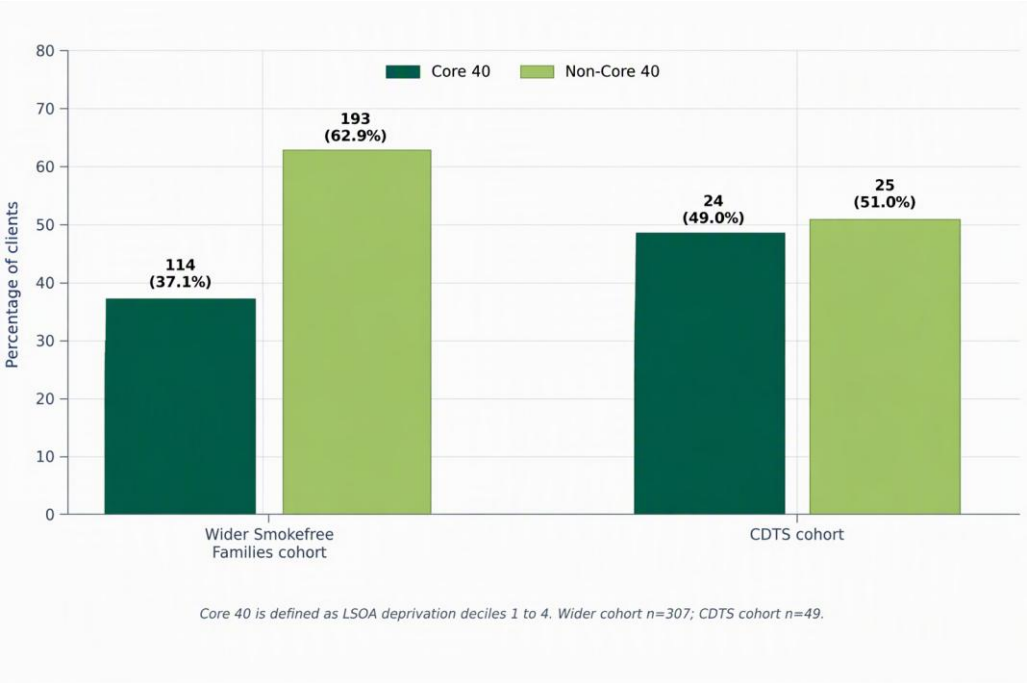
Note: Standard pathway population n=208; CDTS cohort n=49. Unable to Code indicates clients who did not want to share socioeconomic details.

Lower-layer Super Output areas (LSOAs) deprivation profile and core 40 reach

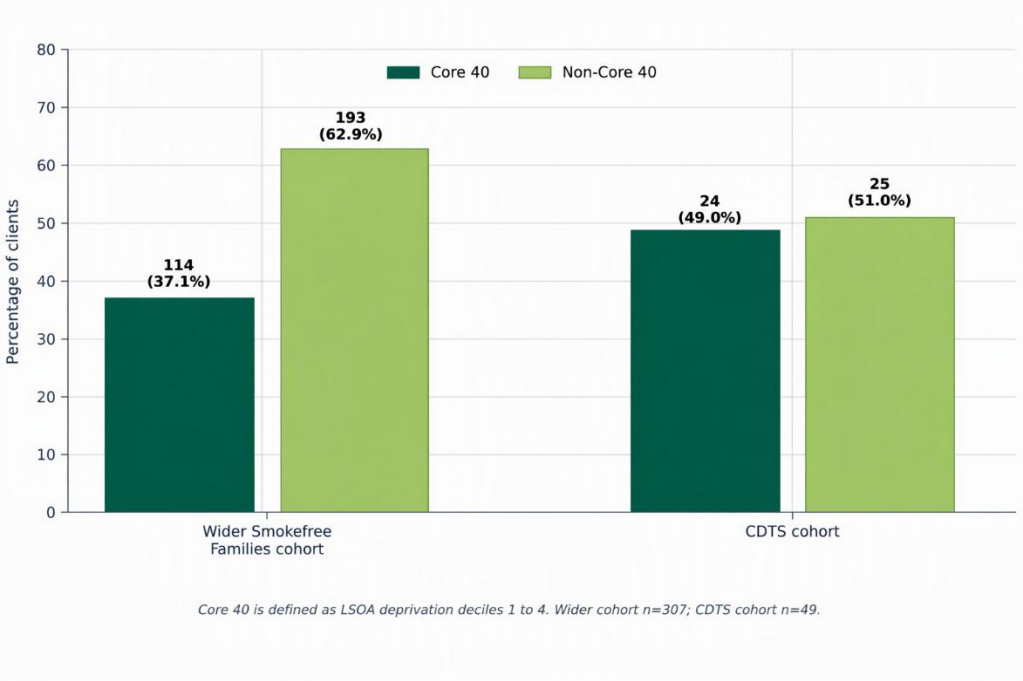
Lower-layer Super Output Areas (LSOAs) are small geographical areas used nationally to describe relative deprivation at neighbourhood level. Within this evaluation, LSOA deciles have been used to identify clients living in the “Core 40” population, defined here as those living in areas ranked within deciles 1 to 4, representing the 40% most deprived areas. Among the 49 clients who accessed the CDTS pathway, 48 had a recorded LSOA decile and one client had no recorded LSOA because they were homeless. Of those with recorded LSOA data, 24 clients were living in Core 40 areas, representing 50.0% of clients with known LSOA data and 49.0% of the full CDTS cohort. This is notably higher than the 37.1% of the wider Smokefree Families cohort living in Core 40 areas during the same period. This indicates that the pathway was reaching a substantial proportion of clients living in areas of higher deprivation. Importantly, Core 40 clients were also represented among those who achieved quit outcomes: 13 of the 27

