Using Facebook to improve attendance at screening appointments

Evaluation

Oct 2017 - Oct 2018

Good Things Foundation

Contents

Introduction

The national breast screening programme is designed to pick up cancers at an early stage. Typically, these cancers are too small to detect by feel. Health outcomes are better for cancers detected at this early stage. Almost all women diagnosed with breast cancer at the earliest possible stage survive for at least 5 years after diagnosis and are likely to be cured.*

Currently, attendance at screening appointments is in decline. This decline is most significant in the prevalent cohort, women who are attending a screening appointment for the first time. “In 2016, the proportion of eligible women taking up routine breast screening invitations fell to its lowest rate in a 10 year period in the UK”.

The health outcomes for screening attendance are clear. In 2016-17, detection rate was 8.4 cases per 1,000 women screened.**

In 2017-18 in Stoke-on-Trent, 3195 eligible women opted out of their screening appointment and 4743 women did not attend. This represents approximately 65 positive detections.

One strand of the Stoke-on-Trent pathfinder used digital technology to increase engagement with the screening service. North Midlands breast screening service used Facebook to:

- promote the screening service
- directly engage target groups
- familiarise target group with the screening process
- address public attitudes to breast screening
- book appointments

This evaluation analyses and reviews the success of this approach and the relevant factors that enabled it to work in Stoke-on-Trent.

This pathfinder increased first-time appointments across 7 screening sites in Stoke-on-Trent. In contrast to national decline in attendance, the North Midlands breast screening service improved attendance by an average of **12.9%.**

*Cancer Research UK, Screening for Breast Cancer
** NHS Digital, Breast Screening Programme 2016-17

Introduction

The screening strand of the Stoke-on-Trent pathfinder tested the value of operating a Breast Cancer Screening Facebook page, run by a Health Improvement Practitioner.

The Facebook page responded to a 10 year decline in screening attendance for first-timers.

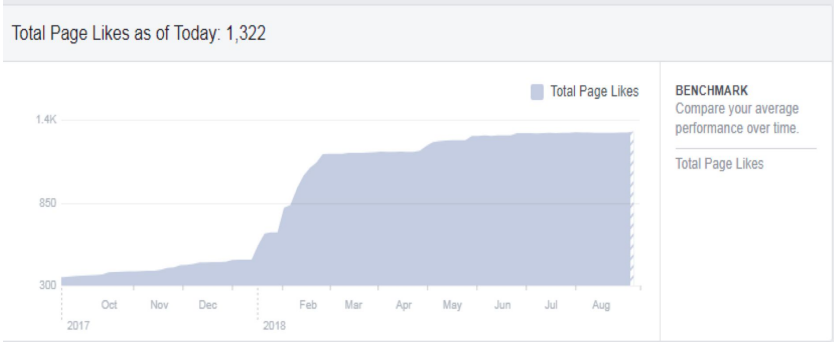
The target cohort for breast screening is women between 50-70 years of age. Internet use data suggests that Facebook's growing demographic is women over 55 years of age.

The pathfinder recognised this opportunity both to:

- target a growing Facebook population
- use Facebook to enhance the way in which they communicated the service.

Although the Facebook page for the North Midlands breast screening service was already extant when the pathfinder began, the pathfinder process provided structure, training and support which increased interactions.

The following table demonstrates a sharp increase in site usage at the point when the pathfinder started to support the breast screening Facebook campaign.



