THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Quit for New Life

Phase 2 Evaluation Report: A case study analysis

2019

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Contact:
L/Prof Rob Sanson-Fisher
Priority Research Centre for Health Behaviour, University of Newcastle.
Phone: (02) 4042 0713
Email: Rob.Sanson-Fisher@newcastle.edu.au

Abbreviations

List of Abbreviations

ABF	Activity Based Funding
AHW	Aboriginal Health Worker
AMDC	Aboriginal Maternal and Infant Health Service Data Collection
AMIHS	Aboriginal Maternal And Infant Health Service
BSF	Building Strong Foundations for Aboriginal Children, Families and Communities
CI	Confidence Interval
CO	Carbon Monoxide
IQR	Inter Quartile Range
KPI	Key Performance Indicator
LHD	Local Health District
MoH	The NSW Ministry of Health
NRT	Nicotine Replacement Therapy
QFNL	Quit for New Life
SD	Standard Deviation

List of LHD Abbreviations

CC	Central Coast
FW	Far West
HNE	Hunter New England
IS	Illawarra Shoalhaven
MNC	Mid North Coast
MUR	Murrumbidgee
NBM	Nepean Blue Mountains
NNSW	Northern New South Wales
NS	Northern Sydney
SES	South Eastern Sydney
SNSW	Southern New South Wales
SWS	South Western Sydney
SYD	Sydney
WS	Western Sydney
WNSW	Western New South Wales

Definitions

List of Definitions

Aboriginal Maternal And Infant Health Service (AMIHS)	Clinics where midwives and Aboriginal Health Workers (AHWs) provided antenatal and postnatal care (up to 8 weeks postpartum) to mothers of Aboriginal babies.
Building Strong Foundations (BSF) service	Early childhood health service provided by child and family nurses and AHWs, for Aboriginal children from birth to school-entry age and their families.
Cerner	A patient information system used to record information during antenatal care appointments in SWS and SYD LHDs.
Clinic	The health service where women received antenatal or postnatal care. This includes AMIHS and BSF postnatal services as well as hospitals and community health centres.
Clinic staff	Midwives, child and family health nurses and AHWs who saw women for their appointments in the clinic.
eMaternity	A patient information system which replaced ObstetriX.
Eligible women	Pregnant mothers of Aboriginal babies who smoked in the first half of pregnancy and received antenatal care in an LHD implementing QFNL.
Evaluation team	The research team at the University of Newcastle contracted to conduct the data collection, analyses and reporting for the evaluation.
First half of pregnancy	Prior to 20 weeks gestation.
LHD of service	The LHD of service attended for pregnancy care where known or hospital of birth if not.
ObstetriX	A patient information system used to record information during antenatal care appointments. Was superseded by eMaternity.
QFNL Coordinator	QFNL staff member responsible for overseeing QFNL implementation.
QFNL interventions	Nicotine Replacement Therapy, NSW Quitline cessation and follow-up support offered through QFNL.
QFNL service	An antenatal care service identified as implementing QFNL.
QFNL team	The staff within an LHD who worked on QFNL.
Reach of QFNL	The number of eligible women who attended a QFNL service implementing QFNL for antenatal care at any time in their pregnancy.
Second half of pregnancy	From 20 weeks gestation to the birth of the baby.
Smoking Care Advisor	QFNL staff member who provided smoking cessation support to clients.
Smoking cessation	Defined for this evaluation as being recorded as smoking in the first half of pregnancy (<20wks) but not in the second half of pregnancy (>20wks).
Uptake of QFNL	The number of eligible women receiving QFNL who took up a core QFNL intervention during the antenatal period.

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Executive Summary

Background

Despite the significant adverse impact of smoking on pregnancy outcomes, 45% of Aboriginal women across Australia smoke during pregnancy. While rates of smoking among pregnant Aboriginal women have declined over time, smoking rates remain unacceptably high. The Quit for new life (QFNL) model is a culturally appropriate smoking cessation initiative that aims to contribute to a reduction in tobacco related harm from smoking and environmental tobacco smoke among pregnant women having an Aboriginal baby. The QFNL model comprises advice, behavioural support, referral to the NSW Quitline or a tobacco treatment specialist, up to 12 weeks of free nicotine replacement therapy, and extended follow-up including smoking cessation support such as free NRT for cohabitants. QFNL was funded in Local Health Districts (LHDs) for a five-year period between January 2013 – June 2018, at which time practice change sustainability plans (as agreed between each LHD and the NSW Ministry of Health (MoH)) were expected to be in place. Overall, the MoH committed approximately $9.5 million for the phased implementation and evaluation of QFNL.

Phase one of the evaluation of QFNL assessed the acceptability, reach and impact of QFNL, and found that in 2016 QFNL was being delivered in 70 health services across 13 LHDs in New South Wales (NSW). The uptake of QFNL interventions among eligible women attending services implementing QFNL was 21% in the Aboriginal Maternal and Infant Health Service Data Collection. Separate LHD maintained records suggested 54% of eligible women had taken up a core QFNL intervention. Interviews with Key Stakeholders involved in implementing QFNL found that most considered QFNL to be an appropriate model to address smoking among pregnant women having Aboriginal babies, but noted several challenges with implementing the model. These findings were used to refine program delivery. The purpose of Phase two of the evaluation of QFNL was to describe promising implementation models in detail, and explore client perspectives of QFNL.

Aims

The aims of the second phase of the QFNL evaluation were to:

1. Describe promising models of QFNL implementation within specific LHDs in depth, including key achievements, key outcomes, and factors influencing implementation and sustainability.
2. Explore client experiences and perspectives of smoking care received across three LHDs implementing QFNL.

Methodology

Three LHDs with promising, innovative and/or potentially sustainable models of QFNL implementation were identified from Phase one of the evaluation. Case study sites selected were those that had been implementing QFNL over several years so that processes, data collection and governance structures were well established. A case study design was used, with each of the selected LHDs participating in each of the following components:

1. **Analysis of program monitoring data provided by LHDs.** Analyses of routinely collected program monitoring data were conducted to investigate program reach, offers and uptake of core QFNL interventions, and the impact on smoking behaviours among the program target group. Case study LHDs were asked to provide program monitoring data to the evaluation team. Data were analysed using descriptive statistics and logistic regression modelling (where possible).
2. **Interviews with QFNL Coordinators and other Key Stakeholders.** Semi-structured interviews were conducted with QFNL Coordinators and other Key Stakeholders in each case study site to obtain information about how QFNL is integrated into routine practice, the sustainability of the chosen model and potential future challenges. Interviews were conducted via telephone or face-to-face. A semi-structured interview guide was used to elicit Stakeholder's perspectives about the model implemented; ongoing challenges and achievements; model sustainability; and success factors and implementation enablers. Interviews were audio-recorded and transcribed. Data were analysed using an inductive qualitative content analysis approach.
3. **Interviews with QFNL clients.** Semi-structured interviews were conducted with clients who received QFNL to collect detailed information about their experiences of receiving smoking cessation care. Women were eligible to participate in an interview if they: were pregnant with an Aboriginal baby, or

had given birth within the last six months; were older than 18 years; reported smoking at their first antenatal appointment; and had at least one previous appointment at the antenatal care service they were recruited from. A semi-structured interview guide was used to elicit interviewee perceptions about receipt of QFNL components; quit attempts; the cultural appropriateness of QFNL; and how smoking care could be improved. Interviewees were provided with a $50 gift voucher as reimbursement for their time taken to participate. Interviews were audio-recorded and transcribed. Data were analysed using an inductive qualitative content analysis approach.

Results for analysis of program monitoring data and interviews with Stakeholders are reported for each of the three case study LHDs. Given the small number of interviews conducted with QFNL clients (n=6), these data are aggregated across all three LHDs.

Results

Northern New South Wales LHD. A referral model with a centralised QFNL team was implemented in NNSW LHD. Midwives, Aboriginal health staff and other healthcare providers (such as GPs), were trained to initiate a discussion with clients who indicated they were smokers, and then complete a referral to the QFNL team for women who agreed. Program monitoring data for the period 10/2013 to 11/2017 were provided for analysis. The dataset contained data for those who agreed to be followed up by the QFNL team. Overall, 362 clients were referred to QFNL across this period: 59% (n=212) were antenatal, 17% (n=60) postnatal and 25% (n=90) household members. The median length of enrolment in QFNL was 77 days (IQR=42-112). Forty-four percent (n=159) of clients being seen by the QFNL team accepted a referral to the NSW Quitline, 77% (n=279) of clients agreed to try Nicotine Replacement Therapy (NRT) and 19% (n=67) of clients reported quitting smoking at discharge from QFNL. A multiple logistic regression exploring the factors associated with being smoke-free at discharge from the QFNL program found that those who had more points of contact with the QFNL team were significantly more likely to be smoke-free than those with fewer contacts (adjusted OR=1.1, 95% CI 1.06-1.16, P<0.001). Three Stakeholder interviews were conducted. Key success factors reported by Stakeholders included: staff having dedicated time to provide cessation support to clients and household members; the ability to provide different types of NRT for clients to try; use of carbon monoxide breath expiry monitors (CO monitors) to motivate quitting; access to QFNL training and other education; and partnership with the MoH to seek feedback about program implementation. Barriers to implementation reported by Stakeholders included: a perceived low level of clinic staff engagement and knowledge; short-staffed clinics and high staff turnover; decreasing engagement over time of the QFNL advisory group within the LHD; difficulties engaging clients; and difficulties with collecting required data. Since QFNL funding ceased, the LHD has trialled an alternate smoking cessation program for pregnant women that involves an opt-out referral model with a centralised clinic providing face-to-face support.

South Western Sydney LHD. SWS LHD implemented a referral model. An Aboriginal Smoking Care Advisor received referrals for women from a number of healthcare providers including AHWs and midwives at AMIHS clinics, hospital based-antenatal clinics and postnatal services, as well as through other programs, events and word-of-mouth. Program monitoring data for the period 7/2014 to 6/2018 were provided for analysis. Overall, 595 women eligible to receive QFNL attended an antenatal clinic offering QFNL across this period. Of these women, 81% (n=482) were either not offered QFNL support, or data about provision of support was not recorded. Overall, 15% (n=91) of women were recorded as taking up a QFNL intervention: 15% agreed to a referral for follow-up support with the Smoking Care Advisor; 8.1% agreed to try NRT; and 1.7% agreed to a referral to the NSW Quitline. Twenty-two percent (n=128) of eligible women were recorded as not smoking in the second half of pregnancy. Three interviews with Stakeholders were conducted. Key enabling factors reported by Stakeholders included: having a designated Aboriginal Smoking Care Advisor; ability to offer household members quit support; provision of free NRT and the ability to provide different types of NRT for women to try; use of CO monitors to motivate quitting; incentives (baby hats, colouring books); and training for QFNL staff about evidence-based interventions by recognised experts. Key barriers to implementation perceived by Stakeholders included: difficulties managing differences in policies and practises across healthcare services; difficulties securing ongoing support from health service management; lack of timely feedback about program impact; lack of clinic staff awareness of QFNL; high turnover of clinic staff; and time pressures and difficulties engaging with and following-up

women. Parts of the QFNL program have been sustained post-cessation of funding, with the LHD now employing a full time permanent Smoking Care Advisor.

Hunter New England LHD. HNE LHD implemented a capacity-building model. This model involved investment in existing services to increase their capacity to provide smoking cessation support. Training was provided to clinic staff and implementation was guided and monitored by health behaviour researchers from Hunter Population Health. Clients who were identified as smokers received cessation support during regular antenatal or postnatal appointments. Program monitoring data for the period 1/2015 to 9/2017 were provided for analysis. A total of 15,507 clients attended a service offering QFNL across this period. Around 29% of clients each month were reported as smokers and approximately 13% took up a QFNL intervention. Of those receiving QFNL, 81% attended an Aboriginal Maternal and Infant Health Service (AMIHS) and 19% a Building Strong Foundations (BSF) or New directions postnatal service. Each month 20-30% of clients (n=1,183) accepted an offer of follow-up support provided at antenatal appointments; 16-24% of clients (n=968) accepted NRT directly or via voucher; and 7-10% of clients (n=405) accepted a referral to the NSW Quitline. 4.2% of eligible women were reported as quitting on average each month. Five interviews with Stakeholders were conducted. Key enabling factors reported by Stakeholders included: employment of Support Officers; flexibility of implementation across services according to staff availability and skills; leadership from Service Managers and the executive leadership team, including interest in performance monitoring; integration of support through antenatal and postnatal care; direct provision of NRT to women and the opportunity to try different types of NRT; and inclusion of household members. Key barriers reported by Stakeholders included: limited resources to provide additional follow-up appointments or phone calls outside of the standard schedule of visits to women; limited resources to support household members to quit; little client interest in referral to the NSW Quitline; understaffing and high staff turnover; perceived low heath literacy of clients; time burden of reporting; and perceived unachievable KPIs. The model implemented was designed to be sustainable by training staff, creating a sense of ownership among staff, providing clinical guidelines and building KPIs into reporting structures. However, some Stakeholders felt that smoking cessation was seen as less of a priority by clinic staff following the cessation of QFNL funding.

Clients. Qualitative interviews were conducted with a total of six clients from across the three case study LHDs. All clients interviewed: had received support through QFNL either in person or over the phone; had used a "tangible" support to help with their quit attempt such as chewing gum or NRT; and were satisfied with the support that they had received. The main motivation given for accepting a QFNL intervention was the health of their baby. Their own health, having more time and saving money were additional motivators. For some women, having QFNL available to help them gave them the extra motivation that they needed to address their smoking. They felt encouraged and supported having someone ask about their smoking and appreciated being able to try different types of NRT to find the one that suited them best. All of the clients interviewed had reduced their smoking following engagement with QFNL, and two quit all together. They reported feeling fitter and healthier. Barriers to fully engaging with QFNL reported by individual clients included not wanting to completely quit smoking, having other life issues to address, difficulty fitting in extra appointments and reports that NRT did not work. Overall, clients reported that they considered it appropriate to address smoking during the antenatal and postnatal periods.

Key Findings

- QFNL was universally perceived as a worthwhile program by QFNL coordinators and other Key Stakeholders.
- QFNL was acceptable to the six clients interviewed. All six interviewees reported some reductions in their smoking, were satisfied with the support that they received, and thought that smoking should be addressed during the antenatal period when the health of the baby was a big motivator.
- The provision of some form of smoking cessation support to mothers of Aboriginal babies has been sustained in each of the three case study LHDs since QFNL funding has ceased.
- Reach, uptake and impact of QFNL is difficult to determine using program monitoring data due to inadequate data collection tools. This limits the ability to draw conclusions about the success of QFNL overall, and within each of the three case study LHDs. However, there is some evidence from NNSW LHD that those who had more points of contact with the QFNL team were significantly more likely to

be smoke-free than those with fewer contacts (multiple logistic regression adjusted OR=1.1, 95% CI 1.06-1.16, P<0.001). Difficulties with data reporting, meeting KPIs and the ability to get timely feedback about reach and impact were identified by Stakeholders as discouraging to implementation efforts.

- The ability to provide free NRT directly to clients, and allow clients to try different types of NRT, were considered key enabling factors for QFNL by both clients and Stakeholders. Most Stakeholders interviewed perceived NRT as a positive and "tangible" incentive that could be offered to women to encourage and motivate smoking cessation.
- All three case study LHDs reported difficulty obtaining adequate funding to be able to continue offering free NRT following cessation of QFNL funding. It was reported by several Stakeholders that enthusiasm for providing smoking cessation support and willingness of clients to engage with smoking cessation support had reduced since funding ceased. This was reinforced by a reported dislike of referral to the NSW Quitline by most Stakeholders.
- The ability to offer household members support to quit, and the use of CO monitors, were considered key enabling factors across all case study LHDs. Involvement of household members encouraged clients to accept QFNL interventions, and the use of CO monitors motivated and encouraged quit attempts.
- The use of other "tangible incentives" could be considered in future programs to facilitate client engagement. The three case study LHDs reported seeing benefits from branded give-aways, which created and maintained awareness of, and interest in, QFNL.
- Sustained cessation support is required into the postnatal period to reduce the risk of relapse. However, the schedule of visits provides less opportunities to address smoking and the motivation to quit for the baby may have reduced, making it difficult to engage clients. Program monitoring data suggests that less than 20% of QFNL clients came through a postnatal service. It was difficult for the case study LHDs to get data about QFNL and its impact in the postnatal period due to the use of different data collection tools with no standard QFNL reporting.
- Under all models of QFNL explored in this study, clinic staff were a key factor in initiating discussions about smoking cessation with clients. As such, a lack of clinic staff awareness, knowledge of how best to talk with clients, time to address smoking, and engagement with QFNL, were identified as key barriers to implementation.
- Several barriers to fully engaging with QFNL emerged from the interviews with clients including not being fully committed to wanting to stop smoking, complex life issues, being surrounded by other smokers, difficulty scheduling extra appointments, and lack of success with NRT.
- QFNL could be expanded beyond pregnant women of Aboriginal babies, with some modifications. The name 'Quit for new life' was seen as relevant to all women, however modifications to the program brand logo were perceived to be needed.

Limitations

Findings should be considered in light of several limitations. Program monitoring data, collected and maintained by the three case study LHDs, were provided for the evaluation. The data varied between LHDs making it difficult to compare results across the case study LHDs. Some data sets contained large amounts of missing data or relied on measures of impact known to be unreliable, such as not smoking in the second half of pregnancy. There were also difficulties recruiting clients to take part in an interview for the evaluation leading to only a small number of interviews being completed.

Conclusion

Overall, QFNL was perceived as worthwhile and acceptable within the three case study LHDs. Stakeholders felt that having a formal framework outlining how cessation support should be delivered helped prioritise smoking within services, and within the LHD. QFNL was also viewed as acceptable by all six of the clients interviewed. Case-study LHDs implemented varying models of QFNL that were tailored to the LHDs resources, size and funding model. Program monitoring data revealed that clients were more likely to accept an offer of follow up support or NRT than a referral to NSW Quitline. There was some evidence from one cast study LHD that increased number of follow up appointments aided cessation attempts. The provision of smoking cessation support to mothers of Aboriginal babies has been sustained in some form in the three case study LHDs since cessation of QFNL funding.

Background

Context of the Evaluation

Smoking is the most significant modifiable cause of adverse pregnancy outcomes**.** Smoking during pregnancy increases the likelihood of pre-term birth, low birth weight, and neonatal mortality[1-4]. Other impacts, including increased risk of developing asthma, poorer neurological development[5], and an increased likelihood of smoking initiation in adulthood are lifelong[6]. If smoking during pregnancy was completely eliminated, it is estimated that 19.8% of total low birth-weight incidence, 7.8% of preterm births and 3.6% of admissions required to special care nursery or neonatal intensive care unit in Australia could be prevented[7].

