

## ShowCase

### Give It Up For Baby

**Topic:**

Smoking

**Organisation:**

NHS Tayside

**Location:**

Tayside (Scotland)

**Dates:**

2006 to ongoing

**Budget:**

£129,000 per annum

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### Overview

Give It Up For Baby is a partnership incentive scheme that supports smoking cessation in pregnant smokers. An incentive of £12.50 per week is paid for every week a woman demonstrates she is smoke-free throughout the pregnancy and for 3 months after the birth of the baby. The incentive is redeemed via a National Entitlement Card at local Asda supermarkets against fresh food and groceries. Participants are also offered nicotine replacement therapy and group support.

### Results

An intention to treat analysis was run for the scheme for women who joined in 2009.

#### In Dundee:

- 65 women engaged with Give It Up For Baby and set a quit date
- 27 of these women were successfully smoke-free at 4 weeks (5.5 per cent of the entire cohort)
- 11 were still smoke-free at delivery

#### In Tayside:

- 213 women engaged with Give It Up For Baby and set a quit date
- 83 of these women were successfully smoke-free at 4 weeks (7.8 per cent of the entire cohort)
- 42 were still smoke-free at the delivery of their baby



Smoking during pregnancy increases the risk of the mother having complications during pregnancy, such as bleeding during pregnancy, placental abruption and premature rupture of membranes. Smoking during pregnancy also increases the likelihood of babies born too small (with low birth weight) and born too prematurely (before week 37 of the pregnancy). Low birth weight has been associated with coronary heart disease, type 2 diabetes and being overweight in adulthood. Babies born to mothers who smoked during pregnancy are also more likely to smoke themselves when they are older.

The 2005 Infant Feeding Survey found that 20 per cent of mothers in Scotland smoked throughout pregnancy (compared to 17 per cent of mothers in England, 18 per cent of mothers in Northern Ireland, and 22 per cent of mothers in Wales). In 2006, the proportion of pregnant women in the region of Tayside who smoked was 25.8 per cent, and in deprived areas it was as high as 35.9 per cent.

In the Scottish Government's Public Health White Paper of 1999, a target was set to reduce the number of women smoking during pregnancy to 20 per cent by 2010. To meet this target, it was estimated that NHS Tayside needed to recruit approximately 50 additional women per annum to be smoke-free at 12 months after quitting.

Against this backdrop, NHS Tayside sought to develop an initiative to help pregnant smokers quit. *The Cochrane Review* (Lumley 2004) identified that a smoking cessation intervention that included social support, provision of incentives and nicotine replacement therapy (NRT) would be more effective than other forms of intervention. For this reason NHS

Tayside decided in 2007 to develop a pilot incentive-based scheme. This would build on work that had commenced in 2006, which included setting up a patient group direction (PGD) to enable the provision of NRT through community pharmacies and publicising the issue of smoking in pregnancy through the local and national media.



A steering group for the project was created, which included representatives from:

- NHS Tayside
- Dundee City Council
- Dundee Healthy Living Initiative
- Dundee and Stirling Universities
- Dundee City Community Health Partnership
- A community pharmacist
- A community midwife



### **Behavioural goal**

The initiative aimed to reduce the proportion of pregnant smokers in Tayside to 20 per cent by 2010 at a rate of at least 50 quitters per annum. The target of 50 pregnant quitters across Tayside was calculated from existing quit rate data.

As a baseline against which to measure success, in 2006 only six pregnant women

made contact with smoking cessation services across Tayside, with none of these women remaining in contact with services after four weeks.

### **Segmentation**

The team segmented pregnant women according to socioeconomic status, aiming to reach areas of high social disadvantage. While commercial companies nurture customers with the highest levels of disposable income, public sector schemes should nurture customers with the greatest need for support or intervention.

In Tayside, the most deprived communities have the poorest health and the reasons for this are directly related to life circumstances. NHS Tayside has invested considerable resources in trying to improve the health of these communities at a pace that will close the health gap with the more affluent communities. Despite these efforts, the health gap remains. However, it is now recognised that the answer to the problem does not lie simply in increasing investment, but doing this in tandem with a methodology that directly addresses the key influences on health behaviour within these deprived communities. Deprivation category 6 and 7 areas were specifically targeted for the project.

### **Secondary research**

The Cochrane Review (a systematic review of primary research in this area) of interventions for promoting smoking cessation during pregnancy found that of all interventions to help women to stop smoking in pregnancy, the 'most effective intervention appeared to be providing incentives, which helped around 24 per cent of women to quit smoking during pregnancy.'

