

***Real-world uptake of a tailored, text message  
pregnancy smoking cessation programme (MiQuit)  
when offered online***

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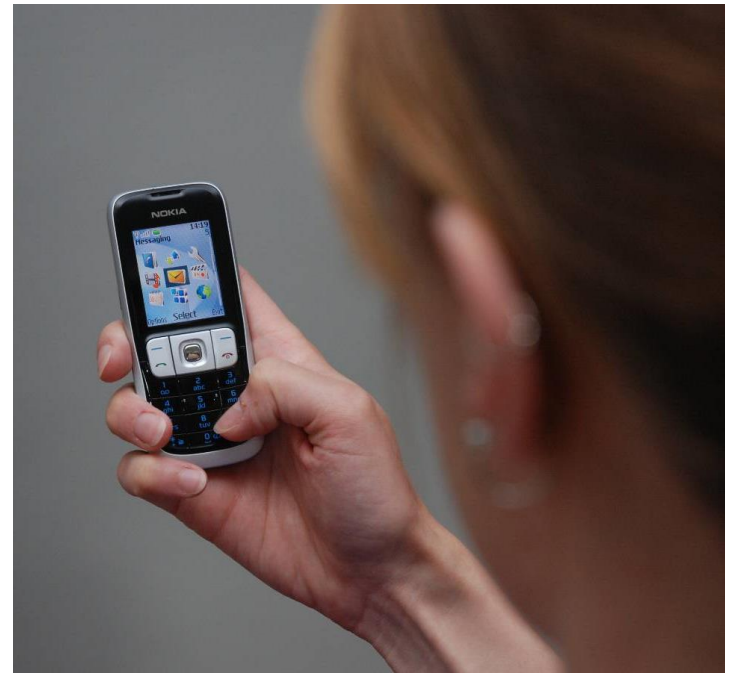
# Background

- Pregnant smokers a hard-to-reach group
  - low uptake of traditional NHS cessation support
- Mobile phone-based self-help may be promising for pregnant smokers (MiQuit)
  - appeal, wide reach, early evidence of efficacy
- BUT likely uptake in real world unknown
  - public health impact = efficacy X uptake**
- Need wide-ranging, low cost enrolment methods

# MiQuit intervention



- 12 weeks of automated, pregnancy-specific, interactive support & advice by text message
- Sign up (activate the support) by texting a short code
- Tailored to user e.g. name, gestation, dependence, partner smoking, motivation
- Cost to deliver texts <£3



# Previous uptake study settings

## Clinical setting



**Help with quitting smoking by text message for pregnant women**

**How do I sign up?**  
Step 1 – Text Quit and your first name and how many weeks pregnant you are to 88010 – e.g. Quit Sarah 12  
Step 2 – Reply to 6 or 12 texts asking about your smoking. Or answer them at [www.miquit.co.uk](http://www.miquit.co.uk). The more questions you answer the more personalised your MiQuit texts will be.

*"Each text reminded me of why I wanted to quit."  
(Sarah, 38)*

*Naughton, Cooper, Bowker, Campbell, Sutton, Leonardi-Bee, Sloan & Coleman (2012)*

## Non-clinical setting



*Hallsworth, Chadborn, Coleman, Cooper, Naughton & Magee (2014)*

**Need to quit smoking?**

Text QUIT to **88010**

for **free** help to stop smoking while pregnant

[www.MiQuit.co.uk](http://www.MiQuit.co.uk) – supported by the NHS

Your mobile provider may charge you for sending this text

# Online uptake



*Is the internet a viable, cost-effective place to offer MiQuit?*

## **Aims**

Explore uptake of MiQuit by pregnant smokers (including cost) when offered online

## **Main outcomes**

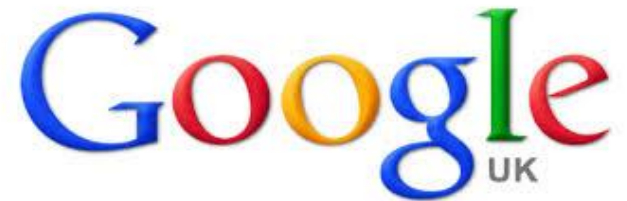
- Number of sign ups (activations), cost per sign-up
- Characteristics of those signing up
- MiQuit system usage (e.g. setting a quit date)