Smoking rates among pregnant Aboriginal women have improved over time, dropping from 53% in 2005 [8] to 44% in 2015 [9]. However, smoking rates remain high and above those for non-Aboriginal pregnant women (12% in 2015[9]).. As a result, Aboriginal mothers have higher rates of still birth (13.3 versus 7.1 per 1000 live births), neonatal deaths (6.9 versus 2.7 per 1000 live births) and preterm deliveries (13.7% versus 7. 9 %) compared to non-Aboriginal mothers, as well as double the incidence of low birthweight (12.5% versus 5.9%)[10, 11].

Despite the existence of effective smoking cessation interventions for pregnant women[12], few interventions have explored effective strategies to reduce smoking among pregnant Aboriginal women. A recent review identified only two intervention studies that had examined the effectiveness of interventions for smoking cessation among pregnant Aboriginal Women[13], and neither produced statistically significant results[14, 15].

Overview of Quit for new life

Aims of Quit for new life

Quit for new life (QFNL) is a smoking cessation support initiative for mothers of Aboriginal babies that aims to contribute to a reduction in tobacco related harm from maternal smoking and environmental tobacco smoke among women who identify as having an Aboriginal baby. The stated objectives of QFNL are to:

1) Build the capacity of participating antenatal and postnatal services to provide evidence-based smoking cessation care to all clients who smoke, as part of routine care;
2) Provide smoking cessation care and support to clients of participating services and other members of their households;
3) Reduce the rate of environmental tobacco smoke (passive smoking) in households of mothers of Aboriginal babies in the antenatal and postnatal periods; and
4) Reduce the risk of smoking relapse by clients of participating services in the antenatal and postnatal periods.

Key features of QFNL

Given the lack of evidence about the effectiveness of smoking cessation interventions for mothers of Aboriginal babies, the best available evidence relating to smoking cessation in non-Aboriginal populations informed the development of QFNL. QFNL comprises two key components:

1) Provision of smoking cessation support for mothers of Aboriginal babies in the antenatal and postnatal periods, and any household members (including: identification of smoking status, brief advice, provision of Nicotine Replacement Therapy (NRT), referral to the NSW Quitline, provision of follow-up support and provision of self-help information)
2) Provision of support for practice change strategies for service providers (including provision of training and information to staff, implementation and/or modification of relevant policies and procedures to support sustainability of the QFNL model, collection of routine monitoring data).

QFNL was designed to acknowledge the strength and resilience that many Aboriginal people experience through their culture, and to address the socio-cultural context of Aboriginal smoking.

QFNL Implementation and rollout

The implementation of QFNL commenced in 2013. Table 1 provides detail about how QFNL was implemented in each LHD, including an overview of the results of Phase one of the evaluation for the LHDs that participated.

Table 1: Summary of QFNL implementation, and findings from Phase one of the evaluation (where available), by LHD.

LHD of service						Attended QFNL service post-QFNL implementation 2014/2015		
	Start date	Model implemented	No. QFNL Services	No. Staff trained	No. eligible women	% eligible women attending	% taking up a core QFNL intervention	% ceasing smoking†
IS	Jan-13	Referral	4	23	143	94%	56%	30%
HNE	Aug-13	Capacity building	12	103	543	60%	21%	13%
CC	Sep-13	Referral	3	23	98	64%	16%	22%
NBM	Oct-13	Referral	3	20*	184	44%	22%	22%
NNSW	Oct-13	Referral	16	52	135	87%	22%	18%
WS	Nov-13	Direct provision	4	7*	128	44%	13%	20%
MNC	Jan-14	Referral	5	19	135	62%	21%	7%
MUR	Jun-14	Referral	4	17	113	45%	2%	12%
SWS	Mar-14	Referral	5	51	N/A	N/A	N/A	N/A
SES	Jul-14	Referral	2	28	46	N/A	N/A	N/A
SNSW	Aug-14	Referral	2	11	62	N/A	N/A	N/A
SYD	Oct-14	Referral	1	9	N/A	N/A	N/A	N/A
WNSW	Jan-15	Direct provision	9	50	364	N/A	N/A	N/A

Source: Centre for Population Health, NSW Ministry of Health Data; Phase one interviews with Stakeholders; Phase one staff training records from January 2013 to April 2015; AMDC July 2014 to June 2015 (n=1479). **Exclusions**: Women who did not receive antenatal care; did not smoke in the first half of pregnancy; or received care in FW or NS LHDs. AMDC data were not available for SWS or SYD LHDs as they used Cerner for data collection rather than ObstetriX. Data for SES, SNSW and WNSW LHDs are not included as they commenced implementing QFNL during the period reported. *33 staff were trained in NBM/WS prior to the LHD splitting and are not included in these counts. †Clients are classified as ceasing smoking if they reported not smoking at any time in the second half of pregnancy.

Thirteen Local Health Districts (LHDs) participated in the QFNL program: Central Coast (CC); Hunter New England (HNE); Illawarra Shoalhaven (IS); Mid North Coast (MNC); Murrumbidgee (MUR); Nepean Blue Mountains (NBM); Northern New South Wales (NNSW); South Eastern Sydney (SES); Southern New South Wales (SNSW); South Western Sydney (SWS); Sydney (SYD); Western Sydney (WS); Western New South Wales (WNSW). Northern Sydney (NS) LHD did not implement QFNL. Far West (FW) LHD offered QFNL for a short period and then withdrew from implementing the program. QFNL rollout occurred in three phases across NSW; six LHDs commenced implementation from January 2013, six in 2014 and one in 2015. The models of care implemented varied by LHD, but fit under three general models of care at the time the Phase one evaluation was conducted:

1. *Referral model.* This model was implemented by 10 LHDs. In this model, at least one individual was employed to provide smoking cessation advice. Clinic staff would refer women identified as smokers to this dedicated staff member, the Smoking Care Advisor, to receive cessation support.
2. *Direct service provision model*. This model was implemented by two LHDs. In this model, the role of Smoking Care Advisor was integrated into the role of an existing staff member. Clinic staff provided brief intervention and offered referrals to the NSW Quitline. They then referred interested clients to the local staff member to deliver follow-up care and provide NRT if appropriate.

3. *Capacity building model*. This model was implemented by one LHD. In this model, QFNL was integrated into the role of all existing clinic staff providing care both in antenatal and postnatal services. Clinic staff provided behavioural smoking assessments, offered QFNL interventions and addressed smoking at every visit with the client. Cessation support was provided during regular appointments with the women, however additional appointments could be booked if extra support was required.

In 2016, QFNL was being delivered in 70 health services across 13 LHDs in NSW. QFNL has been implemented mostly through Aboriginal Maternal and Infant Health Services (AMIHS; 45 sites) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF), and New Directions postnatal services (15 sites, 11 co-located with AMIHS). Fourteen hospital-based antenatal care services across seven LHDs were reported to also implement QFNL and three LHDs implemented QFNL in a community health setting. The number of services offering QFNL varied across LHDs from one site to 16, reflecting the size and number of services in the LHD.

QFNL Funding period

The MoH committed $4.58 million for the implementation of the QFNL initiative over a four year period (2012/13 – 2015/16). In 2014, an additional two years funding ($3.2 million) was provided to ensure adequate time and resources to embed QFNL into routine clinical care[15]. The funding period for QFNL included dedicated program funds for 13 participating LHDs as well as the provision of free NRT for eligible women and their cohabitants. In preparation for the end of the funding period, the MoH required all participating LHDs to submit practice change sustainability plans. In these plans LHDs identified key strategies to maintain ongoing cessation support within routine antenatal and postnatal care for women having Aboriginal babies. The conclusion of QFNL program funding coincided with ceasing smoking during pregnancy being a cessation priority for all women in NSW. As a result, quitting smoking by the second half of pregnancy for all women was included as a KPI in service agreements for 2017-18.

While each LHD refined the QFNL model for implementation in their district, there were changes to how QFNL was managed at a state level over the period of funding, which had broader impacts. The findings of the evaluation should be considered in light of the following:

- In October 2013, a statewide coordinator was employed to provide a means of communication between the LHD based QFNL coordinators and the MoH. In Phase one of the evaluation it was reported that this was perceived by LHDs as a significant improvement to the support available to help with implementing QFNL.
- The QFNL coordinator in each LHD was responsible for reporting QFNL outcomes each quarter. Originally QFNL data were collected in ObstetriX in most LHDs. Between 2015 and 2017 a new system called eMaternity was rolled out changing the way that data was collected. LHDs hoped that this would provide higher quality and more timely QFNL data.
- Funding for QFNL ceased in June 2018. From this time reporting requirements ceased and NRT was no longer available to LHDs for QFNL. It was hoped that by this time LHDs would have implemented their sustainability plan with alternate funding if continuing with the free provision of NRT and QFNL staff.

Rationale for the Evaluation

Additional funding was committed by the MoH to evaluate the implementation of QFNL, bringing the total investment of the MoH in QFNL to approximately $9.5 million[16]. The purpose of the evaluation was to provide a comprehensive overview of how QFNL was implemented across NSW, and the impact of QFNL on smoking cessation rates among mothers of Aboriginal babies.

In 2015, a consortium of researchers from the University of Newcastle were commissioned through a competitive process to undertake an evaluation of QFNL. The evaluation was conducted in two phases. Phase one of the evaluation included analysis of routinely collected patient data, analysis of program monitoring data, and semi-structured interviews with implementation staff and other Stakeholders. Phase one of the evaluation has been completed. Findings of Phase one of the evaluation can be found in a previous report. While this component of the evaluation did not provide clear evidence about the impact of QFNL on cessation rates in the target group, it did identify the main implementation models, and several

implementation challenges. The purpose of Phase two of the evaluation was to explore promising implementation models in more depth, as well as explore client perspectives of QFNL.

Evaluation Objectives

The objectives of the second phase of the evaluation of QFNL were to:

1. Describe promising models of QFNL implementation within specific LHDs in depth, including key achievements, key outcomes, and factors influencing implementation and sustainability.
2. Explore client experiences and perspectives of smoking care received in QFNL sites.

Evaluation scope

Phase two of the evaluation was conducted in three LHDs that were identified as having promising models of implementation of QFNL- Northern New South Wales, South Western Sydney, and Hunter New England LHDs. The model implemented in each case study LHD, its strengths and weaknesses, how it has changed over time and the outcomes, are described in detail for each case study LHD. Sufficient detail is provided to allow other LHDs to compare and assess the relevance of models implemented in case study LHDs to their own context.

Evaluation Governance

QFNL is an initiative of the Centre for Population Health, MoH in partnership with the Health and Social Policy Branch. The QFNL evaluation was co-ordinated by the Centre for Epidemiology and Evidence in collaboration with the Centre for Population Health. The QFNL evaluation was overseen by an Evaluation Advisory Committee and an Evaluation Project Group. The Evaluation framework was devised by these two groups, and refined by the University of Newcastle Evaluation Team.

Methodology

Ethics Approval

Ethics approval for the evaluation was provided by The Aboriginal Health and Medical Research Council Ethics Committee (protocol number 1029/14) and The NSW Population & Health Services Research Ethics Committee (HREC/14/CIPHS/46). The evaluation protocol was registered with the University of Newcastle Human Research Ethics Committee (H-2015-0124).

Design

A case study design that included analysis of routinely collected data and qualitative interviews, with Key Stakeholders and QFNL clients, was implemented.

Selection and Recruitment of Case Study Sites

Three Local Health Districts (LHDs) with promising, innovative and/or potentially sustainable models of QFNL implementation were identified from Phase one of the evaluation by the MoH in collaboration with the evaluation team. Case study LHDs selected were those that had been implementing QFNL over several years; so that processes, data collection and governance structures well established. The MoH approached the chosen LHDs, provided information about what participation would involve, and invited participation.

Component 1: Analysis of Program Monitoring Data

Aim. To investigate program reach, offers and uptake of core QFNL interventions, and the impact on smoking behaviours among the program target group, using program monitoring and impact data.

Design. Descriptive analysis of routinely collected program monitoring data held by the case study LHDs. Results are presented separately for each case study LHD.

Data collection and procedures. The MoH sent an email to case study LHDs requesting QFNL program monitoring data to be provided for the evaluation. Case study LHDs were asked to provide requested data directly to the evaluation team. Reminder emails and telephone calls were made where data was not received within one month of the original request.

Data sources and analysis. Data were obtained from LHD-specific databases that included program processes and outcome data entered by clinic staff. Each case study LHD therefore provided different data to the evaluation team. A description of the data received, and the statistical analysis undertaken, is presented separately by case study LHD below. Analysis was conducted in Stata 14.

NNSW LHD. *Data received:* NNSW LHD provided two data sets containing individual de-identified records to the evaluation team. The datasets contained data for all antenatal and postnatal women and their householders referred to the QFNL team between October 2013 and November 2017. The first data set contained: referral date; discharge date; client status (active or inactive); pregnancy status at referral (antenatal, postnatal or householder); discharge pregnancy status; referral to the NSW Quitline (whether accepted, declined or not offered); referral for NRT (whether accepted, declined or not offered); if smoke-free for any 24hr period during care and if smoke-free for over 24hrs at discharge; the number of cigarettes smoked per day; and time to first cigarette at referral. The second data set contained process data including the number of times the QFNL team attempted to contact clients; how many times contact was made via telephone; number of text messages sent to clients; the number of face-to-face appointments each client had; and the type(s), and amounts, of NRT provided. *Analysis:* Descriptive statistics were reported. The data provided was for women who had accepted a referral for follow-up support rather than all women offered, or eligible for, support. Therefore, the overall reach and uptake of QFNL could not be determined. A logistic regression model was constructed to assess the factors associated with smoking cessation at discharge. The factors included in the model were: total number of contacts with the QFNL team (total successful phone contact plus face to face meetings); whether a voucher for NRT had been provided; whether the client reported reducing the number of cigarettes smoked in an attempt to quit at referral; whether the client reported smoking within 30 minutes of waking at referral; year referred to QFNL and client type (antenatal, postnatal or householder). The regression was run as a complete case analysis, assuming those who could not be contacted were still smoking.

SWS LHD. *Data received:* Data were provided in both aggregate format and as individual de-identified records. Data were extracted from Cerner for each woman birthing each quarter for the period July 2014 to June 2018. Data were entered by clinic staff, rather than the Smoking Care Advisor. For each eligible woman, the data included: the Aboriginality of herself, baby, and her partner (where known); the facility providing antenatal care; whether the client reported smoking in the first half of pregnancy; whether the client reported smoking in the second half of pregnancy; whether she accepted a referral to the NSW Quitline, NRT or follow-up support. From April 2015, offers of support that were declined were also recorded. *Analysis:* Descriptive statistics were reported. A logistic regression model was constructed to examine whether taking up a QFNL intervention was associated with not smoking in the second half of pregnancy, controlling for the year the woman gave birth and her Aboriginality. The regression was run as a complete case analysis, where those with missing data for whether they were smoking in second half of pregnancy, was taken as still smoking.

HNE LHD. *Data received:* Data were provided in aggregated format. The data came from quarterly data reports which were based on an LHD developed database used to track rates of offering women the QFNL interventions and uptake of those interventions. Data were collected and entered by clinic staff to provide a snapshot of the uptake of QFNL each month. The dataset contained information for each month between January 2015 and September 2017 about: the total number of clients seen across all AMIHS, BSF and New

Directions services; the number who were existing QFNL clients; the number (%) who were current smokers excluding the existing QFNL clients; the number of clients (both current smokers and existing QFNL clients who were not currently using that intervention) who were offered each of the QFNL interventions (Quitline, NRT or follow-up support); the number who accepted the interventions; and the number using any of the QFNL interventions. The number reporting not smoking in the last seven days was also included in the dataset, however, as this data item was not part of mandatory reporting and was not reliably collected, it is not considered a reliable measure. *Analysis:* Descriptive statistics were reported.

Component 2: Interviews with QFNL Coordinators and Other Key Stakeholders

Aim. To obtain detailed information about how QFNL is integrated into routine practice, the sustainability of the chosen model, key achievements and potential future challenges, from the perspectives of QFNL Coordinators and key staff members.

Design. Semi-structured interviews with key QFNL Stakeholders identified at each case study site. Results are presented separately for each case study LHD.

Recruitment. MoH identified the relevant QFNL coordinators to be interviewed at each case study site and provided their contact details to the Evaluation Team. The Evaluation Team sent identified individuals an information package via email informing them of the purpose of the interviews and inviting them to participate (see Appendix A). Invited staff were asked to indicate their willingness to participate via reply email or phone call. A reminder email was sent a week after the first if no response was received. A telephone reminder call was made a week later if there was still no response. Consenting QFNL coordinators were asked to identify up to five other staff members involved in implementation of QFNL within their LHD that they thought would be valuable to interview. These individuals included (but were not limited to) Service Managers, midwives, Aboriginal Health Workers (AHWs), Smoking Care Advisors and Health Promotion Managers.

Data collection. Separate interview guides were used to conduct interviews with staff delivering QFNL, QFNL Coordinators, Antenatal/Postnatal Service Managers, and Health Promotion Managers (see Appendix B). Interviews were conducted via telephone or face-to-face by an experienced researcher who had a detailed understating of QFNL through involvement in Phase one of the evaluation. Interviews elicited Stakeholders perspectives about: the model implemented; whether QFNL processes have been integrated into routine clinical practice within participating services; ongoing challenges and achievements of implementing QFNL; long-term sustainability of the QFNL model of care in participating services; acceptability of QFNL from the perspective of staff; perceived acceptability of QFNL to clients; and implementation enablers. Interviews were audio-recorded with the permission of each participant.

Analysis. Audio recordings of interviews were transcribed by a professional transcription company. An inductive qualitative content analysis approach was used to analyse the data. This method was considered particularly suited to gain an in-depth understanding of interviewee's perspectives which are grounded in the actual data, rather than researchers' preconceived categories and theoretical perspectives[17-19]. Each whole interview was considered as a unit of analysis. Initial coding was conducted by one researcher and used to form a coding matrix which was reviewed by all members of the research team. The robustness of the conclusions was tested on the basis of each case by comparing codes within each interview, as well as independently of cases by comparing codes between interviews[20, 21].

Component 3: Interviews with QFNL Clients

Aim. To collect detailed information about the experiences of pregnant mothers of Aboriginal babies with the QFNL program, including: uptake of components of QFNL; the impact of smoking cessation advice; barriers to uptake; and the acceptability of care received.

Design. Semi-structured interviews with clients who received QFNL. While clients were selected from the three case study LHDs, results were analysed and are presented aggregated across all three LHDs due to the small number of participants.

Client eligibility. Women were eligible to participate if they were: pregnant with an Aboriginal baby, or had given birth within the last six months; were aged older than 18 years; reported smoking at their first antenatal appointment; and had at least one previous appointment at the antenatal care service they were recruited from.