Intervention model

STAGE 1:
ENGAGE PEOPLE
WHERE THEY ARE

STAGE 2:
MAKE COMMUNICATION
EASY

STAGE 3:
BOOK APPOINTMENTS

STAGE 4:
OUTCOME

1

Develop a screening service Facebook page

2

Get your messages to the Facebook pages your audience use

3

Allow direct messages to service

4a

Book appointments by communicating through messenger

4b

Respond to messages with appropriate information

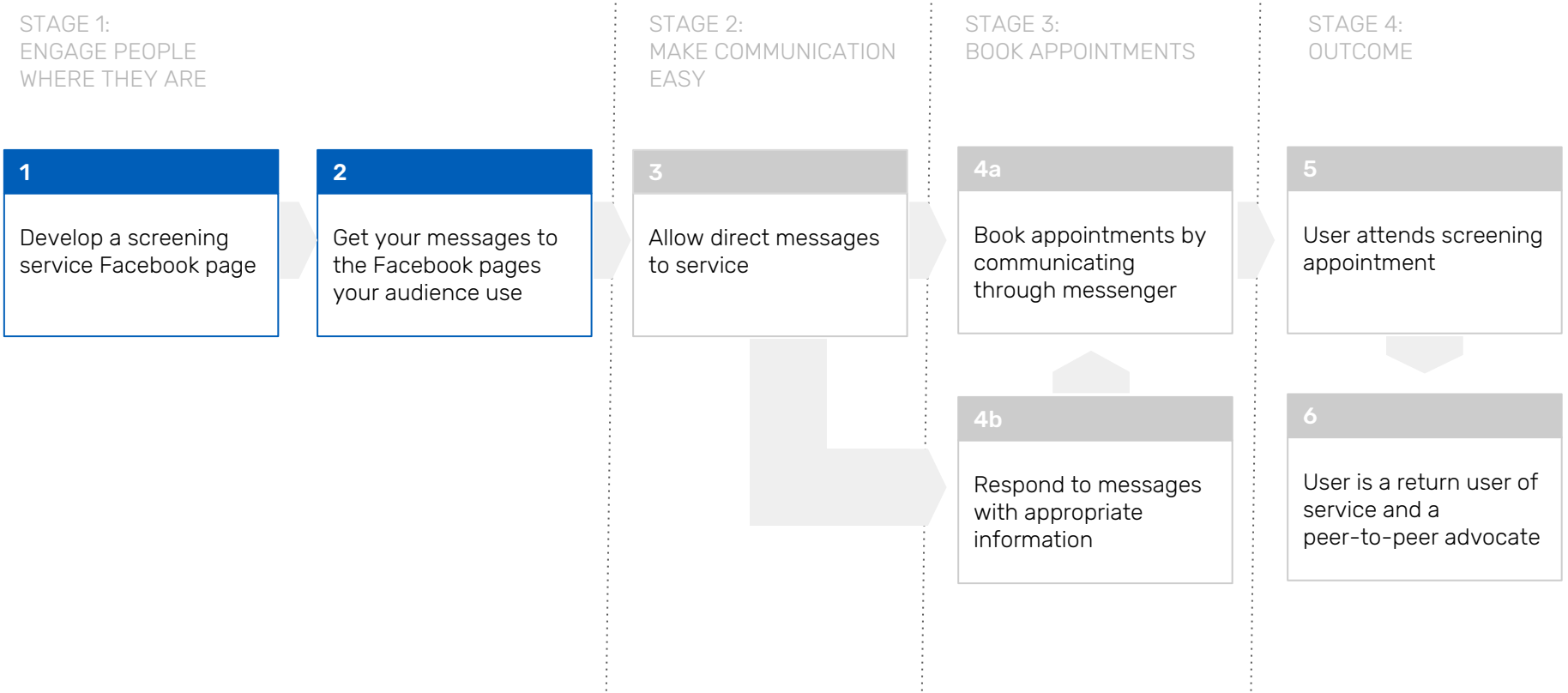
5

User attends screening appointment

6

User is a return user of service and a peer-to-peer advocate

STAGE 1: Engage people where they are



Engage people where they are

This pathfinder used Facebook to make communication easier for women who need more information about breast screening. It did this by providing information in two ways:

- The screening unit sent out open communications about the service

- The managing health improvement practitioner responded to specific queries, made either in response to screening posts or in private messages to the screening service.

Open communications helped the screening service to put out messages which helped women to understand breast screening.

The content of these open communications respond to barriers which the Health Improvement Practitioners identified through their work. Content addressed the following concerns:

- Screening will result in positive diagnosis
- Women will be required to remove clothing in the presence of men
- The screening process is painful

These concerns were addressed through:

- Video
- Testimony from other patients
- Information posts

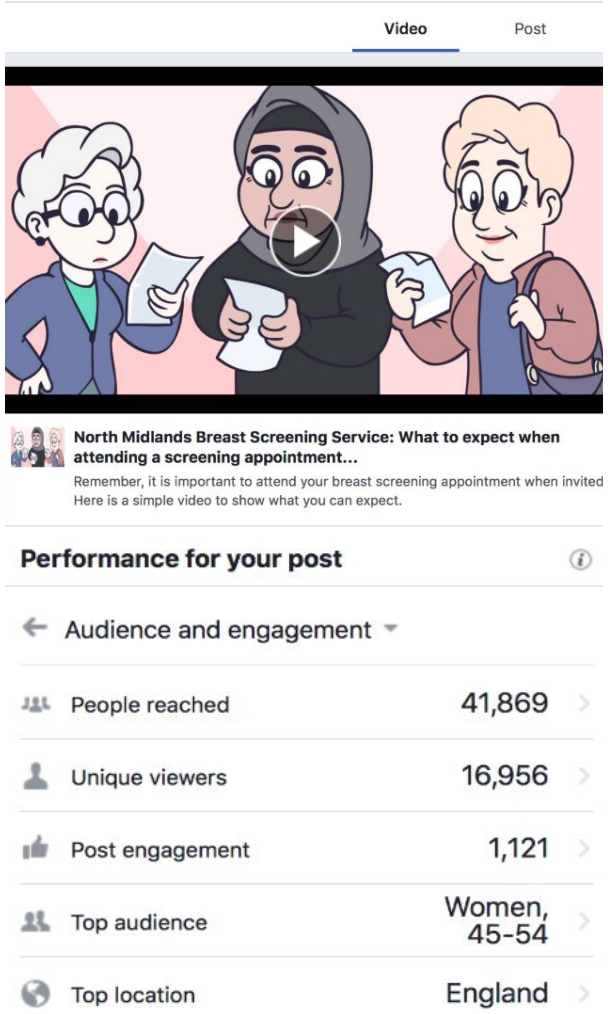
Engage people where they are

Video content can be engaging and communicative. When people find content useful, they want to share it with other people who they think will find it useful.

In this way, good content is able to facilitate peer-to-peer sharing. In turn, this widely disseminates the health information produced by the screening service.

The screening service used video in a variety of ways. These ranged from professionally produced videos to short videos which the team made themselves on smartphones. In this way, they were able to produce videos which supported the aims of the service:

- Video which show the room in which screening takes place, and introduce the mammographers who conduct the screening
- Testimonials recorded with patients who explain how screening has impacted them
- Information which helps women to understand breast screening.



Engage people where they are

By using Facebook, the breast cancer screening service was able to meet user needs which were unmet by the existing system of inviting women to screening appointments.

Our user research indicated:

- women were not responding to messages in standard comms
- screening needed to be more visible
- groups with low attendance need targeted communications.

There is no limit to the number of Facebook messages a service can write. Facebook messages can contain any content that the health lead believes to be appropriate. For this reason, the health lead can be in control of the messages that are reaching target groups.

In combination with this, Facebook allows the screening service to promote messages directly to the target cohort. In this way, it showed new ways of communicating health messages:

> It's about public messages and how to take a different approach. Your traditional approach from a health professional would be, we'll create a profile of the service, and we'll just send out messages. What they're doing differently is saying 'Why don't we go out to where people are on the internet, and infiltrate their space a bit more?'

This effect was facilitated by specific actions to take messages to target audiences:

1. Promoting service directly through special-interest groups

The Health Improvement Practitioner who leads the Facebook strategy directly engages with special interest groups with members of target cohorts. These have included:

- place-specific groups, including village groups like a little bit of Stone which are news and events platforms for people living in a specific area.
- demographic-specific groups, including Transgender, BAME, and learning-disability groups. These groups might be targeted with specific messaging or attention because of historic exclusion from, or poor experiences of mainstream healthcare.

Engage people where they are

2. Paid-for sponsored posts

Although the majority of interactions were generated through posting and peer-to-peer sharing, additional reach was gained through targeted sponsored Facebook posts. For a cost, Facebook will promote a post to Facebook users within a specific location and within a certain age group.

In this way, the service was able to place their communications on the Facebook feeds for women who do not contribute to area- and interest-based groups. This was felt to be particularly relevant for women in disadvantaged areas.