# Where to reach pregnant smokers?

1. Google Adwords (paid advert)
2. Facebook Ads (paid advert)
3. Smoking in pregnancy webpages (free of charge, text-only link)
  - NHS Choices & National Childbirth Trust

Clicking on advert / link takes user directly to MiQuit website for further information and short code to sign up





stop smoking pregnancy

**Web** Images News Videos Shopping More Search tools

About 5,810,000 results (0.42 seconds)

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[Got it](#)

### **Pregnant? Still Smoking? - MiQuit.co.uk**

**Ad** [www.miquit.co.uk/](http://www.miquit.co.uk/)

NHS pregnancy stop smoking support. Free, personalised text messages.

Free support by text - Personalised help & info - Direct to your mobile - Get a boost

[What is MiQuit?](#) - [What Support is Provided?](#) - [Sign Up](#)

### **Stop smoking in pregnancy - NHS Choices**

[www.nhs.uk/conditions/pregnancy-and-baby/.../smoking-pregnant.aspx](http://www.nhs.uk/conditions/pregnancy-and-baby/.../smoking-pregnant.aspx)

Find out why you should stop smoking in pregnancy, and how smoking can harm your unborn baby. Plus where to go for support to help you quit.

[Your newborn](#) - [Getting pregnant](#) - [Pregnancy](#) - [Labour and birth](#)

# facebook

Facebook interface showing a sponsored post for MiQuit. The post is highlighted with a yellow border.

**Joanne Emery**  
Edit Profile

Adverts Manager  
News Feed  
Messages  
Events  
MiQuit

APPS  
Games  
On This Day  
Find Friends  
Pokes  
Photos  
Saved

PAGES  
Create Advert  
Pages feed  
Like Pages  
Create Page

GROUPS  
Create group

EVENTS  
Create Event

Find friends

Joanne Home


Update Status Add Photos/Video Create Photo Album

What's on your mind?

Post

**MiQuit**  
Sponsored (demo)

New NHS-funded help to stop smoking in pregnancy. Get FREE, personalised support by text.



**Help for Pregnant Smokers**

MiQuit provides free, personalised text message support to help pregnant women stop smoking. Get a boost with non-judgemental advice, encouragement and information direct to your phone. Sign up today!

[WWW.MIQUIT.CO.UK](http://WWW.MIQUIT.CO.UK) [Learn More](#)

Like · Comment · Share · 141 8

**Add Friends to see more Stories**

You'll have more stories in News Feed if you add more friends. [Find Friends](#)



# Free links on smoking in pregnancy pages

## NHS Choices

ages/smoking-pregnant.aspx#close

Should I give up smoking? Media last reviewed: 20/03/2014  
Next review due: 20/03/2016

### Smoking and the unborn baby

Protecting your baby from tobacco smoke is one of the best things you can do to give your child a healthy start in life. It's never too late to stop smoking. Every cigarette you smoke contains over 4,000 chemicals, so smoking when you are pregnant harms your unborn baby. Cigarettes can restrict the essential oxygen supply to your baby, so their heart has to beat harder every time you smoke.


### Benefits of stopping smoking in pregnancy

Stopping smoking will benefit both you and your baby immediately. Harmful gases like carbon monoxide and other damaging chemicals will clear from your body. When you stop smoking:

- you will have fewer complications in pregnancy
- you are more likely to have a healthier pregnancy and a healthier baby
- you will reduce the risk of [stillbirth](#)
- you will cope better with the birth
- your baby is less likely to be born too early and have to face the additional breathing, feeding and health problems that often go with being [premature](#)
- your baby is less likely to be born underweight: babies of women who smoke are, on average, 200g (about 8oz) lighter than other babies, which can cause problems during and after labour, for example they are more likely to have a problem keeping warm and are more prone to infection
- you will reduce the risk of cot death, also called sudden infant death (find out about reducing the risk of [cot death](#))

Stopping smoking will also benefit your baby later in life. Children whose parents smoke are more likely to suffer from [asthma](#) and other more serious illnesses that may need hospital treatment.