Recruitment. Potential participants were identified by clinic or QFNL staff (midwives, AHWs or Smoking Care Advisors) using client records. Staff responsible for recruitment provided women meeting the eligibility criteria with an information statement (see Appendix C) that described the evaluation, and what participation would involve. Those willing to speak with the evaluation team completed a consent for contact form (see Appendix D), which included providing their contact details. When consent for contact forms were received by the evaluation team, a female Aboriginal interviewer contacted women at their preferred time, and provided information about the purpose of the interview and what participation would involve. After three unsuccessful attempts to contact the client, a text message was sent advising when another telephone call would be made (see Appendix E). If no response was received after five attempts, no further attempts at contact were made.

Data collection. Interviews were conducted over the phone by a female Aboriginal interviewer. No interviewees elected to have a face-to-face interview. An interview guide was used to guide the conduct of each interview (see Appendix F). Interviews explored women's perceptions of: the factors influencing their participation in smoking care; the factors influencing the uptake of cessation advice; which interventions they received; whether they made a quit attempt during pregnancy; the impact of smoking care on their health and wellbeing and that of their family; their thoughts on the cultural appropriateness and utility of the QFNL components; how the smoking care they received could be improved; and their current smoking behaviour, including any changes as a result of receiving QFNL. Interviews were audio-recorded with the permission of each participant. All interviewees were provided with a $50 gift voucher (not redeemable for alcohol or tobacco) as reimbursement for their time taken to participate.

Analysis. Audio recordings of interviews were transcribed by a professional transcription company. An inductive qualitative content analysis approach was used to analyse the data. This method was considered particularly suited to gain an in-depth understanding of interviewees' perspectives that are grounded in the actual data, rather than researchers' preconceived categories and theoretical perspectives[17-19]. Each whole interview was considered as a unit of analysis. Initial coding was conducted by one researcher and used to form a coding matrix which was reviewed by all members of the research team. The robustness of the conclusions were tested on the basis of each case by comparing codes within each interview, as well as independently of cases by comparing codes between interviews[20, 21]. An overview of each client's experience with QFNL and smoking is presented before the qualitative analysis results.

Results

Presentation of Results

Each case study begins with a description of the model implemented. This is the model that was implemented while QFNL was fully funded by the MoH. Changes to this model which were made to sustain the implementation beyond the funding period, or improve the outcomes, are described in the Stakeholder interviews. Results for the analysis of program monitoring data, and interviews with Stakeholders, are reported for each of the three case study LHDs. The results of the client interviews are aggregated across the three LHDs due to the small number of interviews conducted.

Case Study 1- Northern New South Wales LHD

Overview of implemented model

A referral model with a centralised QFNL team was implemented across all services providing QFNL in NNSW LHD from October 2013. Midwives, Aboriginal health staff and other healthcare providers (such as GPs), were trained to initiate a discussion with clients who indicated they were smokers, and then

complete a referral to the QFNL team for women who agreed. The QFNL team consisted of a manager and two health promotion officers with clinical backgrounds. A member of the QFNL team contacted, referred clients primarily by telephone but also face-to-face if distance allowed it, and provided smoking cessation support. Support offered included behavioural interventions delivered through regular phone calls and texts, referrals to the NSW Quitline, and access to NRT. LHD policies only allowed clinic staff to provide NRT directly, so a voucher scheme was implemented and the QFNL team collaborated with pharmacies to set up the scheme and ensure it ran smoothly. The QFNL team provided ongoing training and mentoring in smoking cessation strategies to healthcare providers involved in initiating discussions about smoking cessation and referring women to QFNL.

Component 1: Analysis of Program Monitoring Data

Reach. Based on data kept by the QFNL team, 362 clients were referred to QFNL in NNSW LHD across a four-year period from 17/10/2013 to 2/11/2017. Most clients (59%, n=212) were antenatal at referral, and 35% of these clients (n=75) continued with QFNL into the postnatal period before being discharged. An additional 17% (n=60) were referred in the postnatal period, and 25% (n=90) were household members. At referral, 62% (n=225) of clients smoked within 30 minutes of waking, and 38% (n=137) clients smoked more than 15 cigarettes per day. Twenty one percent (n=77) of clients reported recently reducing the amount that they smoked.

Uptake. The dataset only contains data for those who agreed to be followed-up by the QFNL team. An average of 17.5 (SD=12.3) calls were attempted with each referred client, with 31% of calls resulting in talking with the client. On average, each client spoke with the QFNL team over the phone 5.9 (SD=6.6) times. Clients were sent an average of 3.3 (SD=3.6) text messages, and had 0.3 (SD=0.8) face-to-face meetings. Clients were part of the QFNL program for a median of 77 days (IQR= 42-112). Overall, 13% (n=47) of clients who were referred did not have any contact with the QFNL team. Forty-four percent (n=159) of clients accepted referral to the NSW Quitline and 77% (n=279) agreed to try NRT. Clients received an average of 3.1 (SD=2.8) vouchers for NRT while part of the QFNL program, with 60% (n=168) of clients changing the type of NRT they used. Nicorette 25mg/16hr patches were the most common form of NRT provided (See Table in Appendix G).

Impact. The impact of QFNL on smoking status at discharge for QFNL clients in NNSW LHD is provided in Table 2. Nineteen percent (n=67) of clients who received follow-up support reported not smoking for at least 24hrs at discharge from QFNL. The median length of time smoke-free was 24.5 days (IQR=3-96 days). A logistic regression exploring the factors associated with being smoke-free at discharge from the QFNL program found those who had more points of contact with the QFNL team were significantly more likely to be smoke-free than those with fewer contacts (n=305, adjusted OR=1.1, 95% CI 1.06-1.16, P<0.001). No other factors had a significant association with being smoke-free (Table 3). The analysis was conducted as a complete case analysis where those whose smoking status was unknown were considered not smoke-free. A sensitivity analysis removing these cases did not alter these results (n=227).

Table 2: Smoking status at discharge from QFNL for clients who received follow-up support* in NNSW LHD for the period 2013-2017 (n=362).

	Smoking status at discharge from QFNL N (%)
Smoke-free for 24 hours or more	67 (19%)
Reduced the number of cigarettes smoked	97 (27%)
Smoking the same number of cigarettes	24 (7%)
Status unknown	174 (48%)

Source: Program monitoring data supplied by NNSW LHD. * 11 clients were still active in QFNL, their current smoking status is reported.

Table 3: Multiple logistic regression on the factors associated with being smoke-free on discharge from the QFNL team among clients receiving QFNL follow-up support in NNSW LHD in 2013-2017 (n=305).

		Quit smoking at discharge n (%)	Not quit at discharge n (%)	Adjusted OR (95% CI)*	P value†
Total contacts with QFNL team	Mean visits	10.1 (SD=9.4)	5.3 (SD=5.8)	1.1 (1.06-1.16)	**<0.001**
Quitline referral	Yes	27 (17%)	132 (83%)	0.82 (0.42-1.62)	0.57
	No	40 (20%)	163 (80%)		
NRT voucher received	Yes	53 (19%)	226 (81%)	1.14 (0.36-3.72)	0.82
	No	14 (17%)	69 (83%)		
Reducing to quit	Yes	27 (35%)	50 (65%)	1.40 (0.61-3.20)	0.42
	No	40 (15%)	225 (85%)		
First cigarette within 30 mins of waking	Yes	31 (14%)	194 (86%)	1.15 (0.73-3.29)	0.25
	No	22 (22%)	76 (78%)		
Year referred to QFNL	2013	4 (17%)	19 (83%)	ref	
	2014	15 (18%)	68 (82%)	1.39 (0.33-5.95)	0.66
	2015	14 (19%)	59 (81%)	2.35 (0.54-10.5)	0.25
	2016	18 (18%)	82 (82%)	1.87 (0.44-7.78)	0.40
	2017	16 (19%)	67 (81%)	1.39 (0.27-7.05)	0.69
Client type	Antenatal	43 (20%)	169 (80%)	ref	
	Postnatal	12 (20%)	48 (80%)	1.17 (0.48-2.83)	0.73
	Householder	12 (13%)	78 (87%)	0.78 (0.33-1.88)	0.59

Source: Program monitoring data supplied by NNSW LHD. *Adjusted for all covariates presented in the table. †p value<0.05 considered statistically significant.

Component 2: Interviews with QFNL Coordinators and other Key Stakeholders

Stakeholders. Three interviews were conducted. Stakeholders included the QFNL coordinator and two members of the QFNL team.

Reason for selecting model. A referral model was chosen due to the large geographic area covered by the NNSW LHD, the high workload of midwives, and the perception that there were limited staff available to provide smoking cessation support. Stakeholders also reported that it was difficult to train all clinical staff in smoking cessation strategies due to high staff turnover.

"We knew that our AMIHS staff did not have the time or the capacity to roll out Quit for new life themselves. Because there's too few of them. Their turnaround is very high." (Stakeholder 1)

Enabling factors. The Stakeholders interviewed felt that the QFNL team were very well trained with up to date evidence around what worked and what didn't in smoking cessation. They appreciated having dedicated time to provide smoking cessation support to clients as it allowed them to build rapport and delivered evidence-based interventions. They also valued the opportunity to assist householders with quitting, and thus help create a "smoke-free" environment for their clients.

"They [the clients] know that there's someone there to support them. I think that's a really, really valuable component of the program." (Stakeholder 1)

"The fact that householders or co-habitants were invited to be on the program as well was really well received. It was like; that's great, I've got someone else as a buddy." (Stakeholder 2)

Being able to provide different types of NRT, having clinical champions and using CO monitors to elicit information on smoking habits, and thus provide "tangible" smoking cessation support, were seen as

enablers to the successful implementation of QFNL. Stakeholders also reported success with offering incentives to clients. NNSW LHD trialled several different incentives including phone or supermarket vouchers and found that a 'spin and win' wheel was the most effective.

"What the wheel is, if they blow six parts per million or less with their Smokerlyzers reading, that they spin the wheel and whatever it lands on, so the items that we have on the wheel are baby items like a baby carrier or you know nappies." (Stakeholder 1)

Stakeholders indicated that the training they received through QFNL, self-learning or attending formal education sessions on smoking cessation helped motivate them to focus on smoking cessation, increased their ability to talk about smoking with clients, and facilitated teamwork between various healthcare providers to increase referral rates.

"One of the key things it's done for me is that it's increased my prioritising of addressing smoking within pregnancy." (Stakeholder 2)

Stakeholders also appreciated having continuous contact with the MoH to report back and seek help on how to run the program.

"[…] the help we needed was more from people like Ministry of Health. It was good for us to talk to someone about what we were doing and how we were doing it, and to get advice about how we could best link with something or do something in that way through our networking or the organisational structure." (Stakeholder 1)

Challenges and barriers to implementation. Stakeholders reported that clinic staff attitudes and perceived lack of skills often hindered the implementation of QFNL, which they felt resulted in a relatively low level of staff engagement and referrals. They also perceived a lack of confidence in raising smoking with clients, especially among part-time staff.

"The training education might have been fine, but they didn't have a great opportunity to practice on the ward, and they weren't confident." (Stakeholder 1)

Stakeholders reported that some clinics were short staffed, and a perceived high staff turnover meant that staff found it difficult to find time to provide smoking cessation care and add discussion about smoking into routine antenatal appointments. Stakeholders reported that long-term engagement of staff in providing smoking cessation support was hindered by the fact that the multidisciplinary QFNL advisory group, which initially met monthly and then bimonthly, showed decreased commitment over time.

"It's unrealistic in a 20 minute consultation to expect to provide patient centred care, led by patient, and then think you're going to have room to talk about anything beyond." (Stakeholder 2)

Stakeholders reported a lack of client knowledge about the dangers of smoking during pregnancy, as well as provision of conflicting advice from healthcare providers about the safety of NRT in pregnancy. Stakeholders perceived that many clients considered smoking as a less important problem in the context of precarious life circumstances. Stakeholders felt that engaging these clients was difficult, particularly when they were living in rural areas and struggled with accessing the clinic. One Stakeholder also reported difficulties with providing phone counselling, given that some clients repeatedly changed their phone number or did not have sufficient resources to possess a phone.

"They've got to have credit, they've got to have power, and they've got to have a phone. They've got to make sure that someone hasn't just taken their phone. Got to have reception which is not necessarily the case in quite a few of our areas." (Stakeholder 2)

"I think the fact that when you're looking at Quit for new life, we're looking at a disadvantaged socioeconomic disadvantaged group of people that have a lot more problems in their life than smoking. Smoking's the one thing that they can do for themselves, that they feel gives them a bit of time out. It's something that they own, and they're not that keen to give it up." (Stakeholder 1)

Stakeholders reported difficulties with finding the right kind of NRT for women through the voucher system rather than being able to directly provide a trial pack. Some Stakeholders also reported low client interest in referrals to the NSW Quitline as they were already receiving telephone support from the QFNL team, and clients reported not wanting to engage with a service that was perceived as 'anonymous'.

"If you're my new client and you agree to have phone conversations with me. Then I say, would you like a referral to Quitline? It's like, thinking, well, I think the phone conversation is with you and I, why would I want them calling me?" (Stakeholder 2)

Given the model implemented, Stakeholders reported that a significant amount of the QFNL team's time was put into providing smoking cessation education to health professionals across NNSW LHD. Stakeholders perceived that this work was not reflected in their outcomes due to unrealistically high Key Performance Indicators (KPIs) set by the MoH. They also encountered issues with collecting and reporting QFNL data in both ObstetriX and eMaternity, and therefore had to set up their own database with a dedicated staff member to undertake data collection and entry.

"We wore the brunt, regardless of how hard we worked, how committed we were, we tried so many different strategies. We still didn't meet KPIs. The other thing we thought because it was retrospective, so when we'd get a report, it would be three or six months behind. […] There was a push to meet the KPIs and there was a lot of angst when we didn't." (Stakeholder 1)

Key achievements. Stakeholders felt that QFNL helped women become more aware of the benefits of smoking cessation which often motivated a change in behaviour. They indicated that women who engaged in the program were either more likely to reduce the amount of cigarettes they consumed per day or gave up completely. Stakeholders reported further key achievements, such as ensuring that all women who attended the participating clinics and were identified as a smoker were offered evidence-based quitting support.

"They've [clients] never gone back to that mindlessness of just picking up a cigarette." (Stakeholder 3)

"But certainly, I think one of the highlights was the increased focus amongst clinicians." (Stakeholder 2)

Suggested improvements. Stakeholders suggested a need to provide more comprehensive support to women by supplementing telephone QFNL counselling with face-to-face home visits by local AMIHS staff, and employing a designated smoking cessation person in hospitals.

"The tobacco role is massive because there's so much - it needs more support. It needs more support from the rest of the LHD." (Stakeholder 3)

One Stakeholder recommended funding NRT through the PBS. Another suggested providing clinics with stock of NRT to allow them to directly supply NRT to clients. This was seen to provide the opportunity for clients to trial different types of NRT and find the type that best fit with individual's needs and preferences- a "try before you buy" approach.

"Because we did it via voucher system it took a couple of weeks sometimes to settle people down into what they wanted to use. You had to order a two week supply so you might order a two week supply in one particular NRT and then they find it didn't work for them. The patches made them itch and the inhalator they thought well might have been a Godsend and it wasn't. So I would love to have been able to give it directly. I would love to have been able to give a week's supply just to begin with." (Stakeholder 3)

Stakeholders also supported the routine use of CO monitors as a way of starting a conversation about smoking.

"We would love in some ways like to see that in our LHD at least, this it's just an expectation, you're a smoker. Of course you'll have a Smokerlyzer done when you come to our health service sites. " (Stakeholder 2)

Sustainability of the model. NNSW LHD decided to set up a new clinic once the QFNL funding ceased taking what they had learnt through QFNL and what they thought would work better. In February 2018, NNSW LHD set up an outpatient clinic called *You Me & Baby Smokefree*. The clinic was run by a midwife two days a week, and because it was an outpatient clinic, was eligible for funding through the Activity Based Funding (ABF) model.

"Because it's set up as an outpatient clinic, we can attract ABF funding to it. For telephone or face to face consults, if the client has to be counselled for nicotine dependence and it's documented, and included in the data, as an at service event, then we can claim." (Stakeholder 1)

An opt-out referral system was implemented so that any woman (Aboriginal and non-Aboriginal) who reported smoking during pregnancy, was referred to the program, unless they chose not to be. Support was provided over the telephone, face-to-face and in small groups using brief action planning. This approach emphasised talking about the risks of smoking in general rather than forcing women to quit immediately, setting small goals, motivating women to take ownership of their quit attempts and celebrating successes through incentives, such as the provision of free baby items.

> *"At this point it's the engagement and, why the engagement is being effective is because we use brief action planning, and I think a lot of it has to do with that. We don't set the standards that you have to stop or quit smoking. What we're saying is that one small step at a time." (Stakeholder 1)*

Stakeholders reported implementing a number of strategies to facilitate the implementation of the new model of smoking cessation support. Clinic staff were provided with access to training modules developed by the MoH. Clinics were further offered financial incentives, such as small grants for interested staff. Stakeholders reported having mentors for clinic staff, such as Cessation Support Officers or external tobacco experts. They also tried to identify and support champions who could further guide and assist clinic staff with providing smoking cessation, such as clinical nurse educators who focus on smoking cessation. These strategies were perceived to facilitate the uptake of this new model of smoking cessation support into routine antenatal services and community groups.

> *"What we're trying to do is get that [cessation support delivered by clinic staff] adopted by the healthcare facilities, so it frees up our time and our time then will be just supporting and trying to set up champions in the area. We offer things like a $1500 grant to people that are interested in doing a smoke-free or a tobacco treatment program in their ward, department, facility. We're going to focus on women's care units, across the LHD." (Stakeholder 1)*

The response to the new program was perceived by Stakeholders to be very positive, with referrals coming from across NNSW LHD and with more clinicians referring to *You Me & Baby Smokefree* than did to QFNL. Stakeholders suggested that this may be because a physical clinic now exists in the hospital, with champions based at other locations who can meet women face-to-face. CO monitors and NRT samples were available for use with clients. However, due to funding constraints, a regular supply of NRT for clients and householders is lacking. The clinic was scheduled to run to the end of 2018 as a trial, but extended to June 2019.

Perceptions of the QFNL Brand. The name of the program was seen positively in terms of starting a new life. However, the term "quit" was perceived by Stakeholders to be off-putting to some clients who did not think quitting was achievable for them. While the Aboriginal artwork was perceived as appropriate for this model of QFNL, it was not considered suitable if the scope of QFNL was expanded to include all pregnant women. When the new *You Me & Baby Smokefree* program was implemented, the name and branding were changed accordingly to reflect the expanded scope of including all pregnant women.