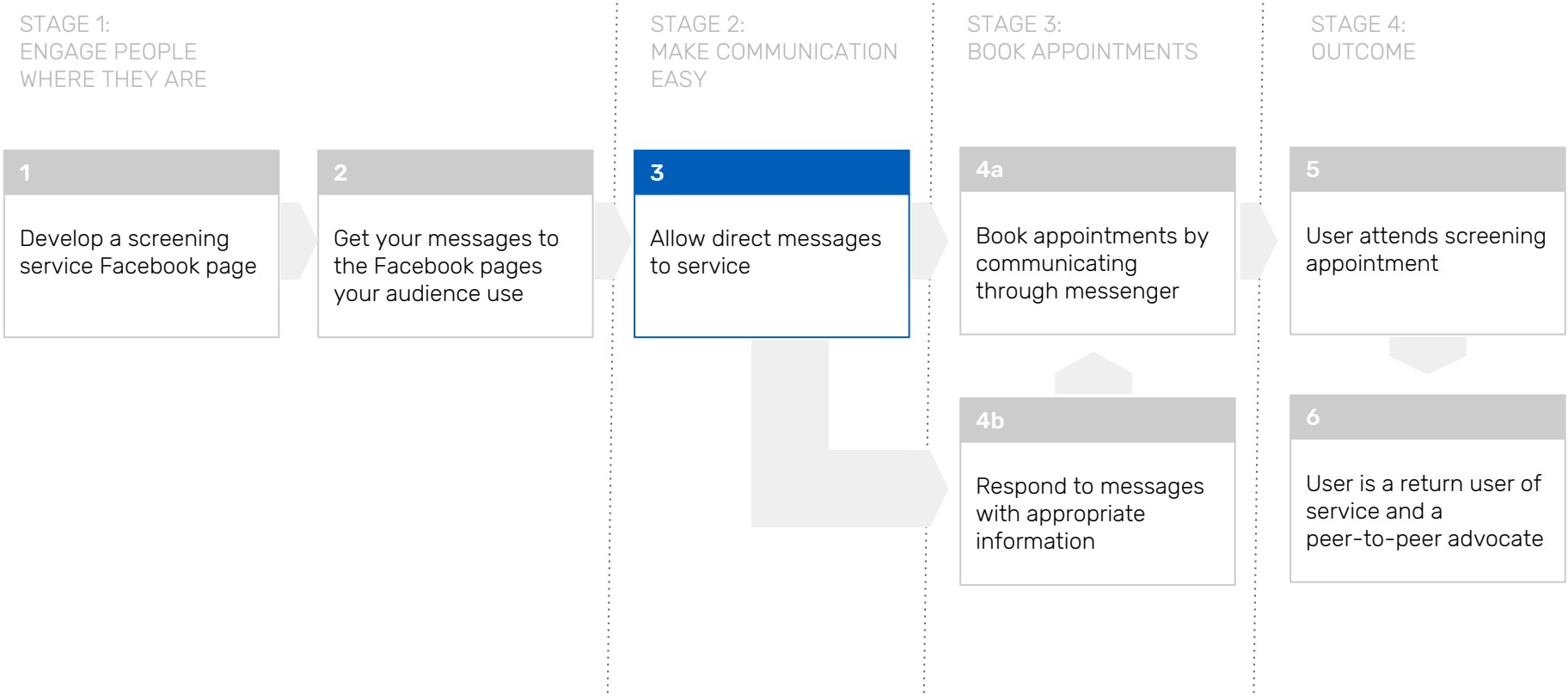
3. Peer-to-peer sharing

People naturally want to share content that they think is relevant to people they know. By creating content that people wanted to share, the screening service was able to promote its messages through a snowball effect.

This is a natural feature of Facebook which makes it particularly useful for health messaging. The screening service was able to utilise the social connections of the Facebook community to reach eligible women.

The screening service found this feature important as a way to reach specific target groups. Peer-to-peer sharing allow health messages to be disseminated between people. This increases the reach of these messages and validates them through peer sharing.

STAGE 2: Make communication easy



Make communication easy

Through the course of the Pathfinder, it became clear that these open messages needed to be supplemented with more personalised communications.

For this reason, the managing health improvement practitioner responded to specific queries, made either in response to screening posts or in private messages to the screening service.