The sooner you stop smoking, the better. But even if you stop in the last few weeks of your pregnancy this will benefit you and your baby.



### Related articles

- Get support to stop smoking
- Alcohol, medicines and other drugs
- Exercises and keeping active
- Foods to avoid
- Existing health problems

### External links

- Smokefree
- [MiQuit: pregnancy stop smoking support by text](#)  
healthtalk.org: women talking about pregnancy

### Services near you

Services

Stop smoking services

## National Childbirth Trust

- you're more likely to have a healthier pregnancy and a healthier baby and have fewer complications in pregnancy
- you are likely to cope better with the birth
- you have a reduced risk of [stillbirth](#)
- your baby may cope better with any birth complication
- your baby is less likely to be born underweight and have problems keeping warm.
- your baby is less likely to be born too early and have the extra breathing, feeding and health problems which often go with prematurity.

The first few days without cigarettes may not be much fun, but the symptoms are a sign your body is starting to recover. You can think about the reasons you stopped, the money you're saving or how much you're helping your baby. Some women find looking at the picture of their baby on the scan or talking to their baby can help when going through tough times and withdrawal symptoms.

### Secondhand smoke and pregnancy

If your partner or anyone else in your house smokes, their smoke can affect you and the baby both before and after birth. You are also likely to find it's more difficult to quit. Secondhand smoke can cause low birth weight and cot death. Babies whose parents smoke are more likely to be admitted to hospital with respiratory infections such as bronchitis and pneumonia.

### Further information

NCT's helpline offers practical and emotional support in all areas of pregnancy, birth and early parenthood: 0300 330 0700. We also offer [antenatal courses](#) which are a great way to find out more about birth, labour and life with a new baby.

Smokefree offers NHS information on smoking in pregnancy including a pregnancy support DVD, cost calculators, 'stress-buster for the mind' and 'stress-buster for the body' MP3 downloads and a Quit app to help with support and encouragement. There is also new NHS-funded support available through MiQuit - text message help with stopping smoking in pregnancy - which provides free and personalised advice, non-judgmental encouragement and information sent direct to your mobile phone.

Smokefree also offers information specifically for fathers.

NHS Pregnancy Smoking helpline is on 0800 123 1044. The helpline is open Mon to Fri 9am to 8pm and Sat and Sun 11am to 5pm. You can also sign up to receive ongoing advice and support at a time that is convenient for you.

QUIT is the UK charity that helps smokers to stop and young people to never start. Information on smoking in pregnancy is available as is information specifically for young smokers.


Quitbecause offers information specifically for young smokers.

In June 2010, NICE published public health guidance on quitting smoking in pregnancy and following childbirth. The guidance [How to stop smoking in pregnancy and following childbirth](#) guidance updates recommendations on smoking in NICE's clinical guideline on antenatal care.

http://www.miquit.co.uk/?page\_id=1& What is MiQuit? | MiQuit

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## What is MiQuit?

MiQuit is an NHS funded text message service for pregnant women who are thinking about or planning to quit smoking. MiQuit provides **encouragement, support, motivation** and **information** on quitting smoking in pregnancy direct to your phone.

*"...easy going with no pressure"*  
(Kelly, 29)

You don't have to be planning to quit; MiQuit can help even if you are not sure about stopping smoking.

After answering some simple questions about your smoking, MiQuit support can be personalised to you and your lifestyle. As well as receiving regular personalised support, you can text **HELP**, **SLIP** or **QUIZ** for instant support or distraction to help you not smoke.

All texts sent from MiQuit are **free**. Click [here](#) for more details. MiQuit is a new system and is still being evaluated.

*"I liked the text messages...they were aimed at just me"*  
(Ashleigh, 20)

**Sign up!**

### MiQuit info

- What is MiQuit?
- What support is provided?
- Who created MiQuit?
- Will MiQuit cost me?
- What if I don't like it?
- MiQuit privacy policy



http://www.miquit.co.uk/?page\_id=20

Sign up! | MiQuit



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## Sign up!