Based on this evidence it was decided that the pilot scheme would use incentives to help pregnant smokers give up smoking.

### **Primary research**

In partnership with a major Community Development Project in Dundee, Dundee

Healthy Living Initiative (DHLI), work was undertaken with local community groups to explore their views about smoking in pregnancy. Customer insight was gathered through three focus groups, as well as community consultation in disadvantaged areas of the city of Dundee in October 2006. These groups were made up from the community development networks of the DHLI.



The project was driven by the same commitment that underpins the success of retailers such as Tesco or McDonalds – to understand the world from the consumer's viewpoint and to develop services and products accordingly. This work revealed that previous attempts to engage with pregnant smokers were relatively unsuccessful and more innovative approaches, which looked at the reality of these women's lives and addressed their true life circumstances, were required.

The focus groups revealed one key piece of insight – that using rewards gave mothers an excuse to opt out of the social norm of smoking within their peer group, but crucially did not isolate them from that group.

The role of local pharmacists in supporting the scheme was also identified as being critically important for the project's reputation.

### **Behavioural theory**

The initiative employs the principles of Reinforcement Theory, which looks at the process of shaping behaviour by controlling the consequences of that behaviour, either by

rewarding good behaviour or by punishing bad behaviour. It seeks to use positive reinforcement or reward. Fixed interval schedules of reinforcement are carried out, so that the desired behaviour (smoking cessation) is reinforced once a week, following the carbon monoxide test. In this way, the target group learns that there is a direct relationship between doing something and getting a reward.

Importantly, this reward focus means that mothers can adopt a no-smoking behaviour which, though potentially different to her social group, does not isolate her because her group accepts that changing behaviour for a financial reward is quite legitimate.

### Pretesting

A brand ('Give It Up For Baby') and logo was developed and informally pretested with expectant mothers through classes and groups run with pregnant women by the DHLI.



The Cochrane Review identified that a marketing mix that included social support, provision of incentives and free NRT would be more effective than other smoking cessation interventions.

The commercial sector has used incentive schemes for many years as a strategy to develop customer loyalty in a competitive market. Over 40 million customer loyalty cards are thought to be circulating in the UK, and there is abundant evidence that successful schemes improve customer loyalty and allow companies to develop more profitable relationships. Indeed, the costs of acquiring new customers are calculated to be five times the cost of retaining existing customers. Further to this, consumer research demonstrates that

the spending behaviours of retained customers can be developed to yield greater profitability through targeting of specific services that match perceived customer preferences.

### The product

This evidence informed the development of the Give It Up For Baby product offer, which includes:

- Signposting women to their local community pharmacist by health professionals, including midwives and health visitors
- Twelve weeks (or longer if required) of one-to-one support and NRT from the community pharmacist
- Weekly follow-up and monitoring of the women via carbon monoxide breath testing
- Incentive of £12.50 credit paid every week the woman demonstrates that she is smoke-free, which can be redeemed using a National Entitlement Card at local Asda supermarkets against fresh food and groceries (and cannot be used for cigarettes or alcohol)
- Sustained support – The reward continues throughout pregnancy and for three months after birth
- Major PR and recruitment campaign, including extensive press advertising, media, bus sides and leaflets

Mothers-to-be who are eligible for the programme are identified by health professionals, including midwives and health visitors. Women are also recruited via a Give It Up For Baby Development Worker, who makes personal contact with all women wishing to take part and supports them through the whole process. Alternatively, women can refer themselves to the programme by going to their local pharmacy or by contacting the development worker.

The scheme aims to specifically target deprivation categories 6 and 7, and the National Entitlement Card provides NHS Tayside with a vehicle to promote healthy

behaviours within the hardest-to-reach communities. When mothers join the scheme at the pharmacist (after a carbon monoxide test), they are registered and then receive their card from Dundee City Council. The National Entitlement Card is a smartcard that can be used to access a wide range of services such as transport, education, libraries, leisure, school meals and concessions, and is proof of age for young people. The implementation of Give It Up For Baby via the National Entitlement Card thus also allows close monitoring of take-up of activities and services from residents in disadvantaged areas.



### The exchange

Give It Up For Baby uses financial incentives to reward sustained positive behaviour among its target audience. However, it also addresses a more holistic range of exchange mechanisms to support pregnant smokers through the whole cessation process, from initial enrolment in the scheme through to behaviour maintenance.