Case Study 2- South Western Sydney LHD

Overview of implemented model

SWS LHD implemented a referral model. The model was rolled out across services from March 2014. An Aboriginal Smoking Care Advisor received referrals for women from a number of healthcare providers including AHWs and midwives at AMIHS clinics, hospital-based antenatal clinics and postnatal services, as well as through other programs, events and word-of-mouth. Stakeholders reported that a flexible approach was taken to provide locally tailored support and accommodate the individual circumstances of clinics. Clinic staff could offer women referrals to the NSW Quitline, free NRT, either directly or through a voucher system, and provide referrals to the Smoking Care Advisor for follow-up support (see Appendix H for an overview of this model). Some clinics had a hard copy form kept in the front of the client's file to encourage clinic staff to talk about smoking. Women referred to the Smoking Care Advisor received a follow-up phone call and provision of ongoing support through face-to-face counselling and ongoing NRT.

Component 1: Analysis of Program Monitoring Data

Reach. From July 2014 to June 2018, 595 women attended an antenatal clinic offering QFNL in SWS LHD and were eligible for QFNL.

Uptake. Of the 595 women eligible for QFNL, 15% (n=91) were recorded in Cerner as accepting the offer of a QFNL intervention (see Table 4). The most common QFNL intervention taken up was follow-up support with the Smoking Care Advisor (15%, n=88), followed by the provision of NRT (8.1%, n=48) and referral to the NSW Quitline (1.7%, n=10). All offers of support were declined by 3.7% (n=22) women. The remaining women (81%, n=482) were either not asked, or it was not recorded in the data collection system. The uptake of the QFNL interventions varied each quarter (Figure 1).

Impact. Overall, 22% (n=128) of eligible women were recorded as not smoking in the second half of pregnancy (Figure 2). The recorded rate of quitting varied each quarter from 39% (n=14) in Jul-Sept 2015 to 2.4% (n=1) in Oct-Dec 2016. Nineteen percent (n=112) of eligible women were missing data in this field. Under a logistic regression model there was no significant association between not smoking in the second half of pregnancy and taking up a QFNL intervention (Table 5). A sensitivity analysis removing those cases with missing outcome data did not alter these results (n=483).

Table 4: Proportion of eligible women reported as taking up each type of QFNL interventions in SWS LHD for the period July 2014 to June 2018 (n=595).

QFNL Intervention	n (%)
Follow-up	41 (6.9%)
NRT and follow-up	39 (6.6%)
Quitline, NRT and follow-up	7 (1.2%)
Quitline	1 (0.2%)
NRT	1 (0.2%)
Quitline and NRT	1 (0.2%)
Quitline and follow-up	1 (0.2%)
Any QFNL intervention	91 (14.8%)

Source: Program monitoring data supplied by SWS LHD.

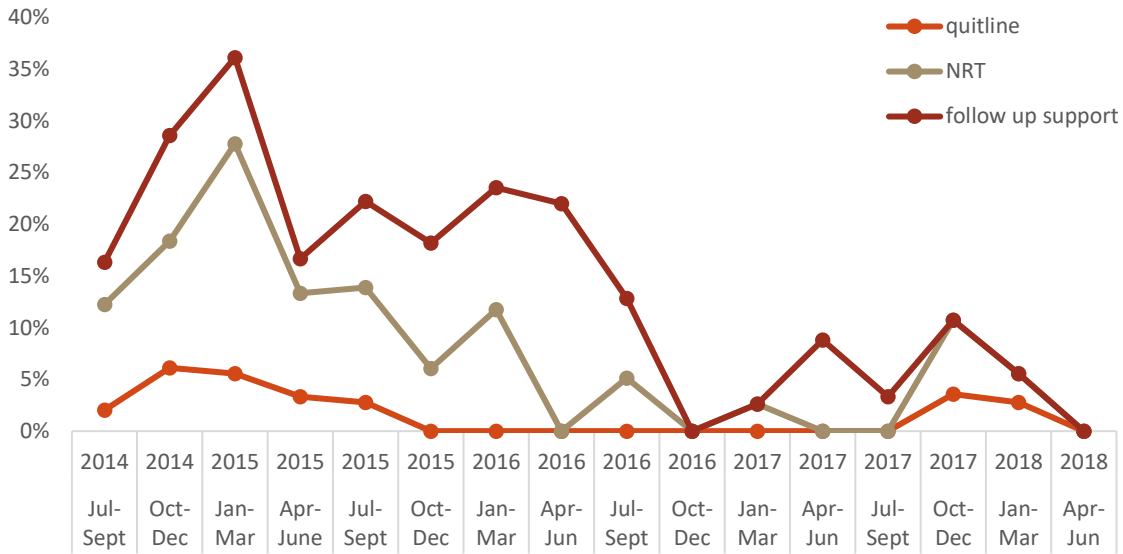

Figure 1: Uptake of the three QFNL interventions in SWS LHD among women who birthed each quarter from July 2014 to June 2018 (n=595). **Source:** Program monitoring data supplied by SWS LHD

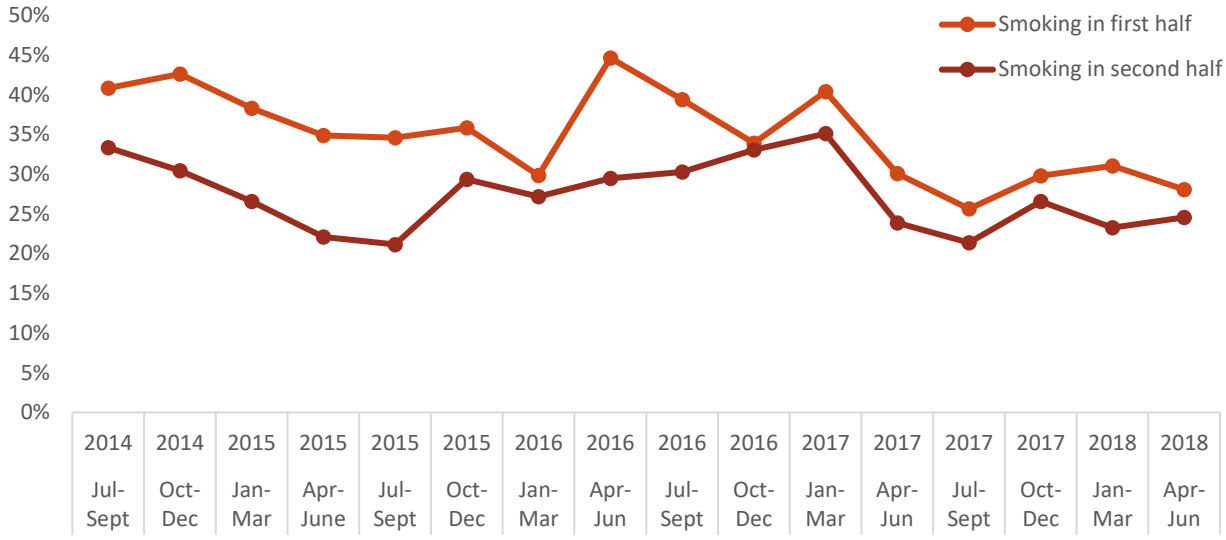

Figure 2: The proportion of women having an Aboriginal baby in SWS LHD who were recorded as smoking in the first and second half of pregnancy each quarter from July 2014 to June 2018 (n=595). **Source:** Program monitoring data supplied by SWS LHD

Table 5: Multiple logistic regression on the factors associated with not smoking in the second half of pregnancy in SWS LHD in 2014-2018 (n=595).

		Not smoking in second half of pregnancy n (%)	smoking in second half of pregnancy n (%)	OR (95% CI)*	P value†
QFNL intervention	No	109 (22%)	395 (78%)	0.81 (0.46-1.43)	0.48
	Yes	19 (21%)	72 (79%)		
Aboriginal	No	36 (21%)	138 (79%)	1.09 (0.7-1.69)	0.71
	Yes	92 (22%)	329 (78%)		
Year gave birth	2014	23 (23%)	75 (77%)	ref	
	2015	42 (30%)	96 (70%)	1.43 (0.79-2.59)	0.24
	2016	30 (18%)	134 (82%)	0.72 (0.39-1.33)	0.29
	2017	20 (16%)	108 (84%)	0.58 (0.3-1.14)	0.12
	2018	13 (19%)	54 (81%)	0.76 (0.35-1.65)	0.49

Source: Program monitoring data supplied by SWS LHD. *Adjusted for all covariates presented in the table. †P value <0.05 considered statistically significant.

Component 2: Interviews with QFNL Coordinators and other Key Stakeholders

Stakeholders. Three interviews were conducted. Stakeholders included the QFNL coordinator, the Smoking Care Advisor and a midwife.

Reason for selecting model. A referral model was implemented to reduce the additional time burden on clinic staff. It also allowed the provision of continuous smoking cessation care which is often not possible in clinics due to high staff turnover.

"Often midwives and other clinicians can be quite busy, so they feel less confident to give quite detailed support around smoking cessation." (Stakeholder 4)

"When [Smoking Care Advisor] goes out to see them, it's all about smoking and they're going to be more willing and able and receptive to that…I think you can get a lot more out of them and you can focus more on a specific issue if someone's specialising in that domain." (Stakeholder 5)

Enabling factors. Stakeholders indicated the benefits of having QFNL as a framework to help clinic staff discuss smoking cessation with their clients. Stakeholders felt that clients appreciated having a designated and ongoing Aboriginal Smoking Care Advisor to provide culturally specific support, raise awareness among clinic staff and in the wider community, and form long-term relationships with clients and other healthcare providers. The Smoking Care Advisor was perceived to have sufficient experience and time to build a relationship with clients and address other issues they may be facing. They offered home visits as face-to-face counselling was perceived to be more effective and acceptable to clients than helplines.

"Having that Quit for new life program - particularly for the first point of contact when we saw them at the hospital - was a really good way, I think of introducing the fact that we really do want to try and help them to stop smoking for the benefit of their babies and themselves, and their families and things, and their health and finances." (Stakeholder 5)

"Being Aboriginal, [the Smoking Care Advisor] is known in the community, and has that rapport as well, or people are often open to building that rapport with her." (Stakeholder 4)

Stakeholders provided a number of reasons for the perceived success of QFNL, including the involvement of householders, the provision of free NRT (or NRT voucher if staff were not entitled to prescribe NRT) with the ability to switch between different types of NRT to accommodate women's needs, using CO monitors in clinics as a motivator, and incentives to increase clients' awareness of, and engagement in, smoking cessation (e.g. baby hats, colouring in to keep other children busy). Stakeholders reported there was flexibility around the scheduling of appointments and clients who opted-out had opportunities to re-enter the program later on.

"But I think the best thing about the program is yeah, the fact that the NRT was available to the woman, the partner and anyone else that's in the household." (Stakeholder 6)

Stakeholders appreciated being able to liaise with other Stakeholders and LHDs to share experiences and monitor progress. QFNL staff were trained with the help of recognised experts in the field to enable them to use evidence-based strategies for smoking cessation and build rapport with clients.

"[Smoking trainer] is a genius. Pretty much the queen of smoking cessation and making it relatable and being able to actively promote without interrogating." (Stakeholder 6)

Stakeholders reported that the Smoking Care Advisor provided training to clinic staff on site, on a regular basis, using the MoH developed resources as well as regularly attending staff meetings, providing data entering guides, and brochures on smoking cessation. It was felt this helped to create awareness, build rapport and increase staff engagement. The Smoking Care Advisor is also available to trouble-shoot if staff experienced any issues and provide ongoing support.

"We do encourage the midwives and other Aboriginal health workers to do some health learning, like the [yarning] about quitting." (Stakeholder 4)

Locally tailored resources to use at community events to promote QFNL were seen as a further enabler for sustainable implementation. Stakeholders reported that they appreciated having hard-copy referral forms to overcome issues with data collection, and being able to present case studies, with agreement from the relevant clients, to tell their success stories.

Challenges and barriers to implementation. Stakeholders reported difficulties with managing differences in policies and practices of different healthcare services, which was perceived as having hindered the translation of QFNL from one setting to another. Difficulties were reported with securing ongoing support from health service management due to a lack of engagement of medical doctors, which highlighted the importance of having continuing support from clinical champions. Also, KPIs that were provided by the MoH were not perceived to reflect the success QFNL staff experienced in day-to-day clinical care.

"So initially it was a strong steering committee, but once the project came into implementation, the steering committee was there, but it was very loose and now it is predominantly that the steering committee does not meet." (Stakeholder 4)

Stakeholders felt that clinic staff did not receive timely feedback and were not held responsible or given a sense of ownership of the program. They further highlighted a lack of clinic staff awareness of QFNL and a lack of clinic staff knowledge about evidence-based and culturally appropriate smoking cessation strategies, particularly pertaining to how to appropriately ask clients about their smoking. This was attributed, at least in part, to high staff turnover and time pressures. They also reported misconceptions of some healthcare providers about the benefits of smoking cessation, despite training being available.

"A lot of the other midwives that weren't working in Aboriginal Health really didn't know about the service very much." (Stakeholder 5)

"I basically referred them and left them with the Quit for new life program to follow-up and do all that sort of stuff. I didn't get any feedback or I wasn't involved in any data entry or anything. Yeah, it's a shame." (Stakeholder 5)

"Oh, my doctor told me that if I quit smoking, it would put more pressure on me and my baby, so I decided not to and I'm like pulling my hair like really? Okay, well, unfortunately - and then I've got to try to contradict this medical professional, you know what I mean?" (Stakeholder 6)

Stakeholders mentioned the multiplicity of challenges clients often faced led to smoking cessation not being a high priority for many. They reported difficulties following-up some women due to changes in their phone number or address, trouble organising a time to meet, and difficulty having a second health worker present with the Smoking Care Advisor if needed to ensure safety during home visits. Stakeholders reported that clients often present to hospital relatively late in their pregnancy which they felt reduced the time available to implement some of the smoking cessation strategies. It was considered that the uptake of QFNL interventions was further reduced by: clients not wanting to use the NSW Quitline; the Smoking Care Advisor not being able to provide NRT directly due to LHD policies; and CO monitors not being used in clinics due to lack of time or space to store them.

Reporting the outcomes of QFNL was an additional time burden for staff. Stakeholders reported gaps in reporting outcomes of QFNL due to irregular reporting, missing or inaccurate data, and the Smoking Care Advisor not having access to appropriate systems. No information was available on how QFNL was introduced to clients, why they may decline support, and whether clients used different services or tried to quit themselves.

"The Quit for new life data recording form in [Cerner] is like seven clicks away. So it's not easily accessible. So having that completed for every offer has been an issue." (Stakeholder 6)

Key achievements. Stakeholders were proud of the successes that they had witnessed through QFNL. They reported that QFNL helped increase women's readiness to engage in smoking cessation and that this was considered a key achievement of the program. The QFNL team indicated that using evidence-based and culturally appropriate counselling made women more aware of the health benefits of smoking cessation for themselves and their babies and resulted in women reducing smoking or giving up completely, and motivated householders to quit. The QFNL team further reported having the same full-time Aboriginal Smoking Care Advisor as one of their key achievements. It was felt this allowed strong and ongoing relationships with clients and clinic staff to be built.

"It might not be as perfect as we all thought it might have been; the reduction might not be where we thought it is, but it is reducing, and closing the gap is kind of the whole point. So I think it's happening. Things never happen fast in health, right?" (Stakeholder 6)

"There's a very big stigma around a lot of Aboriginal Health and women smoking while they're pregnant and all that sort of stuff. […] I found that they were very willing and happy to give up and very willing and happy to have this service provided. They weren't stuck in just wanting to smoke. They really did want the best for their babies and things like that." (Stakeholder 5)

Suggested improvements. Stakeholders suggested allowing QFNL and clinic staff to provide NRT directly and improve data entry procedures by allowing the Smoking Care Advisor to have access to the relevant systems to enter data.

"I think if I was able to give out direct NRT, it would just cut out the next middleman. So people would be more inclined again to take it up and at least give it a go." (Stakeholder 6)

Sustainability of the model. Towards the end of the QFNL funding period, stakeholders reported that a business case was prepared in collaboration with Aboriginal health staff, using local data which showed a decline in smoking rates in line with the 2% each year that was aimed for. This was used to help create and maintain support by healthcare providers and policy makers to secure funding and therefore maintain the Smoking Care Advisor. Ongoing, the Smoking Care Advisor position will be a permanent full-time position to help provide continuity of care. However, Stakeholders reported that funding for NRT has ceased, and that efforts are currently being made to find an alternative source for this. In the meantime, information about accessing NRT through a GP referral is provided to clients. Stakeholders perceived that there has been a drop in the acceptance rate of QFNL, which they attributed to the lack of viability of NRT.

"Since the funding has stopped almost a month ago, we've had very limited uptake on home visits because I inform people that I am now only able to give out brief intervention advice and that our vouchers had ceased." (Stakeholder 6)

Perceptions of the QFNL Brand. The name of the program was perceived as appropriate for the target audience. The artwork and colour scheme was perceived to have the potential for high recall and recognition value. Stakeholders appreciated that the branding could be used as a template and be customised, for example to present success stories. Shirts and other products were created with the artwork which helped create awareness about the program. One Stakeholder indicated that the best people to judge the suitability of the branding were members of the Aboriginal community.

"Using the artwork and the logos and brands is something that was specifically designed for the Aboriginal community - I think that's an important conversation to be had with the right players around the table." (Stakeholder 4)

There was the perception that QFNL could be extended to non-Aboriginal women. However, Stakeholders said that if the scope of QFNL was to expand, to include all pregnant women, the artwork would need to be changed to reflect a larger target group.

"I actually think it would be wonderful to have it for all pregnant women and that. […] I think, (1) it would make them feel supported and (2) I think it points a very big message that it's not good to smoke while you're pregnant." (Stakeholder 5)

Case Study 3- Hunter New England LHD

Overview of implemented model

HNE LHD was the only case study LHD to implement a capacity-building model. This model involved investment in existing AMIHS and BSF and New Directions services to increase their capacity to provide smoking cessation support. Clients who were identified as smokers received cessation support during regular antenatal or postnatal appointments. It was expected that at all sites staff would address smoking with clients at every appointment. Training was provided to clinic staff and implementation was guided and monitored by health behaviour researchers from Hunter Population Health. Clinic staff provided referrals to the NSW Quitline and NRT, as well as continuing support through short-term goal setting, practical tips and behaviour change strategies. Additional phone contact or follow-up appointments could be made if needed. One manager and two full-time Support Officers were employed to support implementation of QFNL. The manager oversaw activities and liaised with the district and MoH. The Support Officers worked with Service Managers and other clinic staff to implement clinical practice change, provide ongoing site support through regular site visits utilising a site support checklist, and staff training. They also monitored performance and provided feedback to services and HNE LHD.

QFNL was first implemented in HNE LHD August 2013. A review of the smoking cessation model implemented took place within the LHD in 2015. This involved a telephone survey of clients, staff feedback, performance monitoring and a review of international best-practice models. Based on this the original *stages of change model* was revised to a *Swap to Stop Model* where support was offered directly regardless of readiness to quit (see Appendix I for an overview of this model). The model was launched in 2016 through a series of workshops and skills labs.