**Step 1** Everyone who wants to use MiQuit needs to do this: Text the word **Quit to 84010**

**Step 2** Once you have done step 1, choose a method below to answer MiQuit questions to personalise your support to you and your lifestyle:

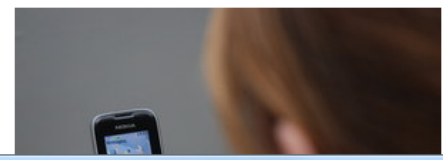
**By text** Do nothing now but reply to **6** or **12** texts that MiQuit will send asking about your smoking over the next few days.

OR

**Online** Click [here](#) to answer all 12 questions online (to get back to this page use the back button)

## MiQuit info

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# Google & Facebook advert metrics

- *Impressions*: number of times your advert is shown / viewed
- *Clicks*: number of people sent to your website
- *Cost Per Click*: average cost to send someone to website



**Procedure** – Run all adverts and links concurrently to budget end (£1000 each) or 6 months max

**Measure** – advert performance (views → clicks to website → visits to sign-up page → activations), and *who* enrolls

# Results

# Number of Google searches



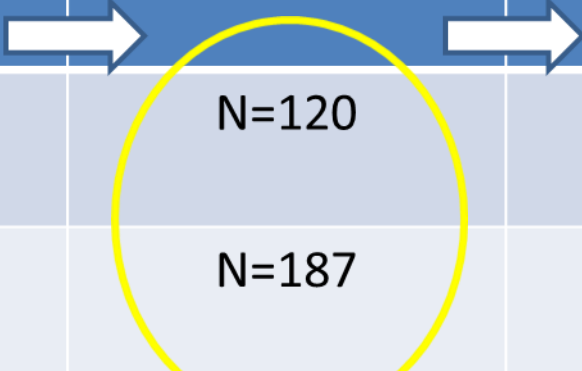
- Advert was shown almost 30000 times in Google in one month (about 2.8% clicked on it) = around 45000 searches made for our keyword phrases
- Majority of searches from mobile phones rather than desktops

# Commercial advert performance -clicks, sign ups & costs (budget £1000 each)

	1. Clicked to MiQuit website (cost per click)	2. Got short code on website	3. Signed up (cost per sign up)
Google AdWords	N=812 (£1.33)	N=120	N=42 (£23.86)
Facebook Ads	N=1889 (£0.53)	N=187	N=42 (£23.81)