clients who achieved a 4-week quit were from Core 40 areas, and 13 of the 25 clients who achieved a 12-week quit were from Core 40 areas.

Core 40 representation: wider cohort vs CDTS



Core 40 representation among CDTS quit outcomes

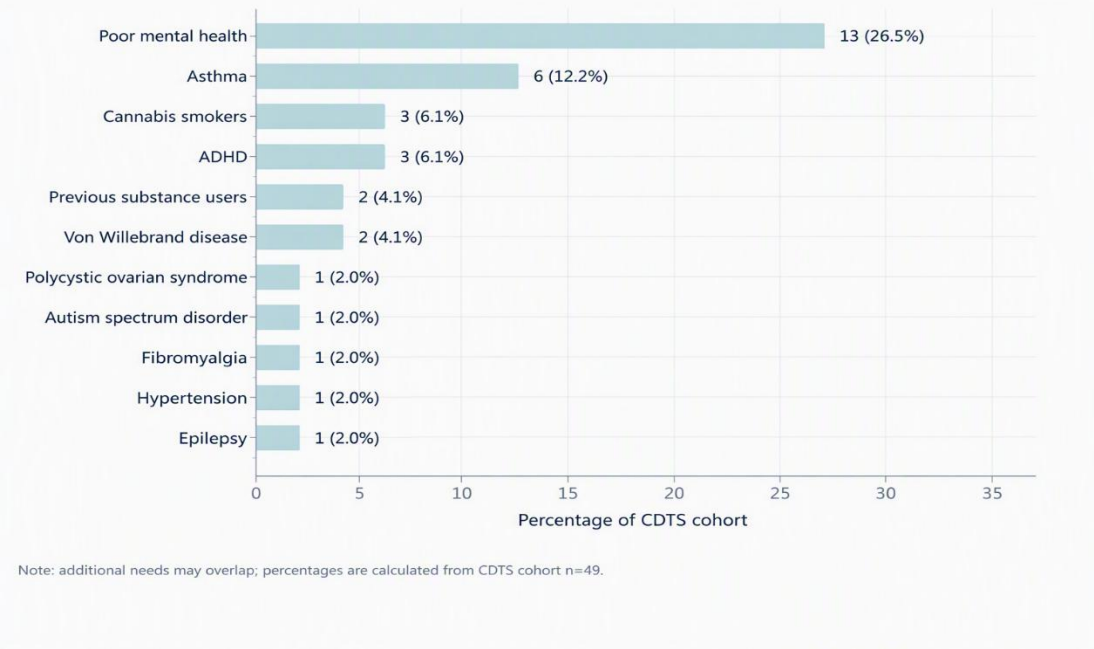


Additional Needs

Analysis of recorded additional needs demonstrates that many clients accessing the CDTS pathway were managing complex health and social circumstances alongside smoking in pregnancy. The most recorded additional need was poor mental health, affecting 13 clients (26.5%) and including conditions such as anxiety, depression, post-traumatic stress disorder and personality disorders. Other commonly recorded needs included asthma (6 clients; 12.2%), ADHD (3 clients; 6.1%), cannabis use (3 clients; 6.1%), previous substance use (2 clients; 4.1%) and Von Willebrand disease (2 clients; 4.1%). Smaller numbers of clients reported epilepsy, hypertension, autism spectrum disorder, fibromyalgia and polycystic ovarian syndrome (1 client each; 2.0%). It is important to note that these additional needs were not mutually exclusive and some clients presented with more than one challenge.

The findings indicate that CDTS was frequently used with women experiencing multiple and often overlapping vulnerabilities, including poor mental health, long-term physical health conditions, neurodevelopmental conditions and substance use. These factors may influence readiness, confidence and capacity to engage with a traditional abrupt quit approach, highlighting the importance of flexible, person-centred support. Consistent with NICE Guideline NG209, the CDTS pathway enables practitioners to maintain engagement whilst building confidence, motivation and self-efficacy towards a quit attempt.