Component 1: Analysis of Program Monitoring Data

Reach. Across AMIHS, BSF and other postnatal services offering QFNL in HNE LHD, 15,507 clients were seen between January 2015 and Sept 2017. At any time, around 13% of these clients were receiving QFNL and 29% were reported as being current smokers. On average each month, 81% of QFNL clients came through an AMIHS service and 19% from BSF or New Directions postnatal services.

Uptake. The rate of eligible women being offered the QFNL interventions was above 90% for the three QFNL interventions. Between January 2015 and Sept 2017, HNE LHD records suggest that 1,183 eligible women (20-30%[i]) took up the offer of follow-up support provided at antenatal appointments, 968 (16-24%) took a supply or voucher for NRT and 405 (7-10%) accepted a referral to the NSW Quitline. On average each month, 55% of smokers were receiving some form of QFNL intervention (Figure 3).

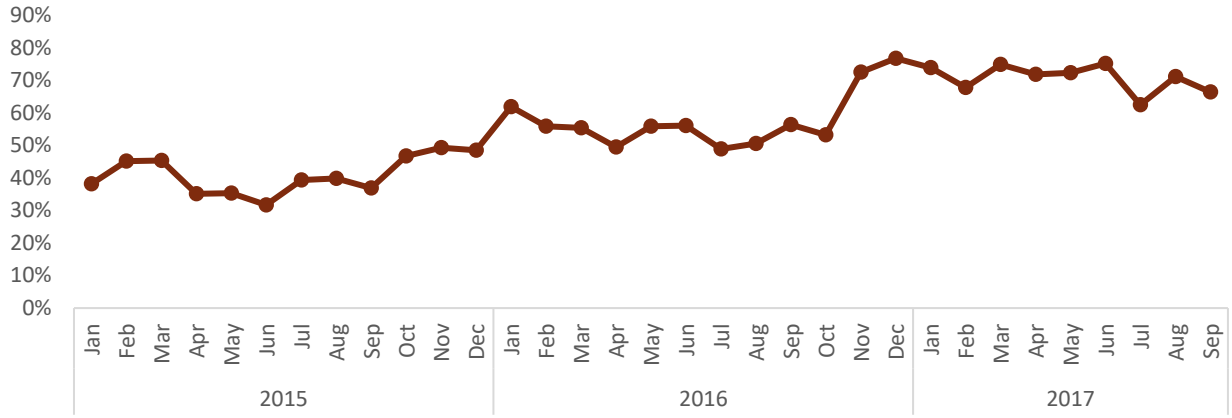

Figure 3: Proportion of eligible women who received a QFNL intervention in HNE LHD each month from July 2015 to June 2018. Source: Program monitoring data supplied by HNE LHD

Impact. The data include a crude measure of quitting as the number of women who had not smoked in the past seven days at the time of the antenatal appointment. This was not always asked or recorded. On average 4.2% (SD=2.1%) of eligible women were reported as quitting each month (Figure 4).

[i] The specified ranges indicate that the total number of women asked is not clear in the dataset due to existing QFNL clients being re-offered the interventions that they had previously declined.

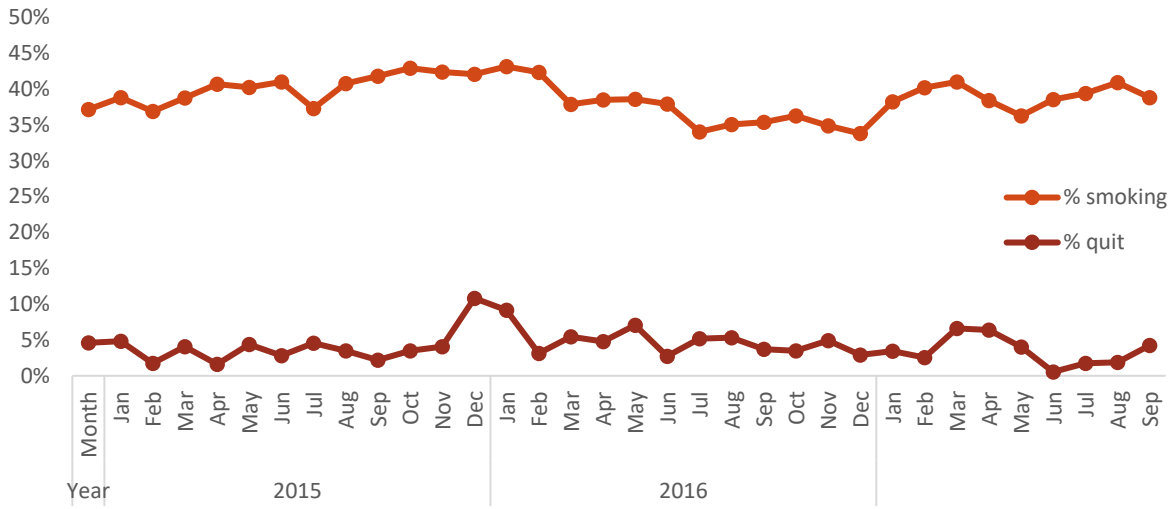

Figure 4: The proportion of clients who attended an AMIHS, BSF or New Directions service in HNE LHD who were recorded as smoking and the proportion of these who were reported as quitting each month from July 2015 to June 2018. Source: Program monitoring data supplied by HNE LHD

Component 2: Interviews with QFNL Coordinators and other Key Stakeholders

Stakeholders. Five interviews were conducted. Stakeholders included the QFNL coordinator, a QFNL Support Officer, a Service Manager, a midwife and an Aboriginal health worker.

Reason for selecting model. The capacity-building model was chosen due to the large size of HNE LHD and the relatively small amount of funding available, which made it impractical to employ Smoking Cessation Advisors. However, the main reason the capacity-building model was selected was sustainability. The approach taken aimed to invest in existing staff so when QFNL funding finished, staff would have the skills necessary to provide best-practice cessation support as part of routine care.

"It's really about investing in a sustainable approach that could be ongoing." (Stakeholder 7)

"Yeah, look, we just incorporated it in our antenatal care, so when we'd do our antenatal care it was just something that we always touched on." (Stakeholder 11)

Enabling factors. Stakeholders appreciated having Support Officers who could act as champions for delivering change. Support Officers had existing connections to staff and clients; possessed a realm of lived experience in the area of smoking cessation; and were committed and flexible problem solvers. The continuous feedback, support, and training, provided by the Support Officers (e.g. in the form of skills labs), were perceived to increase confidence and competence of clinic staff in addressing smoking. Staff were equipped to use an array of evidence-based strategies in order to provide ongoing and comprehensive face-to-face support for their clients. The Support Officers appreciated the opportunity to observe the clinic staff with clients and see them put in action what they had learnt rather than just relying on the data.

"Smoking does come up a few times in their antenatal and postnatal checks already. So having Quit for new life helped you to expand on that rather than just asking a question." (Stakeholder 8)

"We did a second round where we [the Support Officers] sat in and watched them. That was when they got blown away. We were, are they just bluffing? They tell us they do all this stuff. They came back and said you can't fake what we just saw. The way that they interacted with those mums and just the natural way that they introduced the smoking. They talked about the NRT and the knowledge that they had and the information transfer that they say and engagement of the mum. Getting the mums to walk out the door agreeing to what cigarettes they weren't going to have tomorrow." (Stakeholder 7)

The model was implemented differently at each service depending on the availability of staff and their strengths and opportunities to address smoking with the clients. In many services, AHWs took a leading role in addressing smoking and offering support while working in partnership with midwives. It was also

considered important to have Service Managers and the executive leadership team interested in performance monitoring to ensure QFNL was an ongoing LHD priority. QFNL funding was provided to services to help implement change. A number of on-off group meetings involving a number of Stakeholders, such as Aboriginal health workers and midwives, were considered useful in sharing success stories and ideas and fostering confidence in leadership.

"We'd always tried to have the Aboriginal health workers lead as much as we could. Obviously because it was Aboriginal specific services and they have the connections and the knowledge about cultural appropriate care. It was always really important." (Stakeholder 7)

"It [group meeting] was an opportunity for people to say well, this is how it works for me and this is what we've been doing. Some people were like, that would be really good if we could do that too. It empowered them a bit to step up and say I want to drive this." (Stakeholder 7)

Stakeholders mentioned that addressing smoking at every visit through antenatal and postnatal care gave women a greater sense of importance of this topic area and sufficient opportunities to take up offers of support. This was perceived to create a sense of continuity of care among clients and a sense of trust and to result in long-term changes in behaviour even after birth (i.e. reducing smoking to protect infant).

"Even though they've said no, still - you were planting the seed I believe. Because you were bringing it up to them often, at different times, and you could see that they were starting to consider." (Stakeholder 8)

"Some of the clients who are seeing the AMIHS, and they're building a sense of trust and strong relationships with the AMIHS team, won't want to be referred outside for support and are happy to stay within. If the service has got that capacity to do that then that's probably the best model." (Stakeholder 7)

Stakeholders suggested that the factors contributing to the uptake of the QFNL interventions included: the direct provision of NRT along with education about its use and the opportunity to easily try different types; being able to offer household members support; and the use of CO monitors.

"You could tell somebody that they had high blood pressure all you like. Let them see it and then they think it needs something done about it." (Stakeholder 9)

"Being able to give NRT. Being able to give it to them there and then rather than them wait because you often find that you lose them. They say yes and then you lose them when you can't provide anything else for them." (Stakeholder 8)

"We know that you cannot target one group and, especially when it comes to smoking. If the whole household's smoking you've got to target the whole household. Only targeting the pregnant woman would again be setting it up to fail." (Stakeholder 9)

Key achievements. Developing a sustainable model by embedding QFNL into routine care was seen as a key achievement by Stakeholders. This was achieved through educating and mentoring clinic staff, allowing flexibility for services to adapt the model to suit their available resources, and engaging with communities. This was perceived to help increase clinic staff awareness and readiness to help women quit smoking and ensure that smoking cessation was seen as a priority. They used various smoking cessation strategies, such as different forms of NRT or CO monitors, and were able to continuously support women along their care trajectory. Stakeholders perceived that this helped to motivate clients and their householders to quit smoking, or at least to reduce smoking or change their smoking behaviour to make it safer for their babies.

"In Hunter New England we actually made it so that it could be sustainable, and that services were able to implement" (Stakeholder 9)

"Certainly I do think we did make a difference, but was it ground-breaking? Did we go from 50 per cent to 10 per cent? No, we didn't. But what we did do and what the nurses did notice, or the staff did notice, was that there was a change in safety around the care of the infant and children. So we noticed that women were adopting the breastfeed, feed first, have your cigarette after; smoking outside, not smoking in the car, wearing of a smoking shirt, reducing co-sleeping when smoking." (Stakeholder 10)

"Engagement. Engagement with community, engagement with clinicians, engagement with the AHWs. The AHWs leading and owning it in Hunter New England, the AHWs - the majority - you can't throw a blanket over everybody but the majority of AHWs changed their intrinsic beliefs of it is a woman's choice

and actually started advocating, and instead of saying, they've got too much else going on, actually started to assist women in giving up smoking regardless of their situation." (Stakeholder 9)

Challenges and barriers to implementation. Several barriers to the uptake of the QFNL interventions were identified by Stakeholders. The model implemented meant there was limited resources to provide additional follow-up appointments or phone calls if they were needed outside of the standard schedule of visits. This was considered problematic in the postnatal setting where visits are less frequent. Referral to the NSW Quitline was considered to be of little benefit given clients' preference for face-to-face support. There were also limited resources to support household members to quit outside of referrals to the NSW Quitline and provision of NRT. Stakeholders also felt that understaffing and staff turnover made it difficult to provide consistent support to clients.

"We certainly encouraged providing some cessation support for other household members… The majority were we can do a Quitline referral. We'll give them a voucher that it's - yeah we just cannot. We're struggling to provide what we have to for the mother, let alone a whole household full of people." (Stakeholder 7)

Stakeholders also identified the perceived low heath literacy of clients as a barrier to cessation, with many clients believing that stopping smoking was not something they needed to, or could, do. Clients' concerns about using NRT were sometimes supported by other healthcare providers, who either lacked knowledge about the benefit and safety of NRT use during pregnancy, or who were simply reluctant to engage in encouraging smoking cessation with their patient.

"The idea of quitting, I think, can seem really overwhelming and something that they just couldn't even fathom that they could cope with, particularly because they perceived that smoking provides them with that stress relief as well." (Stakeholder 7)

"So at one time there were GPs saying continue smoking because you can't use NRT and also it would increase their stress. So we had general practitioners unaware of the program and unaware of the benefits." (Stakeholder 10)

"Oh, some just say they're not ready to stop smoking and some were a bit worried about - I mean, even after education, about the effects of the nicotine replacement therapy on their baby even though they smoke." (Stakeholder 11)

Inadequacies in data reporting systems were also identified as a barrier to implementation of QFNL. Stakeholders felt that this hindered adequate and timely reporting, and did not provide adequate data about the success and/or failure of the program. As a result of these perceived inadequacies, HNE LHD implemented their own data recording system. While this was perceived as improving the provision of feedback to services, it created a significant time burden on clinic staff who had to complete two different forms of reporting.

"I wish we had good data. I wish we did have better data around quit rates and things because it's so hard to know really. We've got anecdotal stories from the staff's perspective…I just can't even get my head around why in this day and age we don't have a really good system that collects quality data but also prompts best practice care." (Stakeholder 7)

Stakeholders considered the MoH set unachievable KPIs targeting the wrong outcomes. They also highlighted not having enough time to implement the QFNL model and see change.

"They wanted to monitor engagement instead of monitoring further change, like practice change. Now, practice change is what you're aiming for. […] because if a woman didn't give up, then it was deemed as failed […] even though the woman might still be having cigarettes, because she's wearing and using the NRT she's not sucking as hard and her CO levels have dropped to an amber or even a green level. You tell me how that's not a success. [Keeping kids out of NICU]." (Stakeholder 9)

"Don't come in with a Band Aid. When something's broken it needs plaster. It needs time to set, not a Band-Aid that's a quick fix." (Stakeholder 9)

Suggested improvements. Some stakeholders suggested the introduction of mechanisms to facilitate the referral of clients to another staff member within HNE LHD in order to receive more comprehensive support along with assessment and advice in clinic. This could either be via telehealth or someone,

servicing smaller geographic areas, who is able to speak with any smokers in the area, individually or in group sessions. Another thought it would be helpful to have a paid position to provide such local training and support for staff, rather than having central managers travel to sites.

"So, yes, it would have been much better if the LHDs - and this is not just for pregnant women, this is for all people - if there was always somebody whose sole position was to counsel and talk." (Stakeholder 9)

Stakeholders highlighted the need for continuous institutional and policy support as enablers for further smoking cessation support and stressed the benefits of securing ongoing managerial support, ensuring services took ownership and involving more Aboriginal people in decision making. Some Stakeholders suggested that involving GPs to prescribe NRT could decrease follow-up support provided by the clinic to make it more feasible. Including NRT on the PBS would also help. It was also recommended that a new data management system be developed to be able to provide timely feedback to services and guide evidence-based support.

Sustainability of the model. The capacity-building model was designed to be sustainable once QFNL funding ceased by investing in staff and creating a sense of enthusiasm and "ownership of the model" (Stakeholder 7). Various strategies were implemented to achieve this goal, including group activities to create ongoing team spirit and share experiences among professionals of the same field (e.g. AHWs, midwives); developing training videos; ensuring existing staff were trained and could provide ongoing training to new staff; employing methods to collect data and generate feedback including for postnatal services; producing clinical guidelines for the provision of NRT and use of CO monitors; and embedding KPIs in management reporting. Towards the end of funding, Support Officers gradually ended the help they offered, rather than stopping abruptly. It is not clear how much of this has been successful in supporting the continued provision of QFNL.

"Oh look, I think we're offering it, we're still passionate. As to the ability to follow-up per se on a consistent basis, it's more now it's built into our everyday work." (Stakeholder 10)

"I'm not really sure but I have a sense that it's fallen away because I'm not confident that there is the same level of attention being focused on it as there was when we were pushing it and driving it. That was a challenge. The inability to be able to determine if there was any impact on the smoking rates is big." (Stakeholder 7)

Some Stakeholders identified several factors that they felt undermined efforts to create a sustainable model. Stakeholders reported that in February 2018, the MoH sent a communication advising that LHDs were no longer required to report QFNL service improvement measures[ii]. Some of the Stakeholders interviewed reported that this information filtered down to clinic staff and others in the district, and led to a reduction in clinic staff's perceptions about the priority of providing smoking cessation support. Additionally, when funding for QFNL ceased in June 2018 so too did MoH funding to provide free NRT through QFNL. Without alternate funding, the LHD ceased offering NRT to clients. Some Stakeholders perceived that this change left little to offer clients to help them quit, and further led to smoking cessation being seen as less of a priority by clinic staff.

"The thing is a midwife sitting there at the computer and hearing they don't have to do the Quit for new life thing anymore they don't think it's not really about a data collection. That's, I don't have to do smoking cessation anymore. That can be the message that is sent or it's not a priority anymore. …They've stopped funding it so no one has to do it anymore and that's what - that's going to impact on the care at the ground level and our sustainability plans and all of that investment…The fact that it came out of that measure document means that then the district goes we don't have to do that." (Stakeholder 7)

[ii] Correspondence provided by the MoH shows that QFNL co-ordinators were informed that LHDs participating in QFNL were "no longer required to report QFNL services improvement measures in 2017-18…. The reason for this decision is that it is not possible to extract the data to derive these measures in the 2017-18 reporting period. Every avenue has been explored to obtain the missing QFNL monitoring data but without success. This decision is disappointing and does not reflect on the perceived importance of QFNL in any way."

"We probably still have but with the NRT that's got taken away and the vouchers. That makes it really hard... Yeah, so - because people tend to accept that a lot quicker or more than Quitline. But the problem is now there is nothing to offer really except for Quitline." (Stakeholder 11)

Perceptions of the QFNL Brand. The slogan and artwork of QFNL were viewed as appropriate for creating awareness and recognition of the benefits of quitting smoking. Stakeholders appreciated the metaphor and lay terms used in the branding and felt that the acronym not only helped maintain awareness but also facilitated the ease of use of QFNL materials by staff. T-shirts worn by some staff members were particularly well received by clients and other clinic staff. Branded give-aways were viewed as an opportunity to introduce education on smoking cessation and provide "tangible" incentives, rewards and reminders. Expanding the scope to mainstream maternity services was perceived to be useful to include more Aboriginal women who are not attending AMIHS and expand the scope of QFNL.

"Well I think it is a quit for a new life because I think lots of other things come when you let go of cigarettes. Financially, you've got more money. Improved health. The improved health of - or better health for babies that are being born." (Stakeholder 8)

"Everyone loved the shirts. That was something they would talk to us about. Oh what are those shirts for they're saying, can we talk to them about smoking. Then you had the opportunity to then educate and talk to other family members about it. […] Yes, and they would say if I give up, if I take it up, can I get a shirt [laughs]? I'd love to see if they ever brought things out, that they did that again. So, there would be shirts for those who took it up as well. […] Because it's a ripple effect." (Stakeholder 8)

There was, however, a feeling that the label made it a "program" rather than something which should just be part of routine care.