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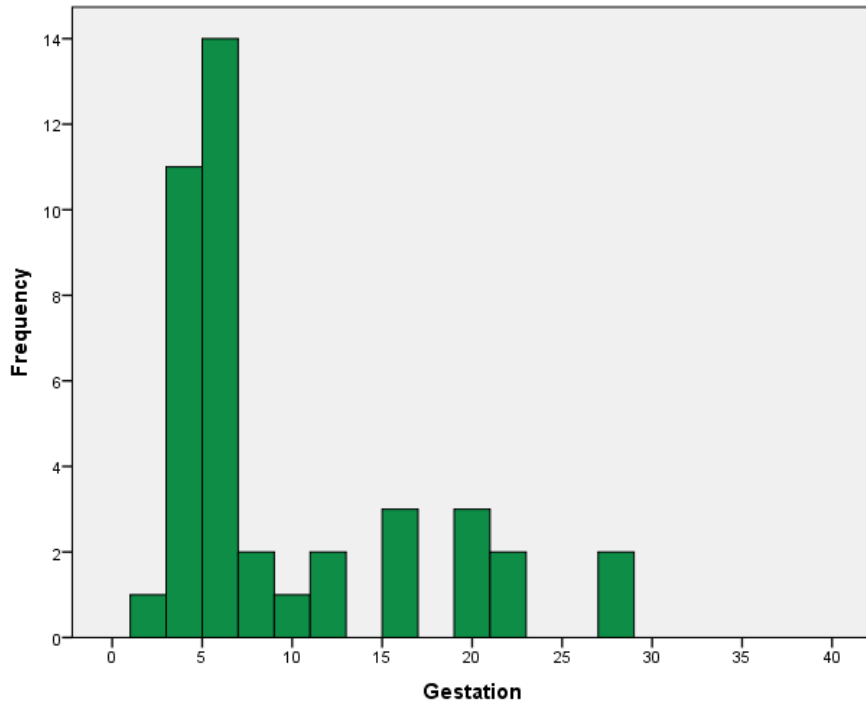
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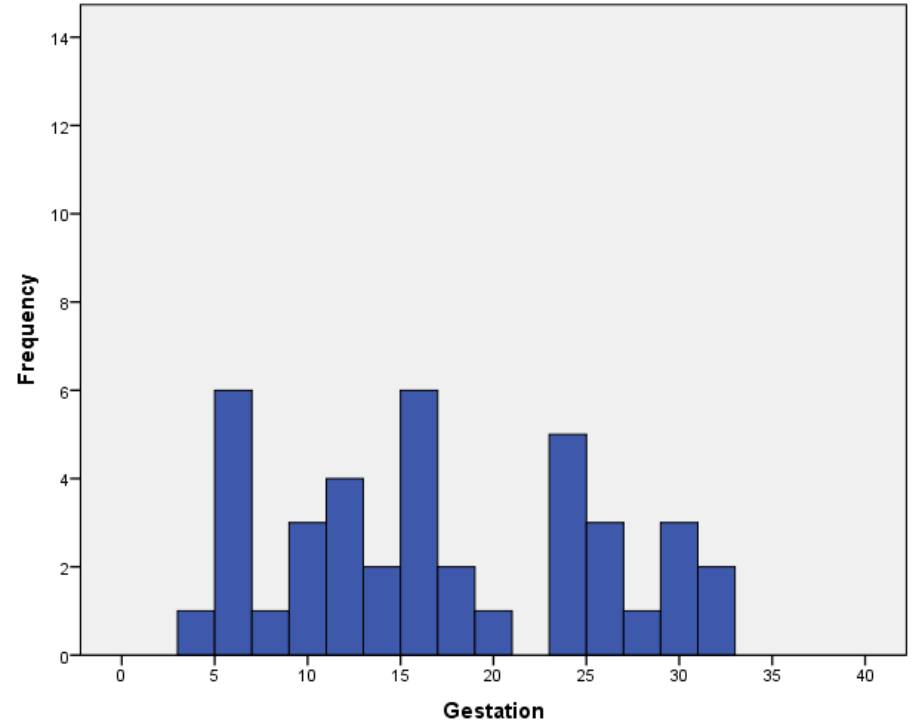
- Google **5.2%** who visited website signed up (Facebook **2.2%**)
- Free links on smoking in pregnancy webpages generated only **8 sign ups** over 6 months