Profile of additional needs among cut down to stop clients

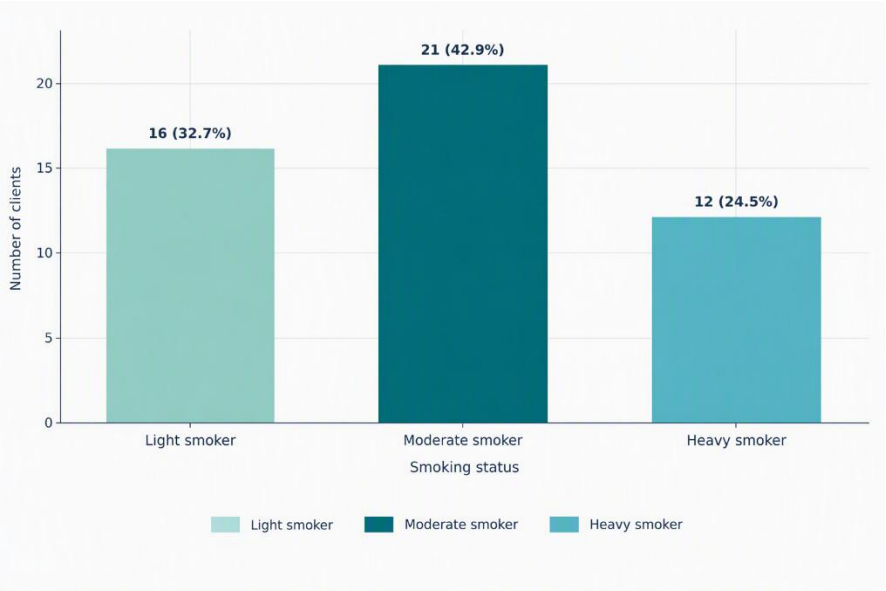


Smoking status at referral

Smoking status at referral was recorded for all forty-nine clients. The largest group was Moderate Smoker, with twenty-one clients (42.9%). Light Smoker was recorded for sixteen clients (32.7%) and Heavy Smoker for twelve clients (24.5%). This shows that CDTS was not limited to one level of smoking dependence. It was used across light, moderate, and heavy smoking groups. This is useful for the evaluation because it suggests that reluctance to set a

quit date is not solely linked to the number of cigarettes smoked. Some lighter smokers still required a gradual pathway, while some heavier smokers were able to engage with reduction and, in some cases, progress to a quit date.

Smoking status at referral



Treatment methods recorded during the Cut down to stop pathway

Treatment methods recorded during the CDTS pathway are shown in Table 2. The most frequently used treatment approach was concurrent vaping and licensed stop smoking medication, which was used by 24 clients (49.0% of the cohort). A further 15 clients (30.6%) used a vape alone, whilst 5 clients (10.2%) used combination licensed NRT, 3 clients (6.1%) used single licensed NRT and 2 clients (4.1%) received behavioural support only. Overall, vaping was recorded as part of the treatment journey for 39 of the 49 clients (79.6%), either as a standalone treatment or alongside licensed stop smoking medication.

All licensed NRT products and vaping options were available to clients across both treatment pathways throughout the evaluation period, with treatment selection based on client preference, clinical suitability and ongoing review of treatment needs.

The highest number of successful quit outcomes was observed among clients using concurrent vaping and licensed stop smoking medication, with 15 clients achieving both a CO-verified 4-week quit and a CO-verified 12-week quit outcome. Among clients using vaping alone, 7 achieved both a 4-week and 12-week quit outcome. Smaller numbers of successful quit outcomes were recorded among clients using combination licensed NRT and single licensed NRT. No successful quit outcomes were recorded amongst the two clients receiving behavioural support only.

These findings should be interpreted cautiously. The evaluation was not designed to compare the effectiveness of different treatment options, and the relatively small numbers within several treatment categories mean that no conclusions can be drawn regarding the relative effectiveness of vaping, licensed stop smoking medication or their combination. The data are

presented descriptively to illustrate treatment use and associated outcomes within the CDTS pathway rather than comparative treatment effectiveness.

Table 2

Treatment Method	Total Clients	4-Week Quit	12-Week Quit
Concurrent vape + licensed medication	24 (49%)	15 (62.5%)	15 (62.5%)
Vape only	15 (30.6%)	7 (46.7%)	7 (46.7%)
Combination NRT only	5 (10.2%)	3 (60.0%)	2 (40.0%)
Single NRT only	3 (6.1%)	2 (66.7%)	1 (33.3%)
Behavioural support only	2 (4.1%)	0 (0.0%)	0 (0.0%)

Note: Percentages in the "Total Clients" column are based on the full CDTS cohort (n=49). Percentages in the 4-week and 12-week outcome columns are based on the total number of clients within each treatment category. Treatment categories are presented descriptively and should not be interpreted as comparative measures of treatment effectiveness.