"I never felt comfortable with them saying we've got this program called Quit for new life because the whole idea was that it was really just meant to be what their normal smoking cessation care." (Stakeholder 7)

Component 3: Interviews with QFNL Clients

Client Overview

Overall, six clients from across the three case study LHDs participated in qualitative interviews. These clients each had different levels of engagement with QFNL and had various success with quitting smoking.

Client	Experience
Client 1	Client 1 attended her local AMIHS every three weeks starting at around nine weeks' gestation. Before she found out she was pregnant, she smoked about 15 cigarettes per day. She is currently smoking three to four per day. Her midwife offered her NRT in the form of patches, gum and spray. She tried the patches but only for four days. They did help reduce cravings but she did not like the taste. She does not live with anyone who smokes.
Client 2	Client 2 was smoking at least 10 cigarettes per day at the beginning of pregnancy. At around 28 weeks gestation she started receiving phone calls from the QFNL Smoking Care Advisor and she subsequently quit smoking. She is now postnatal and has remained quit. Through her pregnancy her midwife regularly asked about whether she was smoking. She was offered to continue to receive calls from the QFNL Smoking Care Advisor but felt that she didn't need them anymore.
Client 3	Client 3 was early in her pregnancy when she started receiving antenatal care at her local hospital every two weeks. She is now postnatal and smokes a few cigarettes a day. This is a big reduction from what she smoked previously. During her pregnancy her midwife referred her to the QFNL Smoking Care Advisor and she received phone calls from them weekly. They asked about her smoking and offered mechanisms to help her quit. She was given nicotine gum which she found helpful but for her it was not the same as smoking. It did not help to

	reduce her cravings. She lives with a smoker who was not offered QFNL. Since the baby arrived, they no longer smoke inside the house.
Client 4	Client 4 received antenatal care from a hospital antenatal clinic every two weeks from around 20 week's gestation. During pregnancy she was referred to the QFNL Smoking Care Advisor and received weekly phone calls from them. She was also offered a referral to the NSW Quitline but didn't feel that she needed this as she was receiving phone calls already. She trialled a lot of different types of NRT (inhalers, gum and patches) and found that the inhalers worked the best for her to reduce cravings without any negative effects. She used them for around two to three months. Her midwife would also ask how she was going with QFNL, how much she was currently smoking and what tools she was using to help her. During pregnancy she went from being a pack-a-day smoker to cutting right back and then completely stopping. Now she has had her baby she is smoking three to four per day. A household member who smokes was also offered NRT and weekly phone calls, however, it did not help to reduce their smoking.
Client 5	Client 5 commenced with the QFNL Smoking Care Advisor in the postnatal period. She was referred from an Aboriginal corporation. She did not smoke during her pregnancy as it made her feel sick but started again two weeks after giving birth. She has now quit again. Through QFNL she was offered NRT in the form of patches, inhalers and gum and discovered that she could use two products together. She found patches and gum together reduced her cravings with no negative effects. She had two attempts to quit. The second attempt she used NRT for two months and has remained quit. Under QFNL she was receiving monthly home visits for additional support which she found useful. It was offered to continue these visits but she felt that she no longer needed them. She knows she can contact them if she needs it.
Client 6	Client 6 was 22 weeks gestation when she commenced antenatal care. Her midwife and doctor both talked to her about her smoking and what she could do to try to quit. She was referred to the QFNL Smoking Care Advisor. Through QFNL she met with someone to chat whenever she needed it. At one point she left QFNL but was able to return when she felt ready. She received vouchers for NRT and tried a few different types to find one that was right for her. She has been able to halve the amount that she smokes to 10 per day. A household member who smokes also met with the QFNL Smoking Care Advisor, and received vouchers for NRT, and was able to reduce her smoking.

Interviews with Clients

Reaction to being asked about smoking. All those interviewed were aware of QFNL and had been asked by a midwife or doctor about their smoking. These conversations varied and could have been; simply a referral to the QFNL Smoking Care Advisor; or involved some information about the benefits of quitting, support and advice around how to quit.

"[They spoke] about the harm to the baby. What I can do to try and quit, and if I needed help to quit, the programs that they have." (Client D)

Most interviewees thought being asked about smoking was acceptable, and that smoking should be addressed during pregnancy care. However, for some, these conversations were difficult and were perceived as confronting.

"Oh, it was fine. I had no issues with [them talking to] me about it." (Client F)

"It was a bit confronting. I guess it's an addiction. It's kind of hard to talk about it sometimes" (Client E)

"Yeah, it was all right. Sometimes they were a bit pushy, but yeah, it was okay. I knew it was for the best, anyway." (Client B)

The information provided by healthcare providers was reported to have had a positive effect on interviewees, helping them understand the effects of smoking. Having a midwife address smoking made some women realise the importance of quitting, and made them feel like they were supported to quit.

"It made me realise a lot of things - the reasons I had to stop…The midwives were pushing for me to do it, because they know the effects it has, I guess." (Client E)

"It was good to have someone encouraging me to quit" (Client A)

Motivation to quit. The main reason given by interviewees for attempting to quit or reduce their smoking was perceived health benefits for the baby.

"I just wanted to give my baby the best chance of being fully healthy, yeah." (Client C)

"Well, just for bub. Yeah, that was my main reason." (Client A)

"I just didn't want my baby to come out sick" (Client B)

Another motivator for addressing their smoking was for their own health and wellbeing – interviewees were aware of the negative effect smoking was having on them. One client identified complex life issues as the reason that she accepted the support offered.

"Basically for the health of my baby and my health." (Client A)

"When I fell pregnant it made me sick, because I was pregnant. Then after I started again it was just expensive and I know it's not good for me." (Client F)

"I had mental health issues, as well as I've had three pregnancies now. Yeah, it just all rolled in together; and being an Indigenous woman." (Client D)

Interviewees reported that knowing support was available to assist them to quit was an additional motivator to address their smoking. This was particularly the case in the postnatal period, when the health of the baby was less of a factor.

"Just because I knew it [QFNL] was available to me, so I thought I'll give it a go, because I always struggled giving up unless I was pregnant. It's just that I've got motivation then but, not being pregnant, it's not - no real motivation." (Client F)

"Because I was - I've been trying for months, before getting pregnant, to quit smoking and I just had no sort of motivation or anything like that. So, getting into the program had that sort of motivation." (Client C)

QFNL supports. All six interviewees had received some form of QFNL support. This involved either talking with the midwives, or regular sessions with a QFNL Smoking Care Advisor, over the phone or in person, at their home. All spoke positively about having this support available to help them.

"Yeah, my midwife constantly asked me if I was still smoking at every appointment I went to." (Client E)

"I have a worker and she comes and meets me, and we have chats. I get the vouchers off her. Whenever I'm needing her, she's available for me to contact." (Client D)

"It was good to have someone encouraging me to quit, but unfortunately I couldn't quit completely." (Client A)

Several interviewees identified that it was reassuring that support was also available if needed, after they had quit or if they left the QFNL program but wanted to return.

"Yeah. She was really understanding - I left the program at one point and then I was welcome to come back at any time. It was really good." (Client D)

"Yes, they did ask me if I want them to keep calling me, but I thought that I'm fine now. I can do it on my own." (Client E)

All those interviewed had also taken up a "tangible" support. One client used regular (non-nicotine) chewing gum to help with cravings. The remaining women all tried some form of NRT (gum, inhalers, patches or spray). The availability of the free NRT was perceived as highly motivating, and interviewees liked that they could trial different types to find the one that suited their needs, circumstances and preferences. The provision of NRT by a midwife or Smoking Care Advisor was perceived as helpful, as the provision of the NRT was coupled with support about how to use products effectively (e.g. using multiple

products together) and possible side-effects could be discussed. None of those interviewed identified any negative side-effects of using NRT. However, a few of the women did find that NRT did not work for them.

"I had help with the program. I was able to trial different products with the vouchers. Then I found the ones that worked for me, and that is what's helped." (Client D)

"I had never done - what is it - two - I'd never used two products at once. I'd used [unclear] patches before. I think that's why - when I spoke to my 'quit for life' lady she said that I could use two products it's more successful." (Client F)

"I tried the gum but it was disgusting so I didn't use it." (Client B)

"It [the gum] was [helpful], but at the same time, for me, it's just the - it wasn't the same…it wasn't the same as a cigarette." (Client A)

While a referral to the NSW Quitline was also offered to some of the women interviewed, this was not taken up as they felt supported enough without it.

"I thought I was doing okay with just the lady [from QFNL] calling me every week." (Client C)

Clients interviewed provided mixed reports of QFNL interventions being offered to household members who smoke. When it was taken up, it was felt the supports had varied success.

"She was offered all of the nicotine replacements. She was doing the weekly phone calls as well. (Client C)

Outcomes. All six of the women interviewed either reduced their smoking or quit smoking. Most credited the encouragement they received from QFNL staff, the availability of support, and the provision of NRT through QFNL with helping them succeed.

"On the phone, I was getting phone calls from the smoke people [laughs]. They were kind of encouraging me to stop and, yeah, I just stopped and didn't really start again." (Client E)

"When I was pregnant, being - during the program, I went from being a packet-a-day smoker and I cut right back to one to two and then completely cut out." (Client C)

"I had two attempts. I think the second attempt - I was on it [NRT] for about maybe a month and a half, two months, and that's been since I've quit." (Client F)

Even when interviewees hadn't been able to quit they recognised the effort and support that they had received to help them. In these cases there was a tendency to blame themselves rather than the support received. They often reported making other changes to their smoking to reduce the risk to the baby.

"They - honestly, they did their best. Yeah." (Client C)

"Really, really pleased [with the support received]. I think it was just me, more that I needed to more want to quit." (Client A)

"No, not inside, no we smoked inside, but now that bub is here we smoke outside." (Client A)

All the women interviewed identified some benefits to reducing their smoking. They felt healthier, could breathe easier, had more time for other things and were saving money. However, some also identified negative effects such as putting on weight, headaches from withdrawals, and finding it hard being around friends who smoke.

"Yeah, I'm a bit more fitter. I can walk further without being puffed up." (Client B)

"I've put on weight [laughs]. [Unclear] but again I can breathe easier. When - if I'm doing running or exercising or something I'm not struggling." (Client F)

"Yeah, well, I don't - not really health wise, but time wise we spend less time smoking, so yeah…" (Client A)

"If I'm around people that smoke, because most of my friends do, the next day, my whole chest is heavy and hurts to breathe." (Client E)

Satisfaction with QFNL. All six clients interviewed expressed satisfaction with the support they received through QFNL. They felt that smoking should be addressed during pregnancy care and that the support they received was culturally appropriate. Some clients identified characteristics of their QFNL Smoking Care Advisors that they found beneficial, including that they were Aboriginal, had been a smoker themselves so had lived experience of quitting, were relatable, built rapport and were easily accessible.

"Yeah, about 10 out of 10 probably, because they just offered a whole range of support for me." (Client E)

"She's really good. She has actually been a smoker. So that kind of helped." (Client D)

Key Findings and Implications

The following findings were limited to the three case study LHDs and six clients interviewed, and so cannot be generalised to other LHDs, or all women eligible for QFNL. However, findings may be transferrable to other contexts.

Key Findings and Implications

QFNL was perceived as a positive and worthwhile program in the three case study LHDs

QFNL was perceived as a worthwhile program by QFNL coordinators and other Key Stakeholders interviewed in all three case study LHDs. While Stakeholders were committed and enthusiastic about implementing a smoking cessation program for pregnant Aboriginal women, they identified variable uptake and buy-in from other healthcare providers within the case study LHDs. Stakeholders identified a number of changes in the provision of support to pregnant women, which were attributed to the implementation of QFNL and the availability of dedicated time, and resources, to provide care. QFNL was perceived by Stakeholders as putting smoking 'on the agenda' as part of antenatal and postnatal care.

QFNL was acceptable to clients

The six clients interviewed were satisfied with the support they received through QFNL. All interviewees reported that they were able to reduce their smoking or quit while receiving the QFNL interventions. They spoke positively about the QFNL staff that they interacted with. While some interviewees reported that they found the conversations difficult or the staff "pushy", they understood it was for their and their baby's benefit and appreciated having someone there to help them. All clients interviewed reported that they believed it was appropriate to address smoking during pregnancy since the health of the baby was the main motivation to change their behaviour.

Provision of smoking cessation support to mothers of Aboriginal babies has been sustained in some form in the three case study LHDs since QFNL funding has ceased

Both case study LHDs that implemented a referral model (NNSW and SWS) provided examples of how QFNL has been sustained in some form post cessation of QFNL funding. NNSW LHD is currently trialling a modified referral model where face-to-face support is provided, and SWS LHD has obtained funding to continue employment of a Smoking Care Advisor. Stakeholders in HNE LHD perceived that their capacity building model resulted in widespread training of staff and the development of skilled Smoking Cessation Advisors, who have continued to provide some care post-QFNL funding.

Reach, uptake and impact of QFNL is difficult to determine using program monitoring data

Phase one of the evaluation identified poor quality data recorded through ObstetriX. As a result, many LHDs developed internal data collection and reporting systems to measure the reach, uptake and impact of QFNL. The data obtained for Phase two of the evaluation were data collected and maintained by the case study LHDs. This differed between the three LHDs and had many limitations, including unreliable measures and missing data. Across the three LHDs, there was little quality data to be able to determine the overall reach, impact and uptake of QFNL. Stakeholders reported that they had hoped that the introduction of eMaternity would overcome some of these limitations, however it was reported that this has not been the case. However, the comprehensive data received from NNSW LHD, on the contact points and updates on clients receiving follow-up support, did provide an interesting insight into what worked for those clients who agreed to receive support. When other factors were controlled for, those who had more points of contact with the QFNL team were significantly more likely to be smoke-free than those with fewer contacts (OR=1.1, 95% CI 1.06-1.15, P<0.001). Difficulties with data reporting and the ability to get timely feedback about program impact were identified by Stakeholders as discouraging to implementation efforts. While KPIs set by the NSW MoH helped to put QFNL on the agenda many Stakeholders felt they were unrealistic.

The ability to provide free NRT directly to clients, and allow clients to try different types of NRT, was considered a key enabling factor by stakeholders and clients interviewed in all three LHDs

The six clients interviewed identified the ability to obtain NRT, and trial different types, as a key factor to their success in reducing or quitting smoking. Uptake of NRT (determined using provided program monitoring data) varied across the case study LHDs, with rates of uptake ranging from 8.1% in SWS LHD to 44% in NNSW LHD. However, NRT was widely perceived by Stakeholders interviewed as a positive and "tangible" incentive that could be offered to women to encourage and motivate smoking cessation. Across the three case study LHDs, clients were more likely to take up offers of NRT than a referral to the NSW Quitline. Direct provision, rather than a voucher system, was perceived as the preferable model by Stakeholders, as direct provision allowed QFNL to commence use immediately and trial different types of NRT easily. Program monitoring data from NNSW LHD further demonstrated the importance of providing the opportunity to try multiple types of NRT to accommodate women's needs, given the high number of clients that tried multiple types of NRT before finding a preferred type. Several Stakeholders felt that NRT was most effective when coupled with support and education around its use.

Funding for free NRT is key to sustainability of QFNL

NRT was perceived by Stakeholders as a key component and success factor of QFNL. However since QFNL funding ceased, all three case study LHDs reported difficulty obtaining adequate funding to be able to continue offering free NRT to women. Alternatives, such as a GP referral for NRT, were not seen as viable alternatives due to the additional barriers created. Several Stakeholders reported that enthusiasm for providing smoking cessation support had reduced as they felt "there's no funding available to be able to provide the help [NRT] that's needed".

The ability to offer household members quit support was considered a key enabling factor across all three case study LHDs

Stakeholders reported that the ability to offer support to household members, especially NRT, was a key factor in successful engagement of clients with QFNL. While there was good engagement of household members in NNSW LHD, data about uptake was not collected by the two other LHDs in this evaluation. However, Stakeholders also recognised that the support they could provide to household members was limited, given their time and resources were necessarily focused on their pregnant clients. Clients had mixed views about offers of support, uptake, and success of supports, for household members.

The use of CO monitors was considered a key factor in engaging women

CO monitors were used in all three case study LHDs and were considered by Stakeholders to be a good way to engage and motivate women to quit. The ability to show women their carbon monoxide reading, and that of their children, was largely perceived as positive and a motivator for accepting QFNL interventions.

The use of "tangible incentives" could be considered in future programs to facilitate client engagement

Case study LHDs reported seeing benefits from branded give-aways, which created and maintained awareness, engagement and interest in QFNL. Inclusion of rewards for household members were also considered a helpful way of encouraging a smoke-free environment for women. This aspect of QFNL could be further expanded in the future.

The postnatal period provided fewer opportunities to address smoking with women

Program monitoring data provided by two LHDs suggested that less than 20% of QFNL clients came through a postnatal service. While addressing smoking in the postnatal period and preventing smoking relapse during this period were aims of QFNL, the main focus of the case study LHDs was the antenatal period. QFNL data collection methods were designed for the antenatal setting making it difficult to get data for the postnatal period. The schedule of visits in the postnatal period also provided fewer opportunities to address smoking, and the change in services following the birth of the baby was reported as sometimes disrupting the provision of smoking care. Interviews with clients suggested that focusing on the postnatal period would be beneficial. Some clients picked up smoking again during this period as the main motivator to quit, the health of their baby, was gone. Others that remained quit were comforted to know that the support was still there for them if they needed it.

Lack of clinic staff awareness, knowledge and engagement with QFNL were identified as key barriers to implementation

Stakeholders identified short-staffed clinics with high staff turnover as barriers to women being offered the QFNL interventions. They recognised that clinic staff were a key factor in initiating discussions about smoking cessation with clients, and needed to have confidence, knowledge, time, and to see smoking as a priority, in order to address smoking cessation with clients in a way that encouraged them to take up offers of support. This was the case across all models implemented.

Fully engaging with QFNL requires overcoming several barriers

Several barriers to fully engaging with QFNL and attempting to quit smoking emerged during the interviews with clients. These included complex life issues, being surrounded by smokers, and not being fully committed to wanting to stop smoking. For some women it was difficult scheduling extra appointments for cessation support while others found that NRT was not a good substitute to smoking.

There is scope to expand QFNL beyond pregnant women of Aboriginal babies, with some modifications to branding

All Stakeholders perceived that QFNL could be expanded to provide quit support to pregnant women who smoke, regardless of Aboriginality. The name 'Quit for new life' was seen as relevant to all women, however modifications to the program brand logo were perceived to be needed given the use of Aboriginal artwork.

Limitations

Key findings and recommendations should be considered in light of several limitations.