# Characteristics of online enrollers - Gestation (weeks)

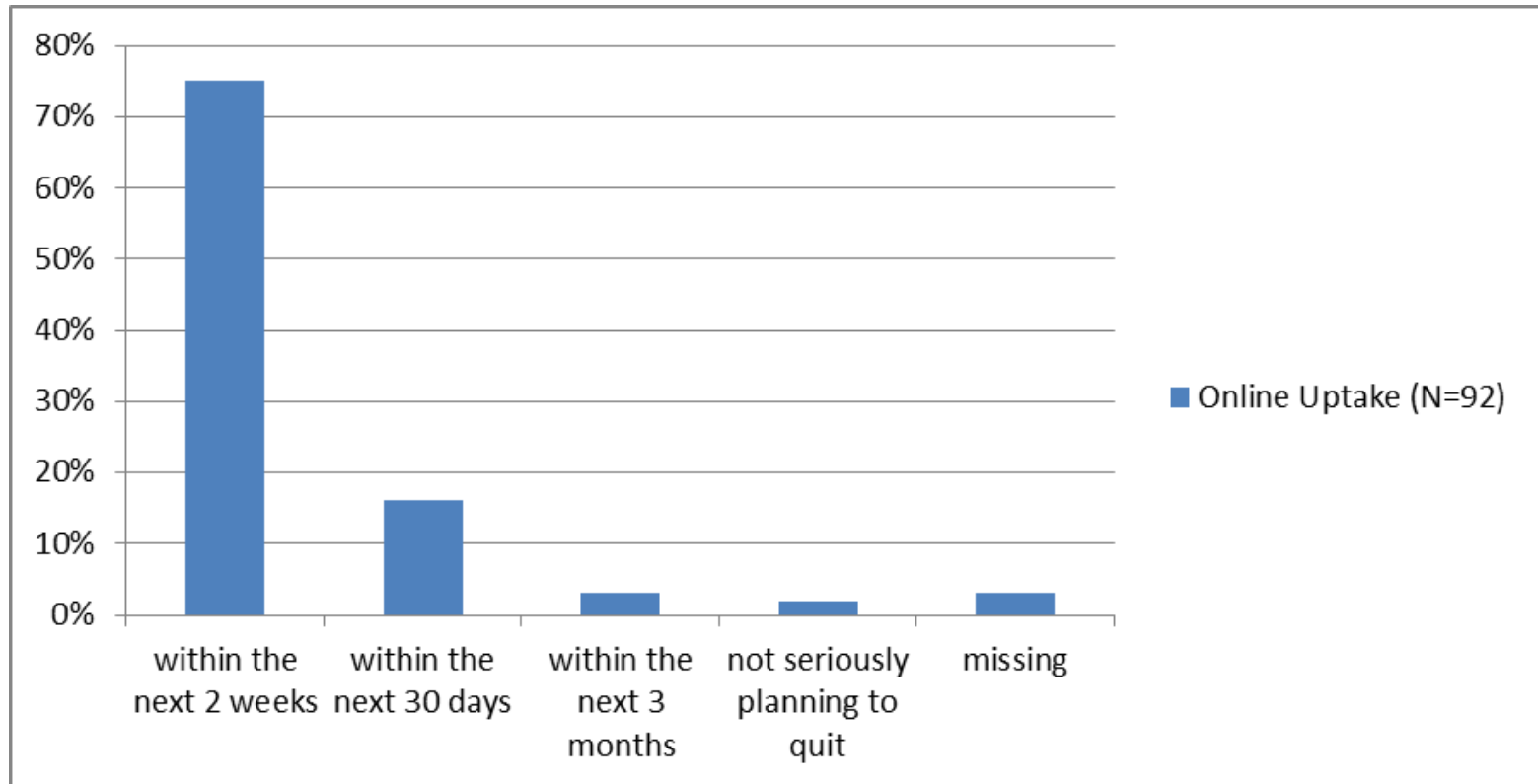
**Google AdWords (N = 41)**  
Mean = **9.1** weeks (SD = 7.2)