Time spent on cut down to stop before setting a quit date

Among the 35 clients who progressed to a quit date, 13 (37.1%) did so after approximately one week on the CDTS pathway. A further 6 clients (17.1%) set a quit date after two weeks, 7 (20.0%) after three weeks, 4 (11.4%) after four weeks and 5 (14.3%) after five weeks. Overall, 19 clients (54.3% of those who progressed to a quit date) did so within the first two weeks of entering the pathway.

These findings demonstrate variation in readiness to quit, with some clients progressing rapidly to a quit attempt while others required a longer period of reduction, confidence-building and behavioural support before setting a quit date.

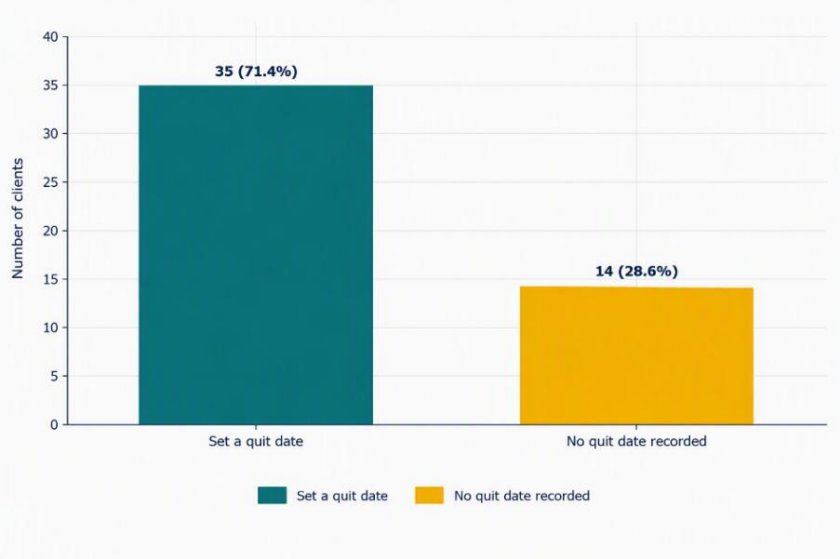
Time taken to set a quit date following cut down to stop referral



Clients who set a quit date

Of the forty-nine clients recorded in the CDTS dataset, thirty-five clients had a quit date recorded, representing 71.4% of the cohort. A further fourteen clients, 28.6%, did not yet have a quit date recorded. This suggests that many clients on the pathway progressed to the point of setting a quit date.

Cut down to stop clients: set quit date recorded



Clients who did not set a quit date

Whilst thirty-five clients (71.4%) progressed to setting a quit date, fourteen clients (28.6%) did not reach this stage of the pathway. A descriptive comparison of socioeconomic characteristics, Core 40 status, smoking level at referral and recorded health needs was undertaken to explore whether any differences were evident between these groups (Appendix 2). Clients who did not set a quit date included a higher proportion of Home Carers, individuals living in Core 40 areas and moderate smokers. However, clients who progressed to a quit date included a higher proportion of heavy smokers and clients with a recorded medical condition. Given the relatively small numbers involved and the absence of statistical testing, these findings should be interpreted as exploratory only.

Although these clients did not progress to a quit date during the evaluation period, the pathway enabled practitioners to maintain contact and continue offering support to a group who may otherwise have disengaged from treatment altogether. Overall, the findings suggest that clients who did not set a quit date represented a mixed population rather than one clearly defined by greater disadvantage, heavier smoking or more complex health needs, reinforcing the importance of a flexible, person-centred approach to smoking cessation support.