Data limitations

It was originally intended that AMDC data would be analysed separately by each case study LHD for Phase two of the evaluation. However, these data were not available for one of the selected case study LHDs and power calculations showed that at 80% power, with the available sample sizes in the remaining two LHDs, only a large difference could be detected. Program monitoring data were therefore requested from case-study LHDs to allow an analysis of reach and impact of QFNL. The data provided varied between the three LHDs in this study, making it hard to compare results across case study LHDs. Each data source had its own limitations. In NNSW LHD, extensive de-identified data was provided for those clients who accepted the offer of follow-up support. Data were not available for clients who declined this support. A data manager maintained this data base. Several of the variables contained a large number of missing values, as these were either not collected for the entire period or no contact could be made with the client to obtain the information. In SWS LHD, data entered by clinic staff for each eligible client was extracted from Cerner. Since the Smoking Care Advisor did not have access to this database, she relied on others to enter new information and could not check the completeness of the data. Concerns were raised that some uptake data may have been missed. The measure of impact was *not smoking in the second half of pregnancy*, which is known to be poorly recorded and does not give QFNL enough time to have an impact on clients who may not start antenatal care until after 20 weeks (Phase one findings). In HNE LHD, aggregated data were provided. These data were entered into an LHD designed database by clinic staff. Numbers were reported for each month, meaning that women could be counted in the data over multiple months. This led to the need to report the data differently than the other two LHDs, as the average proportion of women per month taking up a QFNL intervention or reporting not smoking, rather than the overall proportion of women with these outcomes. The impact data provided was a 7-day point prevalence abstinence. This was not a mandatory reporting measure and was not considered to be reliable as many clients may not have been asked or recorded.

Difficulty recruiting QFNL clients

Difficulties were encountered in recruiting women to take part in an interview for the evaluation of QFNL. This was despite significant engagement with Key Stakeholders within each of the three case study LHDs who recruited women on our behalf. In working with the services and case study LHDs, we have identified a number of reasons for this:

- Case study LHD staff have been unable to contact potentially eligible women to invite them to participate due to out-of-date contact details or no answer to phone calls;
- Many women who were contacted by services did not consent to participate for various reasons;
- Women who provided consent to be contacted by the researchers did not respond to phone calls or text messages over several weeks; and
- Some services no longer have NRT to offer women, so did not consider that they had QFNL clients to ask to participate.

It is likely that those who did agree to participate had engaged well with QFNL and had a good rapport with midwives or QFNL Smoking Care Advisors.

Conclusion

Overall, QFNL was perceived as worthwhile and acceptable within the three case study LHDs. Stakeholders felt that having a formal framework outlining how cessation support should be delivered helped prioritise smoking within services, and within the LHD. QFNL was also viewed as acceptable by all six of the clients interviewed. Case-study LHDs implemented varying models of QFNL that were tailored to the LHDs resources, size and funding model. Program monitoring data revealed that clients were more likely to accept an offer of follow up support or NRT than a referral to NSW Quitline. There was some evidence from one case study LHD that increased number of follow up appointments aided cessation attempts. The provision of smoking cessation support to mothers of Aboriginal babies has been sustained in some form in the three case study LHDs since cessation of QFNL funding.

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Appendices

Appendix A: Stakeholder Informtion Statement

Evaluation of Quit for new life
Information about Quit for new life Stakeholder Interviews

The NSW Ministry of Health is conducting an evaluation of the Quit for new life program. The evaluation aims to describe how Quit for new life has been implemented in participating antenatal and postnatal services, measure the impact of Quit for new life on smoking cessation rates during pregnancy among mothers of Aboriginal babies, and assess the acceptability of Quit for new life from the perspective of program participants and key stakeholders. As part of the evaluation, we are inviting a range of stakeholders to participate in an interview about their experiences and perceptions of the Quit for new life program. While we will not use your name in reporting your responses, your role and LHD will be identified.

What am I being asked to do?
You are invited to participate in a telephone interview about your experiences of Quit for new life. The interview will ask about your role in the implementation of Quit for new life, and your perspective of the achievements and challenges of implementing Quit for new life. The interview will take about 30-45 minutes. If you agree, the interview will be audio-recorded. If you would prefer to do the interview face-to-face we can discuss options for this.

Do I have to participate?
Participation in the evaluation is voluntary, and you can stop the interview at any time without having to give a reason. Whatever your decision, it will not affect your relationship with NSW Health or your service.

What will happen to my information?
All the information collected from you will be treated confidentially, and only the External Evaluation Organisation (the University of Newcastle) will have access to it. The evaluation results may be reported in a written report, scientific publication or at a conference. Individuals will not be named in the evaluation results; however your LHD and role type will be reported. This may potentially allow others to identify you.

What are the next steps?
1. Please reply to this email to indicate whether you are willing to participate in a telephone interview. If yes, please suggest a preferred date and time for the interview.
2. If we do not hear from you, an evaluation consultant from the University of Newcastle will telephone you in the next few weeks, and ask if you want to participate. If you agree to participate they will conduct the interview with you at a convenient time.

Further information: If you have any concerns or would like further information about the evaluation, please contact Rob Sanson-Fisher, Chief Investigator, Quit for new life Evaluation on telephone 1800 084 755 or email rob.sanson-fisher@newcastle.edu.au

Ethics approval: This evaluation has been approved by the Ethics Committee of the Aboriginal Health and Medical Research Council of NSW. Any person with concerns or complaints about the conduct of this evaluation should contact the Executive Officer on 02 9212 4777 and quote protocol number 1029/14. The evaluation has also been approved by the NSW Population & Health Services Research Ethics Committee. Any person with concerns or complaints about the conduct of the study should contact the Ethics Coordinator who is the person nominated to receive complaints from research participants. You should contact them on 02 8374 5600 and quote HREC/14/CIPHS/46.

Thank you for taking the time to consider this invitation. This information sheet is for you to keep.

Appendix B: Interview Guides for staff delivering QFNL, QFNL Co-Ordinators, Antenatal/ Postnatal Service Managers, and Health Promotion Managers.

Staff delivering QFNL:

1. How long have you been with the service? When did the service first implement QFNL?
2. What are the main responsibilities of your role? What is your role in QFNL?
3. What training did you receive for QFNL?
    a. Was it timely?
    b. Did it provide adequate support for your role?
4. How has QFNL changed the smoking cessation support you provide to your clients?
5. Has QFNL increased your confidence and skills in providing smoking cessation care?
6. What resources are available to help you provide smoking cessation support? (e.g. training manuals, mentors). Are these resources adequate? What other resources would help you?
7. How do you integrate provision of QFNL with the other antenatal care you provide?
8. Do you work in partnership with other staff / other services to provide smoking cessation care?
9. How do you feel about the division of responsibilities and your role under QFNL?
10. How do you think QFNL benefits your clients?
11. Why do you think some women do not take the support offered?
12. What has been your experience of providing smoking cessation support to client's family members?
13. What have been the key achievements in implementation of QFNL in your service?
14. What have been the key challenges in implementing QFNL in your service?
15. Do you think the QFNL model is an appropriate model to support smoking cessation? How could the model be improved? If so, how?
16. Do you think the QFNL model could be adapted to address other maternal health issues, such as gestational weight gain or alcohol consumption? How might this work?
17. Do you think that the QFNL model is sustainable?
18. Do you have any other feedback or suggestions for improvements?
19. Do you think the QFNL brand (i.e. logo and name) is suitable for a smoking in pregnancy cessation program?
20. Do you think it would be reasonable to expand the QFNL scope and use for all women (vs restrict to Aboriginal communities)?

QFNL Co-ordinators:

- Can you briefly describe the QFNL model implemented in your LHD?
    - Who is responsible for providing the different aspects of QFNL to pregnant women and how much support do they provide?
    - How are postnatal women engaged?
    - How are cohabitants engaged?
- What factors have contributed to the success of QFNL in your LHD?
- What have been the challenges of maintaining the implementation of QFNL in your LHD, beyond the initial start-up period?
- What steps have you taken to embed smoking cessation into routine clinical care in participating services?
    - Have these steps been successful?
    - What have been the challenges?
- Have any changes to policy, practice and systems taken place to support the implementation?
    - What were these?
    - Who initiated the changes?
- Why do you think women may decline support and are there any efforts to address smoking with these women?
- What impact have LHD level policies had on the provision of NRT in your LHD?
- How has training been provided to new staff?
- Has implementation and governance of QFNL changed over time in your LHD? If so, in what ways?
- Has data reporting for QFNL changed over time in your LHD? If so, in what ways?

- How will you manage when the funding ceases? Do you have a sustainability plan in place?
- Do you think the model of delivery of QFNL that has been adopted in your LHD is sustainable?
- Do you think the QFNL brand (i.e. logo and name) is suitable for a smoking in pregnancy cessation program?
- Do you think it would be reasonable to expand the QFNL scope and use for all women (vs restrict to Aboriginal communities)?

Antenatal/Postnatal Service Managers:

- Describe how QFNL is implemented in your service?
- How has it been managed? Is the governance of the program effective?
- What staff (positions) are involved in the implementation of QFNL at your service? What are their roles and responsibilities in QFNL?
- How has QFNL changed the smoking cessation support provided at your service?
- Have staff (e.g. midwives. Aboriginal health workers) had to change/adapt their role to accommodate the requirements of QFNL? If so how has this been accepted?
- Do you think that QFNL has increased your staff's awareness, knowledge and/or confidence in providing smoking cessation care to clients? What makes you think this?
- Is provision of QFNL integrated with the other antenatal care provided by your service? If so how?
- Are there policies/procedures/guidelines for implementing QFNL in your service? Briefly describe them.
- What components of QFNL have worked well? What components haven't worked well?
- What have been the **key achievements** in implementation of QFNL in your service?
- What have been the **key challenges** in implementation of QFNL in your service?
- Do you think the QFNL model is an appropriate model to support smoking cessation? How could the model be improved? If so, in what ways?
- Do you have staff members at your service whose positions have been funded (in full or part) by QFNL funding?
- How will you manage when the funding ceases? Is there a sustainability plan in place?
- Do you think the model of delivery of QFNL that has been adopted in your service is sustainable?
- Do you think the QFNL brand (i.e. logo and name) is suitable for a smoking in pregnancy cessation program?
- Do you think it would be reasonable to expand the QFNL scope and use for all women (vs restrict to Aboriginal communities)?

Health Promotion Managers:

- How has implementation and governance of QFNL changed over time in your LHD?
- What factors have contributed to the success of QFNL in your LHD?
- What have been the challenges of maintaining the implementation of QFNL in your LHD, beyond the initial start-up period?
- Are there other LHD Health Promotion Managers that you have regularly consulted with during the QFNL implementation period?
- How has QFNL funding been distributed and utilised within your LHD? What factors drove decision-making about distribution of funding?
- Do you have staff members in your LHD whose positions have been funded (in full or part) by QFNL funding?
- How will you manage when the funding ceases? Do you have a sustainability plan in place?
- Do you think the model of delivery of QFNL that has been adopted in your LHD is sustainable?
- Do you think the QFNL model is an appropriate model to support smoking cessation? How could the model be improved?
- Do you think the QFNL model could be adapted to address other maternal health issues, such as gestational weight gain or alcohol consumption? How might this work?
- Do you think the QFNL brand (i.e. logo and name) is suitable for a smoking in pregnancy cessation program?
- Do you think it would be reasonable to expand the QFNL scope and use for all women (vs restrict to Aboriginal communities)?

Study of smoking cessation support for mothers of Aboriginal babies

INFORMATION FOR PARTICIPANTS

Introduction

You have been invited to participate in a research study about smoking habits during pregnancy. The study is being conducted by the NSW Ministry of Health. The University of Newcastle have been contracted to undertake data collection and reporting for the evaluation. The aim of the study is to gather information from mothers of Aboriginal babies about their smoking habits during pregnancy, and determine what kinds of support are offered to mothers through their antenatal care providers.

What am I being asked to do?

The study involves participating in a telephone interview, and will take about 30 minutes. The interview will be conducted by an Aboriginal woman or a culturally competent non-Aboriginal woman. If preferred a time can be made to do the interview in person. If you are interested you can fill in the consent to contact form to give your details to the researchers.

What questions will I be asked?

The interview asks about your smoking during pregnancy, what support you received to quit smoking during your pregnancy, and what you thought about the quit smoking support you received.

Do I have to participate?

Participation in this study is entirely voluntary. You do not have to take part. If you do take part, you can withdraw at any time without having to give a reason. Whatever your decision, please be assured that it will not affect your health care, or your relationship with the staff who care for you.

Why have I been asked to participate?

A group of mothers of Aboriginal babies from across NSW who reported smoking during pregnancy are being invited to participate in this study.

What will happen to my information?

All the information collected from you will be treated confidentially, and only the research team will have access to it. The evaluation results may be reported in a written report, scientific publication or at a conference, but individuals will not be identifiable.

Will the study benefit me?

Some people value the opportunity to discuss their experiences and what they think. In the future, we hope that the results from this study will give us useful information to help future pregnant

women make the best decisions about their own, and their family's health. Participating in this study will not be of any direct benefit to you.

What are the risks?

This study involves answering questions. You may feel anxious about your responses. There are no right or wrong answers. We are interested in finding out about what women think, feel, and do about smoking during pregnancy. It may raise some questions for you about smoking. We encourage you to discuss these with your doctor or midwife or call the Quitline on 13 7848 (13 QUIT).

Costs

Participation in this study will not cost you anything. You will receive a $50 supermarket voucher upon completion of your interview. Your mailing address will be collected solely for this purpose.

What are the next steps?

1. Decide if you if you would like the opportunity to participate.
2. Fill in the consent to contact form
3. A member of the research team will contact you on the number you provide, and ask if you would like to participate in the study.
4. If you agree to participate in this study, you can set up a time for the interview over the phone or in person.
5. The interview will take about 30 mins to complete.
6. At the completion of the interview a $50 voucher will be mailed to you.
7. If you wish to withdraw at any time please call Rob Sanson-Fisher on 1800 084 755 (freecall).

Further information

If you have any concerns or would like further information about the evaluation, please contact Rob Sanson-Fisher on 1800 084 755 (freecall) or email rob.sanson-fisher@newcastle.edu.au.

Ethics approval

This study has been approved by the Ethics Committee of the Aboriginal Health and Medical Research Council of NSW. Any person with concerns or complaints about the conduct of this evaluation should contact the Executive Officer on (02) 9212 4777 and quote protocol number 1029/14. The evaluation has also been approved by the NSW Population & Health Services Research Ethics Committee. Any person with concerns or complaints about the conduct of the study should contact the Ethics Coordinator who is the person nominated to receive complaints from research participants. You should contact them on (02) 8374 5600 and quote HREC/14/CIPHS/46.

Thank you for taking the time to consider this invitation.

This information sheet is for you to keep.

Appendix D: Consent for Contact Form

Consent form for the research project:
Study of smoking cessation support for mothers of Aboriginal babies

☐ **YES: I agree to pass on my contact details to the researchers of the above study**

By signing this form I understand:

- The researchers will contact me about a research study.
- I am only agreeing to the researchers contacting me about the study.
- I can decide, when the researchers contact me, as to whether I would like to take part in the study or not.
- If I do decide to take part in the research study I can withdraw at any time and do not have to give a reason.
- My information will remain confidential to the researchers.
- Data reported from this research will not personally identify me.

If you agree to the researchers contacting you about this study, please fill in the table below and sign the form at the bottom. In the table you can suggest which days and/or times of day would be the best for us to contact you.

Name	
Telephone number	
Type of telephone number (home, mobile)	
Alternative telephone number	
Preferred day/s of the week for us to call you	
Preferred time of day for us to call you	
Mailing address (to send voucher)	

Signature: _____ Date: _____

Please return your form by giving it to a clinic staff member.

THANK YOU FOR YOUR INTEREST IN THIS STUDY

Appendix E: Text Message prompt for mothers of Aboriginal babies ahead of phone interview

Participants were initially be contacted by phone to arrange an interview time. If after 3 attempts the phone was not answered, the following SMS prompt was sent:

> *"Hi [participant's name], you recently filled in a form to say you may be able to have a yarn with us about smoking. I will call you [tomorrow/in 1 hour] to see if you are happy to answer a few questions. Speak to you then - [interviewer's name] "*

Another SMS was sent if the participant did not answer at the time of the interview:

> *"Hi [participant's name], just tried to call you for our yarn I will try you again [tomorrow/in 1 hour]. Thanks [interviewer's name] "*