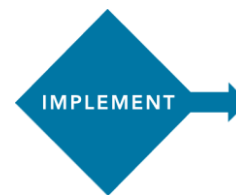
### Overcoming key barriers

- **Lack of awareness of support** – Give It Up For Baby uses active recruitment of quitters via a care pathway, in which health professionals signpost women to their local community pharmacist for support
- **Lack of support to help successful quit attempt** – The community pharmacist provides 12 weeks (or longer if required) of 1-to-1 support and NRT if required
- **Cost of quit treatments and products** – Free NRT is prescribed to pregnant women
- **Lack of incentive to make a quit attempt** – The pharmacist undertakes weekly monitoring of the women. If the woman provides a clear result from a carbon monoxide breath test, a credit (£12.50 per week) is provided to enable the woman to obtain groceries and fresh fruit and vegetables from a local Asda store
- **Insufficient follow-on support once a quit attempt has been made** – The incentive scheme uses the Dundee Discovery Card or National Entitlement Card as a vehicle to enable the credit to be administered. The women are then contacted by the DHLI once their quit attempt begins and invited to participate in further support activities. DHLI has a wide range of community groups that engage in healthy activities, such as walking
- **Left unsupported once quit attempt completed** – The reward continues throughout pregnancy and for three months after birth. This enables a sustained approach to smoking cessation

### Incentives

Give It Up For Baby is not the first health promoting incentive scheme to be implemented in NHS Scotland. The smoking cessation scheme was preceded by a scheme to promote good nutrition and breastfeeding among women from a Social Inclusion Partnership Area in Lanarkshire. 'Best Fed Babies' utilised shopping vouchers in a commercial partnership with a supermarket chain and engaged with

176 women in the first year of operation. The scheme enabled 93 per cent of babies from the project to be born at or above normal birth weight and 36 per cent of mothers chose breastfeeding as their feeding choice.



### Competition

Asda is a valued local supermarket chain and was ready to support the scheme. In this way, the local store that could potentially compete for participants' time and intention to quit became integral to the project's success.

A further source of competition was identified in the purchasing priorities of scheme participants. However, this was limited through the nature of incentives, whereby beneficiaries could only access fresh food and groceries through the scheme, and not alcohol or cigarettes.

The development of the scheme was conducted with thorough stakeholder input to ensure that key influencers were aware of and supported the scheme.

*"We ran a midwife conference. As midwives have regular contact with women they were key people to get on board to disseminate information to women about Give It Up For Baby and to refer people to the scheme. So we made sure they understood what was happening and they had a say in how the scheme was designed."* (Andrew Radley, Public Health Consultant)

The scheme was launched in March 2007. An opportunity arose during the implementation of the scheme through the partnership with the DHLI. Through this partnership, those signed up to Give It Up For Baby were offered wider social support provided by the DHLI, including regular use of swimming facilities, help with literacy and support with debt management. This added more incentives for the mothers-to-be and the services offered were particularly beneficial for those from the most deprived areas that the scheme wished to target.

*"Some of the opportunities were things like when the local leisure providers offered the women that use our scheme free access to use their facilities. We took that up. That's because they had a health promoting philosophy and they saw they could link it nicely."* (Andrew Radley, Public Health Consultant)

Building relationships with stakeholders and partners has been a particularly successful element of the campaign. This includes not only delivery partners but also the media and the Scottish Executive. The Minister for Public Health, Shona Robinson, has also been very supportive of the scheme.

*"When we first did our launch right back in the beginning everyone said that NHS Tayside was bribing people not to smoke, but all the time we've had a much more positive relationship with the press, and even though they might still say the bribe word, the text in the articles that they print is really supportive."* (Andrew Radley, Public Health Consultant)

In Perth and Kinross, local peer workers were used to aid recruitment to Give It Up For Baby alongside the community midwives, and this has been more successful than a top-down approach to recruitment and communications.

Another lesson learnt was that at first some participants found the application form to sign up to the scheme too complicated. NHS Tayside has since simplified the form and continually reviews all processes and procedures through customer feedback questionnaires and feedback from midwives and pharmacists.

While the numbers who have quit smoking through Give It Up For Baby has been very successful, the actual recruitment to Give It Up For Baby has not been as successful as hoped.

“We haven’t recruited as many people as we wanted to. We’ve recruited many more than any other scheme I think in terms of the population, but still there’s many more women who smoke who don’t engage with the scheme and who we’d really like to see through our doors. So Give It Up For Baby is a big step forward, but it’s not the entire answer by any means.” (Andrew Radley, Public Health Consultant)



The scheme has been positively evaluated by Stirling University on behalf of Health Scotland and has been identified as an area of best practice by the Scottish Government. Full evaluation is ongoing and is awaiting publication as of May 2011.