4-week quit outcomes

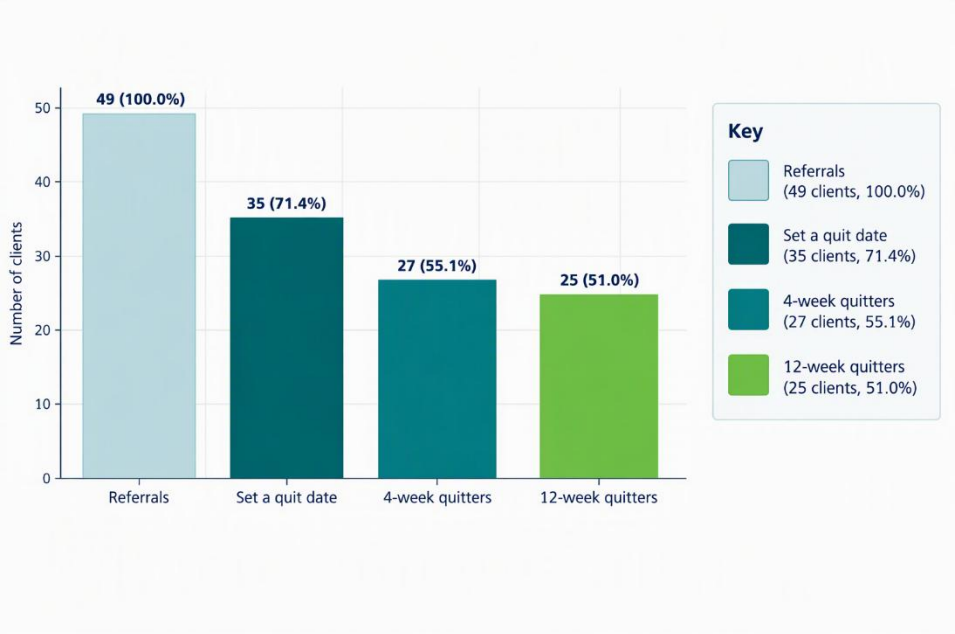
Of the 49 clients who entered the CDTS pathway, 27 (55.1%) achieved a CO-verified 4-week quit outcome. This indicates that more than half of the full cohort progressed from structured reduction to a successful quit attempt, despite not being ready to set an immediate quit date when entering the pathway.

12-week quit outcomes

At 12 weeks, 25 clients (51.0% of the full CDTS cohort) remained quit. The small reduction from 27 clients at four weeks to 25 at 12 weeks suggests that most clients who achieved an early quit maintained abstinence beyond the initial outcome point. Continued monitoring during pregnancy and after birth would provide further evidence about longer-term outcomes.

Importantly, these quit outcomes were achieved amongst a cohort who had specifically entered the pathway because they were not ready to set an immediate quit date, demonstrating that many clients were able to progress from smoking reduction to sustained abstinence despite initial ambivalence towards quitting.

Cut down to stop pathway: referrals, quit dates, 4-week and 12 -week quitters



Postnatal and relapse-prevention support

Support did not automatically end at delivery. Where appropriate, clients continued to receive relapse-prevention support during the postnatal period and could re-engage following a lapse or relapse. However, postnatal outcomes were not recorded consistently enough across the cohort to be included as a separate quantitative outcome in this evaluation. Future evaluation should include routine follow-up after birth to assess sustained abstinence, relapse, re-engagement and continued treatment needs.

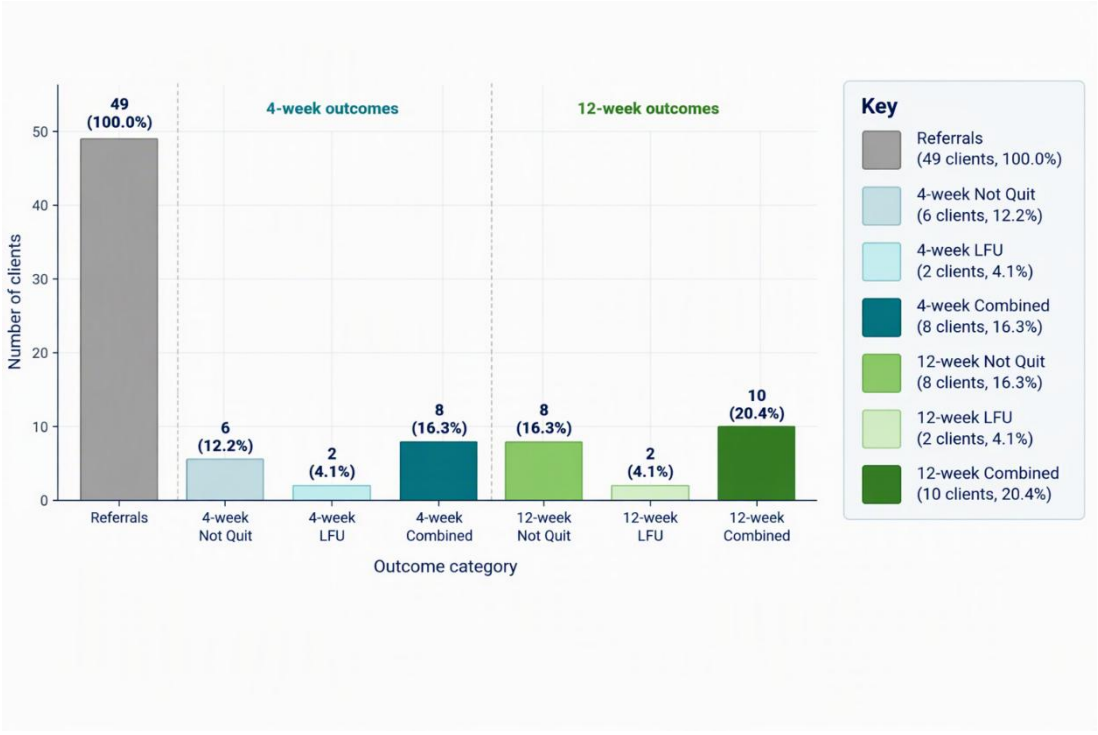
Not quit and lost to follow up outcomes

Whilst many clients progressed to setting a quit date and many achieved successful 4- and 12-week quit outcomes, a smaller proportion either did not successfully quit or disengaged from support. At 4 weeks, six clients (12.2%) were recorded as not quit, indicating that they continued to smoke despite engaging with the pathway. In addition, two clients (4.1%) were recorded as lost to follow-up (LTFU), meaning that their outcome could not be confirmed due to disengagement from the service. Together, this represents eight clients (16.3%) who did not achieve a recorded quit outcome at 4 weeks.