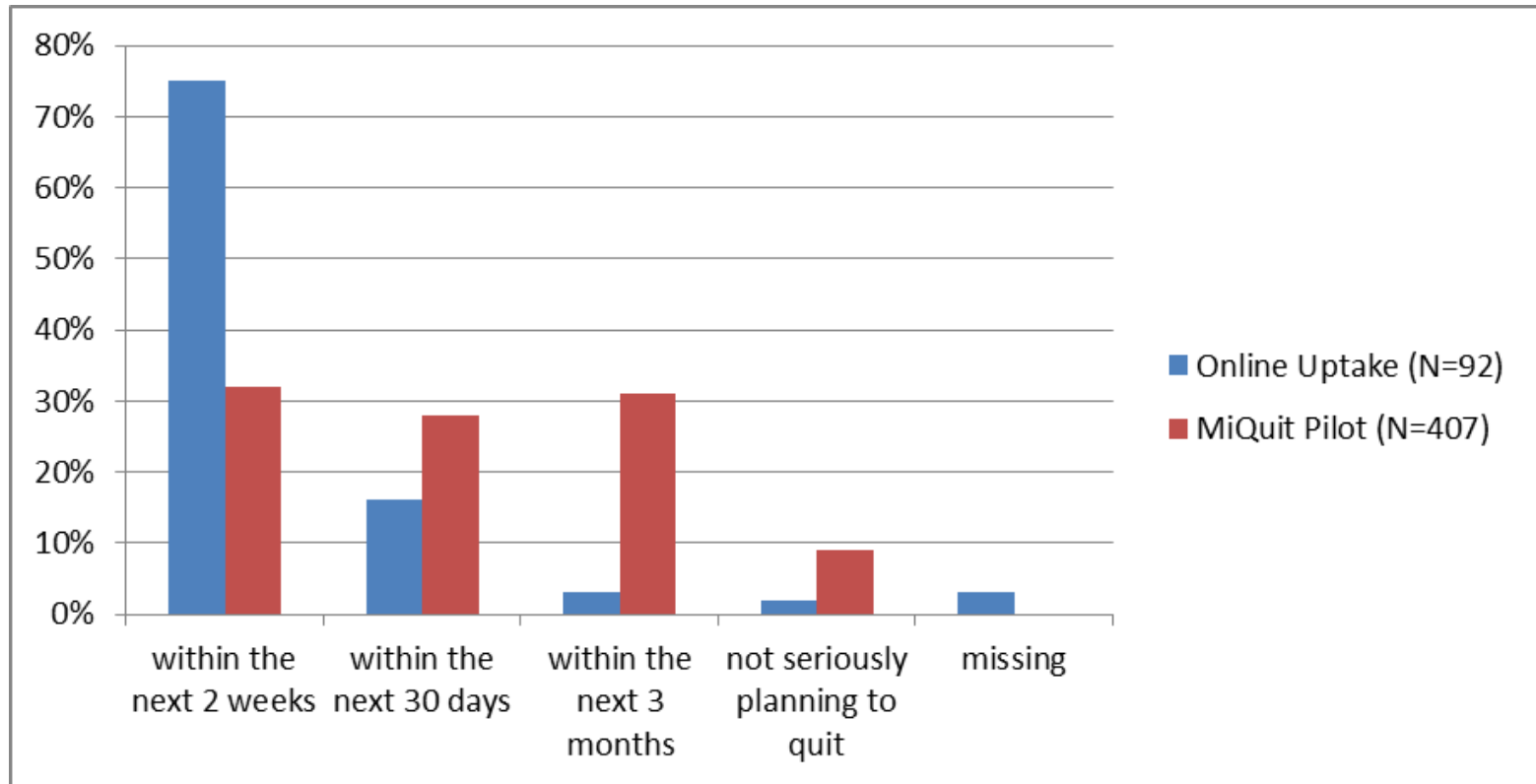
**Facebook Ads (N = 40)**  
Mean = **16.7** weeks (SD = 8.5)



# Characteristics of online enrollers – When planning to quit smoking?



# Characteristics of online enrollers – When planning to quit smoking?



- **49%** online participants set a quit date (**15%** in MiQuit Pilot Trial)



# Cost effectiveness



- Mean per-participant cost to enrol online
  - £23.81
- Mean per-participant cost to send texts
  - £2.71 (mean 77.5 texts x 3.5p each)
- Total cost per online participant
  - £26.52





# Cost effectiveness



- Mean per-participant cost to enrol online
  - £23.81
- Mean per-participant cost of sending texts
  - £2.71 (mean 77.5 texts x 3.5p each)
- Total cost per online participant
  - £26.52
- Incremental quit rate = 3.46%
- Incremental cost per additional online quitter

**= £768**

(plus fixed, total annual running costs of £759)



# Summary 1



- Online (commercial) advertising has reach potential for pregnant smokers
- Target pregnant smokers early and when motivated?
- Likely to be cost-effective

# Summary 2



- Next steps:
  - Minimise advertising costs (optimal keywords)
  - Minimise barriers to signing up (website, process)



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*Jo Leonardi-Bee (Nottingham)*

*Kate Bowker (Nottingham)*

*Matthew Jones (Nottingham)*

*Felix Naughton (Cambridge)*

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