The project has been running since March 2007 in Dundee and has been expanded to Angus and Perth and Kinross in Tayside.

### 2009 results

An intention to treat analysis was run for the scheme for women who joined in 2009.

In Dundee:

- 493 women were estimated to be smoking during their pregnancy
- 65 women engaged with Give It Up For Baby and set a quit date
- 27 of these women were successfully smoke-free at 4 weeks (5.5 per cent of the entire cohort)
- 11 were still smoke-free at delivery

In Tayside:

- 1,061 women were estimated to be smoking during their pregnancy
- 213 women engaged with Give It Up For Baby and set a quit date
- 83 of these women were successfully smoke-free at 4 weeks (7.8 per cent of the entire cohort)
- 42 were still smoke-free at the delivery of their baby (4.0 per cent of the entire cohort)

For women who fully engaged with the scheme, an average payment of about £210 was made.

The Scottish Government target to reduce the percentage of pregnant women who smoke from 29 per cent in 1995 to 20 per cent by 2010 was met in 2008, with 19.2 per cent of pregnant women recorded as smokers at their booking appointment. However, smoking in pregnancy is significantly higher in deprived areas. Only 6.7 per cent of pregnant women living in the least deprived areas were recorded as smoking, compared with 30 per cent of pregnant women in the most deprived areas.

Tayside is relatively less deprived than Scotland as a whole, but the area contains locations of particularly high deprivation, including Dundee City, which has a high proportion of its population (37 per cent) classified in the most deprived quintile. This impacted on rates of smoking during pregnancy and NHS Tayside missed the 2010 target.

Nevertheless the scheme has still been deemed very successful.



The results and lessons learned from the Give It Up For Baby incentive scheme has been widely publicised, including in ASH Scotland's 2010 *State of the Nation* report, which outlined the scheme as a promising model.

As a result of the Give It Up For Baby project, the Scottish Government and NHS Health Scotland commissioned NHS Tayside and its partner organisations to use a social marketing approach to increase quit smoking rates in Dundee's disadvantaged population groups (approximately 36,000 smokers). Subsequently the 'Quit4U' scheme was developed and launched in March 2009 by the Minister for Public Health. In November 2010, the scheme was extended to areas of North Perth. This scheme is aimed at all smokers, rather than just pregnant smokers, and uses the same incentive-based approach of offering £12.50 a week of Asda credit for fresh food and groceries for those who successfully quit smoking.



The 4-week quit rate for Quit4U is almost 50 per cent, which is significantly higher than the average of 28 per cent for those not on the scheme. In addition, the scheme aimed to achieve 1,800 smokers joining the scheme by March 2011, and this target has been exceeded.

The Quit4U incentive scheme is being qualitatively evaluated by the University of Edinburgh, and Aberdeen University is conducting a health economics evaluation of the scheme.

### Lessons learned

#### Improving processes and procedures

Based on feedback from participants and from practitioners operating the scheme, the enrolment process has been streamlined and the systems made more user-friendly. In addition greater publicity for the scheme has been achieved, using community festivals over the summer and publicising the experiences of women who have managed to give up smoking through the scheme.

#### Partnerships

Give It Up For Baby demonstrates the value of working with partners. The partnership with Dundee City Council and Asda added value to the project and enabled the delivery of an innovative programme. Partnership with the DHLI enabled women to be easily contacted and invited to participate in some of the activities provided.

The participation of a wide range of professional groups, including midwives and community pharmacists, was also vital to the success of this pilot. Through their feedback the project team were able to streamline the new care pathway to make registration of women less time-consuming.

The opportunity to use the Dundee Discovery Card or National Entitlement Card enabled



progress with the Good Citizenship agenda in Tayside and opened up other opportunities to address wider health issues in vulnerable groups.

“Make sure you’ve got lots of partners to help you, because without the work of the Council, the Dundee Healthy Living Initiative, the input of the National Entitlement Card and others, we wouldn’t have been as successful.” (Andrew Radley, Public Health Consultant)

### **Role of incentives**

The key success of the Give It Up For Baby incentive scheme has been recognising that for those living in the most disadvantaged areas, increasing disposal income enables them to make different choices about their behaviours.

“Give It Up For Baby is about offering an incentive to engage with people and it’s an incentive which is relevant for their lives. Give It Up For Baby gives a lift in terms of £12.50 of free fresh food and vegetables, which gives an advantage to people from poor backgrounds, gives them a bit of space to make different choices. The people from the disadvantaged areas, we think, struggle to make the changes that other people make because of their circumstances and the incentive seems to have a really important role in that.” (Andrew Radley, Public Health Consultant)