At 12 weeks, 8 clients (16.3%) were recorded as not quit and two clients (4.1%) recorded as lost to follow-up. Combined, this represents ten clients (20.4%) who did not achieve a successful 12-week quit outcome.

Although these outcomes represent a minority of the overall cohort, they highlight the challenges faced by some clients in achieving and maintaining smoking abstinence during pregnancy. Many clients referred into the CDTS pathway presented with complex circumstances, including mental health conditions, socioeconomic challenges, and previous unsuccessful quit attempts, all of which can impact quit success and ongoing engagement with support. Importantly, the low proportion of clients recorded as not quit or lost to follow-up suggests that the flexible and gradual reduction approach offered through CDTS is helping many participants remain engaged long enough to progress towards cessation. Overall, the findings indicate that most clients either achieved a quit outcome or continued to engage with support, providing further evidence that CDTS can be an effective engagement and transition tool within the Smokefree Families pathway.

Cut down to stop not quit and lost to follow-up outcomes



Key findings and conclusions

This evaluation suggests that the CDTS pathway can be an effective engagement and transition tool for pregnant smokers who are unwilling or unable to set an immediate quit date. The findings indicate that CDTS successfully maintained engagement with a group of clients who may otherwise have declined support or disengaged from treatment, whilst keeping the focus on the goal of complete smoking cessation. Of the forty-nine clients who engaged with CDTS, 35 (71.4%) progressed to setting a quit date, demonstrating that the majority were able to move from ambivalence about quitting to taking positive action towards stopping smoking. Importantly, CDTS was not offered as an alternative to the standard abrupt quit pathway. It was specifically targeted at pregnant smokers who were unwilling or unable to set an immediate quit date and who may otherwise have disengaged from support or continued smoking throughout pregnancy. These outcomes were achieved among clients who were not ready to set an immediate quit date when entering the service. Although the evaluation cannot determine what would have happened without CDTS, the findings suggest that the pathway provided a further opportunity for these clients to remain engaged and progress towards cessation.

The pathway also produced encouraging quit outcomes. More than half of the cohort achieved a CO-verified 4-week quit outcome, with 27 clients (55.1%) recorded as quit at four weeks and 25 clients (51.0%) remaining quit at 12 weeks.

The small reduction between the 4-week and 12-week quit outcomes suggests that the support provided through the CDTS pathway helped many clients maintain their quit attempt beyond the initial cessation period, despite facing significant barriers to quitting.

Importantly, the cohort included a substantial proportion of clients experiencing wider health and social challenges, including unemployment, caring responsibilities, long-term health conditions, and mental health needs. The findings therefore suggest that CDTS may have value for clients who require additional time, confidence-building, and personalised support before attempting complete cessation.

Whilst not all clients achieved a successful quit outcome, the proportion recorded as not quit or lost to follow-up remained comparatively low, with eight clients (16.3%) at four weeks and ten clients (20.4%) at 12 weeks.

These findings highlight the importance of ongoing work to strengthen retention and re-engagement, whilst recognising that many participants entered the pathway with complex needs and a lower readiness to quit.

In conclusion, this evaluation provides encouraging evidence that CDTS can support pregnant smokers to move from ambivalence towards a successful quit attempt when an immediate abrupt quit attempt is not acceptable. Rather than acting as an alternative to stopping smoking, CDTS appears to function as an effective bridge into mainstream cessation support, increasing engagement, facilitating quit-date setting, and achieving sustained quit outcomes in a population that may otherwise have remained unsupported. For many of these clients, the alternative was not an immediate quit attempt but continued smoking without ongoing engagement with specialist support. The findings support continuation of the pathway within Smokefree Families and suggest that further evaluation with larger cohorts could strengthen the

evidence base and help identify opportunities to optimise engagement, retention and long-term smokefree outcomes.