Appendix F: Client Interview Guide

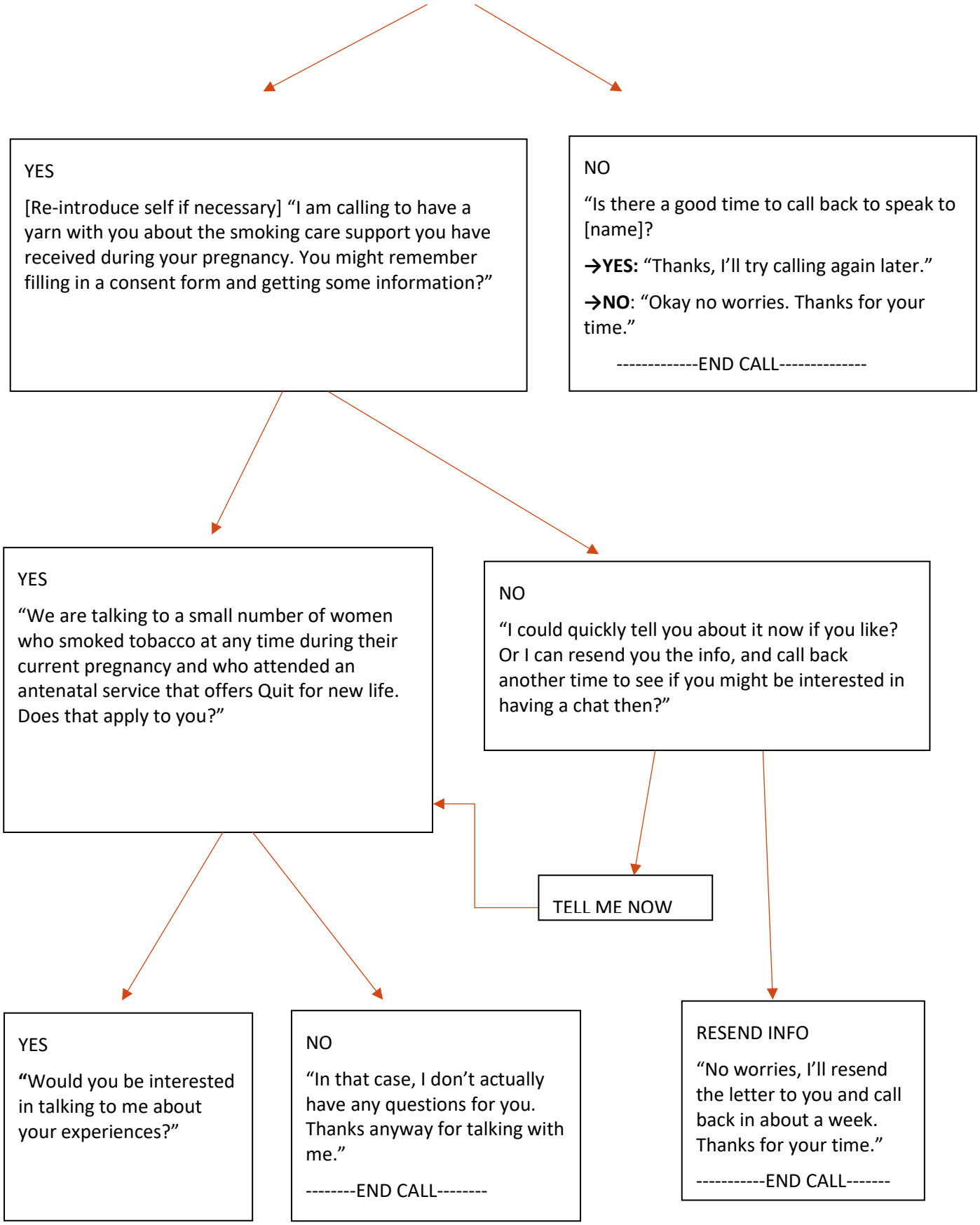
INTERVIEWER INTRODUCTION

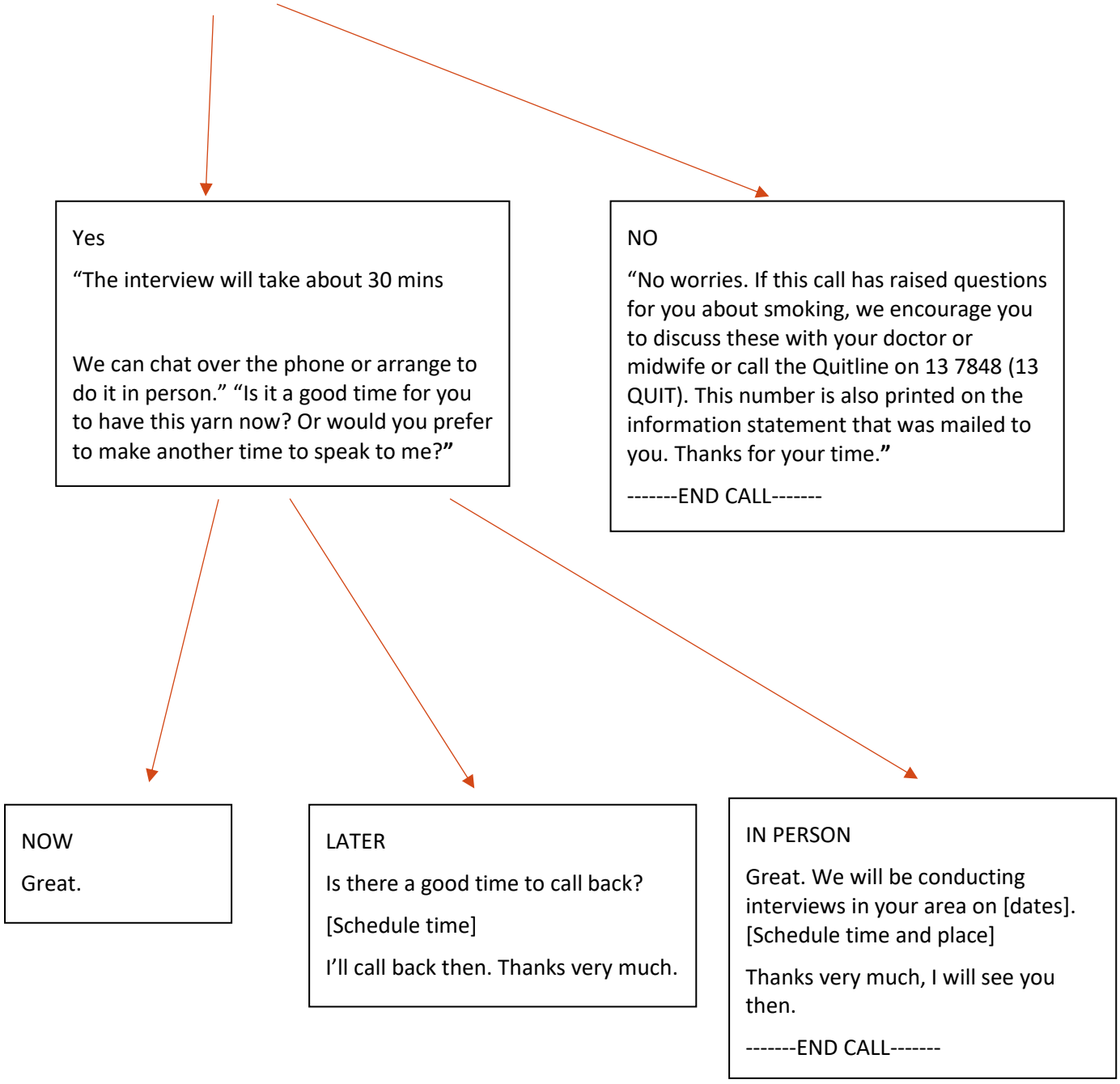
The introductory script will be developed by the evaluation organisation engaged to undertake interviews. The interviews will be conducted by an Aboriginal person experienced in conducting interviews with Aboriginal people. If no Aboriginal interviewer can be identified, a non-Aboriginal interviewer with demonstrated cultural competence and experience conducting qualitative interviews in Aboriginal populations will fill the role.

The introduction will include the following:

- *Interviewer introduces themselves and asks to speak to the identified woman*
- *Interviewer asks the woman whether she received the information letter about the telephone interview in the mail*
- *Interviewer asks the woman whether she is willing to participate in the telephone interview. Interviewer clearly explains that participation is voluntary and that if anything may have occurred which would prevent the woman from wanting to participate in the survey, then she is free to not participate.*
- *If the woman mentions any incident, then the interviewer will offer their condolences for the incident / death, apologise for disrupting the woman and her family during this period and conclude the phone call / withdraw the women from the interview.*
- *If no such incidents are mentioned, the interviewer will verbally invite the woman to participate in interview and seeks her permission to proceed.*

"Hello, this is [name] calling on behalf of the NSW Ministry of Health. I was hoping to speak to [client name] about a study we're doing. Is [client name] available?"





IF WOMAN MENTIONS INCIDENT: "I am sorry to hear that, and am sorry for disrupting you and your family at this time. Thanks for speaking to me."

IF CLIENT ASKS TO STOP MID-INTERVIEW: "No worries. Would you like to reschedule the rest of the interview for another time? Or would you prefer not to be contacted again about this study?"

Thank you for agreeing to this interview which is being conducted on behalf of the NSW Ministry of Health. My colleague [name] is also here and will be taking notes during the interview. We would also like to audio-record the interview if you do not mind. Your responses will be kept confidential."

If yes "I am turning on the tape recorder now"

I am going to ask you some questions about: your smoking; about quit attempts you might have made, the type of support you and family members have had to help you quit, how useful you have found it, and how it could be improved.

1. I will start with a couple of questions about your antenatal care.
   i. What service have you been attending for your antenatal care? (PROMPT: AMIHS, hospital antenatal clinic)
   ii. What gestation week were you at your first appointment with that service?
   iii. How frequently have you been attending the service?
   iv. Are you aware that the service offers a program called Quit for new life?

2. Do you currently smoke tobacco?

If current smoker

3. How much are you smoking now?
   (PROMPT: How many cigarettes a day?; How often do you smoke?; Do you smoke every day or only on some days?)
4. Has your smoking changed during this pregnancy?

(PROMPT: Has it stayed the same? Have you cut down on the number of cigarettes smoked?; Have you tried to stop smoking? (if yes: how many times in this pregnancy))

5. What were some of the reasons you changed/did not change your smoking?
6. Have you been asked about your smoking during your pregnancy appointments?

If yes (or sometimes):

   i. Who talked to you about this (eg midwife, Aboriginal health worker)?
   ii. What sort of things did [person] talk to you about?
   iii. How did you feel about them talking to you about your smoking?

7. What factors influenced your participation in quit smoking support services?
8. Have you been offered anything by your antenatal service to help you stop smoking?

(PROMPT: Such as free NRT (patch, gum or lozenge), a referral to Quitline or extra appointments with someone to talk about smoking and quitting?)

9. **If yes:** have you used any of the supports offered?

(PROMPT: what have you used?)
[If no: did you receive supports to help you quit smoking from somewhere else?
(PROMPT: what have you used?)]
If yes to NRT

a. What sort of NRT have you used?
b. How long did you use it? (eg, 2 weeks, 4 weeks etc)
c. Did you find it helped to reduce cravings?
d. Were there any negative effects? (eg. nausea, bad taste)

If yes to Quitline

a. How many telephone sessions have you had with Quitline?
b. How often were the calls?
b. Did you find Quitline to be helpful?
c. Was the counsellor Aboriginal?
d. How could this be improved?

If yes to additional support from smoking cessation officer

a. How did that support occur? (e.g. home visits, extra time spent at clinic visits)
b. How often did you get this support?
c. Did you find this extra support useful?
d. How could this be improved?

10. **If yes support taken up:** What were your reasons for taking up the smoking care support?
    If no support taken up: Why didn't you use the supports offered?
    (PROMPT: Did you have any problems attending appointments? / redeeming NRT voucher at pharmacy? / with NRT side effects? / receiving support over the phone?)

11. Do any of the people that you live with smoke?
    If yes:
    a. Were the people that you live with offered anything by your antenatal service to help them stop smoking?
       (PROMPT: What were they offered?; Did they use it? Did it help?)
    b. Before you were pregnant was your home smoke-free? (eg. all family members and visitors to your home did not smoke inside the home)

If no: Have there been any changes to reduce the amount of smoke in your home since you became pregnant?
(PROMPT: What changes were made?)
If yes: Have you noticed any improvements to your health or that of your family?

12. Overall, how satisfied are you with the support you have received from your antenatal service (name that service) to help you quit smoking during this pregnancy?
13. Could anything have been done differently to help you stop smoking?
14. Do you think that the advice and support you have received has been culturally appropriate?

(PROMPT: What aspects did you/didn't you find culturally appropriate?)

15. Do you think that smoking should be addressed as part of pregnancy care?

If not a current smoker

3. How much did you smoke at the start of your pregnancy?

(PROMPT: How many cigarettes a day?; How often did you smoke?; Did you smoke every day or only on some days?)

4. At what point in your pregnancy did you stop smoking?
5. Why did you decide to stop smoking?
6. Were you asked about your smoking during your pregnancy appointments?
    a. If yes, who did you talk to about this (eg midwife, Aboriginal health worker)?
    b. If yes, how did you feel about them talking to you about your smoking?
7. What factors influenced your participation in smoking care services?
8. Were you offered anything by your antenatal service to help you stop smoking?

(PROMPT: Such as free NRT (patch, gum or lozenge), a referral to Quitline or extra appointments with someone to talk about smoking and quitting?)

9. Did you use anything to help you stop smoking?

(PROMPT: what have you used?)

If yes to NRT

a. What sort of NRT have you used?
b. How long did you use it? (eg, 2 weeks, 4 weeks etc)
c. Did you find it helped to reduce cravings?
d. Were there any negative effects? (eg. nausea, bad taste)

If yes to Quitline

a. How many telephone sessions have you had with Quitline?

b. How often were the calls?
b. Did you find Quitline to be helpful?
c. Was the counsellor Aboriginal?
d. How could this be improved?
If yes to additional support from smoking cessation officer
    a. How did that support occur? (e.g. home visits, extra time spent at clinic visits)
    b. How often did you get this support?
    c. Did you find this extra support useful?
d. How could this be improved?

10. **If yes support taken up:** What were your reasons for taking up the smoking care support?

If no support taken up: Why didn't you use the supports offered?
(PROMPT: Did you have any problems attending appointments? / redeeming NRT voucher at pharmacy? / with NRT side effects? / receiving support over the phone?)

11. What support have you been offered to remain quit?
12. Have you noticed any differences to your health since you stopped smoking?

13. Do any of the people that you live with smoke?
    If yes:
    a. Were the people that you live with offered anything to help them stop smoking?

(PROMPT: What were they offered?; Did they use it? Did it help?)

    b. Have the people that you live with changed their smoking since you became pregnant? (PROMPT: What changes were made? Eg stopped smoking inside house)

14. Overall, how happy were you with the support you received from pregnancy care workers to help with your smoking during your pregnancy?
15. Can you think of any improvements which could be made to the quit smoking support you received during pregnancy?
16. Do you think that the advice and support you received was culturally appropriate?

(PROMPT: What aspects did you/didn't you find culturally appropriate?)

17. Do you think that smoking should be asked about as part of pregnancy care?
18. Are there any other issues that you would like support with during your pregnancy?

"That is the end of the interview. I will turn off the recorder now.
Thank you very much for taking the time to answer these questions. As a thank you I would like to give you a $50 supermarket voucher. Could I please get your address to send this to you? [Note address provided]

If this call has raised some questions for you about smoking, we encourage you to discuss these with your doctor or midwife or call the Quitline on 13 7848 (13 QUIT). These phone numbers are also printed on the information statement that was mailed to you.

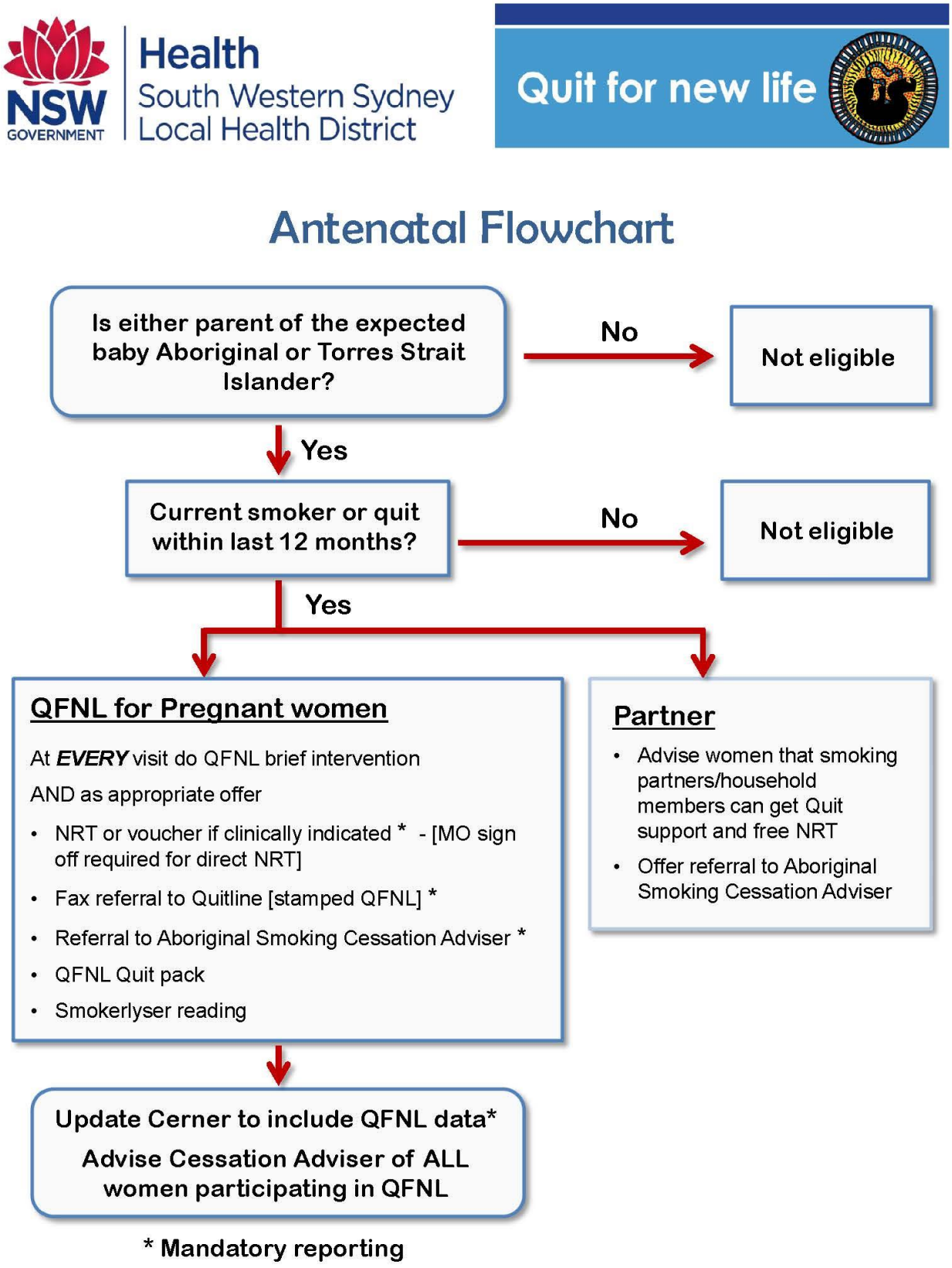
Thanks again for your time"

Appendix G: Type of NRT provided to clients in NNSW LHD over the duration of QFNL (2013-2017).

NRT Type	N (%)
Nicorette Patches 25mg/16hr	184 (22%)
Patches 21mg/24hr	125 (15%)
Nicorette Cooldrops 4mg	118 (14%)
Nicorette Inhalator 15mg	118 (14%)
Nicorette FreshFruit Gum 4mg	102 (12%)
Nicobate Mini Lozenges 4mg	52 (6.1%)
Nicabate Mini Lozenges 1.5mg	26 (3%)
QuickMist	25 (2.9%)
Nicobate Lozenges 4mg	21 (2.5%)
Nicorette Mint Gum 4mg	21 (2.5%)
Nicorette Cooldrops 2mg	15 (1.8%)
Nicabate Strips	11 (1.3%)
Patches 15mg/16hr	7 (0.8%)
QuitX Gum 4mg	6 (0.7%)
Nicorette FreshFruit Gum 2mg	5 (0.6%)
Unknown	5 (0.6%)
Patches 14mg/24hr	4 (0.5%)
Sugar free Gum 4mg	4 (0.5%)
Patches 7mg/24hr	3 (0.4%)
Gum 2mg	2 (0.2%)
Nicorette Lozenges 2mg	2 (0.2%)
Total	856

Source: Program monitoring data supplied by NNSW LHD.

Appendix H: SWS LHD antenatal care QFNL flowchart. **Source:** Program documents supplied by SWS LHD.



Appendix I: HNE LHD Clinical assessment flowchart. From HNELHD Clinical Guideline: Management of Nicotine Dependent Clients of Aboriginal Maternity and Child and Family Health Services. Developed Dec 2017. Source: Program documents supplied by HNE LHD.