Implications for service delivery

The findings should be interpreted within the context of the population accessing the CDTS pathway. Unlike a standard stop smoking programme, CDTS was specifically targeted at pregnant smokers who were unwilling or unable to set an immediate quit date and, in many cases, may not have engaged with smoking cessation support at all without the availability of a reduction-based approach. The pathway therefore provided an opportunity to engage individuals who may otherwise have remained outside of treatment, allowing practitioners to build motivation, confidence and readiness to quit over time. The fact that 71.4% of participants progressed to setting a quit date is particularly significant given that the cohort entered the programme specifically because they were not ready to stop smoking immediately. These findings suggest that CDTS may play an important role in reducing treatment barriers and expanding access to evidence-based smoking cessation support during pregnancy.

Limitations

This was a descriptive service evaluation using routinely collected service data rather than a controlled research study. The CDTS cohort was relatively small, comprising 49 clients, and no statistical significance testing was undertaken. Comparisons with the standard cohort should therefore be interpreted cautiously and are intended to provide context rather than demonstrate causal relationships or statistically significant differences between groups.

Some variables were recorded for service-delivery purposes rather than specifically for evaluation. Consequently, it was not always possible to distinguish whether treatments were used concurrently or consecutively, and the evaluation cannot determine which individual treatment component contributed to a successful quit outcome. Recording of additional needs may also vary according to client disclosure and practitioner documentation.

Outcomes presented in this report describe what was achieved by clients who entered the CDTS pathway. However, the evaluation cannot determine what would have happened had CDTS not been available, nor can it confirm that all recorded quits were additional quits that would not otherwise have occurred. Further evaluation using larger cohorts, more consistent data collection and longer-term follow-up would strengthen the evidence base and help further understand the role of CDTS within pregnancy smoking cessation support.

Although this evaluation explored additional needs within the CDTS cohort, comparable data were not available for the non-CDTS population. Future evaluations should incorporate consistent recording across both pathways to allow comparison of complexity, vulnerability and additional support needs between groups.

Case study 1: Complex physical and mental health needs

This case study illustrates how the CDTS approach can be effectively used for pregnant clients with complex health and social needs who may not be ready or able to quit abruptly.

Client A presented with multiple long-term physical health conditions, including endometritis, migraines, fibromyalgia, chronic fatigue, and asthma, alongside diagnosed depression and ongoing support from the Adult Mental Health Team. She also experienced chronic pain, was using multiple medications, and had additional psychosocial stressors, including a family cancer diagnosis. At the start of pregnancy, she was smoking over twenty cigarettes per day and using cannabis to manage pain, with strong emotional reliance on smoking and low confidence in her ability to quit. This combination of physical illness, poor mental health and behavioural dependence made an abrupt quit attempt unrealistic and highlighted the need for a flexible, harm-reduction approach such as CDTS.

Through CDTS, client A was supported using a trauma-informed, non-judgemental model, allowing her to gradually reduce tobacco use at a pace she could manage. This included a combination of pharmacological support (nicotine patches and vaping as the primary support), behavioural strategies (goal setting, routine changes, and removal of tobacco from the home), and self-monitoring using an iCO device to increase awareness of CO exposure, particularly in relation to cannabis use. Despite multiple setbacks, including illness, nausea, pain flare-ups and significant emotional stress, Client A remained engaged with the service and steadily reduced her cigarette consumption over time, moving from around ten cigarettes per day to 5–6 per day prior to quitting.

Client A went on to make a self-initiated quit attempt, supported by continued use of vaping and NRT, environmental changes, and increased confidence developed through the staged reduction process. She successfully remained smokefree throughout pregnancy and into the postnatal period, with CO-verified abstinence at birth (2ppm) and sustained abstinence beyond 12 weeks. Additional positive outcomes included complete cessation of smoked cannabis alongside tobacco use. Following cessation, the client remained smokefree and did not smoke cannabis, although cannabis was occasionally used via non-combustible methods that did not result in CO exposure. Further positive outcomes included improved coping strategies for stress and pain, and a smokefree home environment supported by her partner also remaining smokefree.

Client A's journey demonstrates that even complex clients with significant physical pain, mental health challenges, and low initial motivation can achieve a successful quit during pregnancy. A flexible, patient-centred CDTS approach, combined with consistent encouragement and tailored pharmacological support, enabled client A to transition from resistance ("I never want to quit") to sustained smokefree status and improved health outcomes for both mother and baby.

Case study 2: Supporting behaviour change through a cut down to stop approach

Client B, a pregnant smoker was referred to Smokefree Families smoking approximately twenty cigarettes per day and expressing a desire to quit but lacking confidence in making an immediate abrupt quit attempt. The client chose to engage with the CDTS pathway and was provided with a vape alongside behavioural support focused on recognising triggers, delaying smoking, managing withdrawal symptoms, and building confidence to quit.

Over the following weeks, the client made steady progress. Within the first week cigarette consumption had reduced from twenty cigarettes per day to twelve per day through the effective use of vaping and distraction techniques. Continued support enabled further reductions to 10, then 8, 6 and eventually, 4 cigarettes per day. As withdrawal symptoms became more challenging, nicotine patches were introduced alongside vaping, demonstrating the importance of tailoring treatment to the individual's needs. The client reported that the stronger nicotine patches made a significant difference in helping manage cravings and continue reducing cigarette consumption.

An additional benefit of the CDTS model was its wider influence on the household. During one appointment, the client's partner became interested in quitting and was subsequently referred for support. This helped create a more supportive smokefree environment and strengthened the client's motivation to continue progressing towards a quit attempt.

The reduction journey was not without setbacks. At one stage, the client's vape device became unusable, resulting in a temporary increase in smoking. However, because the client remained engaged with the service, support was able to continue, barriers were addressed and the client was helped to regain momentum. Eventually cigarette consumption reduced to just three cigarettes per day, and a quit date was agreed.

Following continued support, the client successfully reduced smoking to a single cigarette per day before reaching her quit date. From this point, the client achieved complete abstinence and remained smokefree throughout the remainder of pregnancy. CO monitoring confirmed sustained abstinence, with CO readings reducing from 10ppm during the reduction phase to 3ppm following successful cessation. The client achieved both a CO-verified 4-week quit, and a CO-verified 12-week quit and remained smokefree through to the 36-week pregnancy milestone. During this period, the client successfully managed several potential relapse triggers including stress, family circumstances, and pregnancy-related health concerns. Relapse prevention strategies, behavioural support, and continued access to vaping played a key role in maintaining abstinence.

Although the client experienced a relapse at 8 weeks post-natal, they immediately sought further support and re-engaged with the service to work towards another quit attempt. This demonstrates the strong therapeutic relationship established through the CDTS pathway and reinforces the value of maintaining ongoing engagement even when setbacks occur.

This case demonstrates how CDTS can successfully support pregnant smokers who are not initially ready to stop smoking abruptly. By providing a structured reduction pathway, personalised behavioural support, appropriate nicotine replacement and ongoing encouragement, the client was able to reduce smoking from 20 cigarettes per day to complete abstinence, achieve both CO-verified 4-week and 12-week quit outcomes, remain smokefree

throughout pregnancy and create a more supportive smokefree home environment. The case highlights how CDTS can function as an effective bridge from ambivalence and low confidence to sustained smoking cessation in pregnancy.

Appendix 1: Smokefree Families voucher scheme in pregnancy / postnatal

Milestone	Voucher
First face-to-face appointment	£20
4-week CO-verified quit	£20
12-week CO-verified quit	£30
36 weeks pregnant	£50
2 months postnatal	£20

Appendix 2. Characteristics of CDTS clients who did and did not set a quit date

Characteristic	Set quit date (n=35)	Did not set quit date (n=14)
Routine and manual occupation	12 (34.3%)	3 (21.4%)
Home carer	8 (22.9%)	5 (35.7%)
Never worked/unemployed >1 year	6 (17.1%)	3 (21.4%)
Managerial/professional occupation	4 (11.4%)	1 (7.1%)
Sick/disabled and unable to work	3 (8.6%)	0 (0.0%)
Unable to code	1 (2.9%)	2 (14.3%)
Intermediate occupation	1 (2.9%)	0 (0.0%)
Living in a Core 40 area	16/34 (47.1%)	8/14 (57.1%)
Homeless/no recorded LSOA	1 (2.9%)	0 (0.0%)
Light smoker	12 (34.3%)	4 (28.6%)
Moderate smoker	13 (37.1%)	8 (57.1%)
Heavy smoker	10 (28.6%)	2 (14.3%)
Any recorded medical condition	9 (25.7%)	2 (14.3%)
Any recorded mental-health need	9 (25.7%)	4 (28.6%)

Note: Percentages are calculated within each quit-date group. Core 40 percentages are based on clients with a known LSOA decile. One client who progressed to a quit date had no recorded LSOA due to homelessness. Comparisons are descriptive and no statistical significance testing was undertaken.

Bibliography

National Institute for Health and Care Excellence (NICE) (2021, updated 2023). *Tobacco: preventing uptake, promoting quitting and treating dependence (NG209).* London: NICE.

Department of Health and Social Care (2022). *Working definition of trauma-informed practice*. London: DHSC.

National Institute for Health and Care Excellence (NICE) (2021). *Antenatal and postnatal mental health: clinical management and service guidance (CG192).* London: NICE.

National Institute for Health and Care Excellence (NICE) (2021). *Tobacco: preventing uptake, promoting quitting and treating dependence in pregnancy.* (Referenced within NG209).

National Centre for Smoking Cessation and Training (NCSCT) (2024). *The NCSCT Guide to Behavioural Support for Smoking Cessation*. London: NCSCT.

National Centre for Smoking Cessation and Training (NCSCT) (2024). *Smoking and Pregnancy: A Briefing for Maternity Care Practitioners*. London: NCSCT.