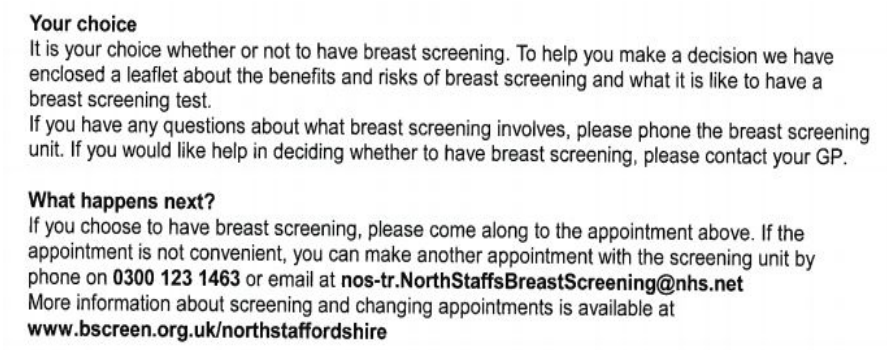
These direct messages are an important part of the screening service's Facebook presence. They provide a way for women to get accurate and timely information about breast screening.

This opportunity contrasts with the standard channels through which women might find out more information before they attend a screening appointment.

The standard communication which invites women to screening appointments is a letter with an information booklet.

The letter provides a successful mass communication. However, the ten year decline in screening attendance suggests that the information is not successfully acting as a call to action for some women.

The following information is provided on the standard letter. This presents the communication routes for women who need more information about screening:



Your choice
It is your choice whether or not to have breast screening. To help you make a decision we have enclosed a leaflet about the benefits and risks of breast screening and what it is like to have a breast screening test.
If you have any questions about what breast screening involves, please phone the breast screening unit. If you would like help in deciding whether to have breast screening, please contact your GP.

What happens next?
If you choose to have breast screening, please come along to the appointment above. If the appointment is not convenient, you can make another appointment with the screening unit by phone on **0300 123 1463** or email at **nos-tr.NorthStaffsBreastScreening@nhs.net**
More information about screening and changing appointments is available at **www.bscreen.org.uk/northstaffordshire**

Standard screening communications

A major finding of this pathfinder is the close link between **the information a woman receives** and **the likelihood of attending a screening.** Understanding of both the screening process and the health structures in which screening occurs is low. For this reason, public messages about screening need to do several jobs at once.

Screening information needs to help women to understand:

- the screening appointment itself and what happens there
- the screening eligibility criteria and rules around self-referral to a screening appointment

The current communication does not provide adequate information for all of the women who receive the letter.

For those women who need more information, the letter recommends several routes to understand more. These routes are:

- Phone the breast screening unit
- Contact her GP
- Find out more information through informal channels: conversation or the internet

Each of these routes requires significant effort. For women who are already at risk of non-attendance, this effort is a hurdle and they are likely to disengage from the service.

Standard screening communications

The link between personalised information, breast cancer awareness, and screening attendance is made clear in patient testimony.

For this patient, direct communication helped her to understand breast screening. Facebook provided a new channel for communication. Because she felt more comfortable with this information channel than a trip to the GP, she accessed information which she may not have found otherwise:

> If I had not seen the post on Facebook I would not of asked or checked myself because where else can we woman go to, you only go doctors if you're ill and even then in your in two minds whether to go as you're either too ill to go or you have to work regardless of how you feel and to be honest I don't want to use the doctor's appointment system on me just asking questions I would feel I am using valuable appointment time that should be for illnesses. Thank you North Midlands Breast Screening Service for helping us woman to ask important life changing questions.

Another patient talked about how personalised communications enabled her to have specific queries resolved. This improved her access to access advice and support:

> I was really pleased to find a contact for queries regarding breast screening. I have had great difficulties in the past accessing breast screening due to brca+ status and having ovarian cancer. I am more pleased than I can say to be able to message someone and not have to go through the hospital switchboard trying to find a department who may be able to answer queries and offer advice and support. Thank you.

These testimonies point to an information gap in the standard screening service.

The following slides present the user journey of a woman from receipt of a screening letter to attendance at an appointment.

It highlights the point in the standard user journey at which the Facebook screening service has added significant value.

Standard user journey

1

I receive a letter from the screening service every three years, when my GP surgery is being targeted by the service.

2

The letter invites me to a pre-arranged screening appointment.

3a

I attend the appointment

3b

I call the service to rearrange the appointment.

3c

I call the service to opt out of screening.

3d

I do not attend.

4

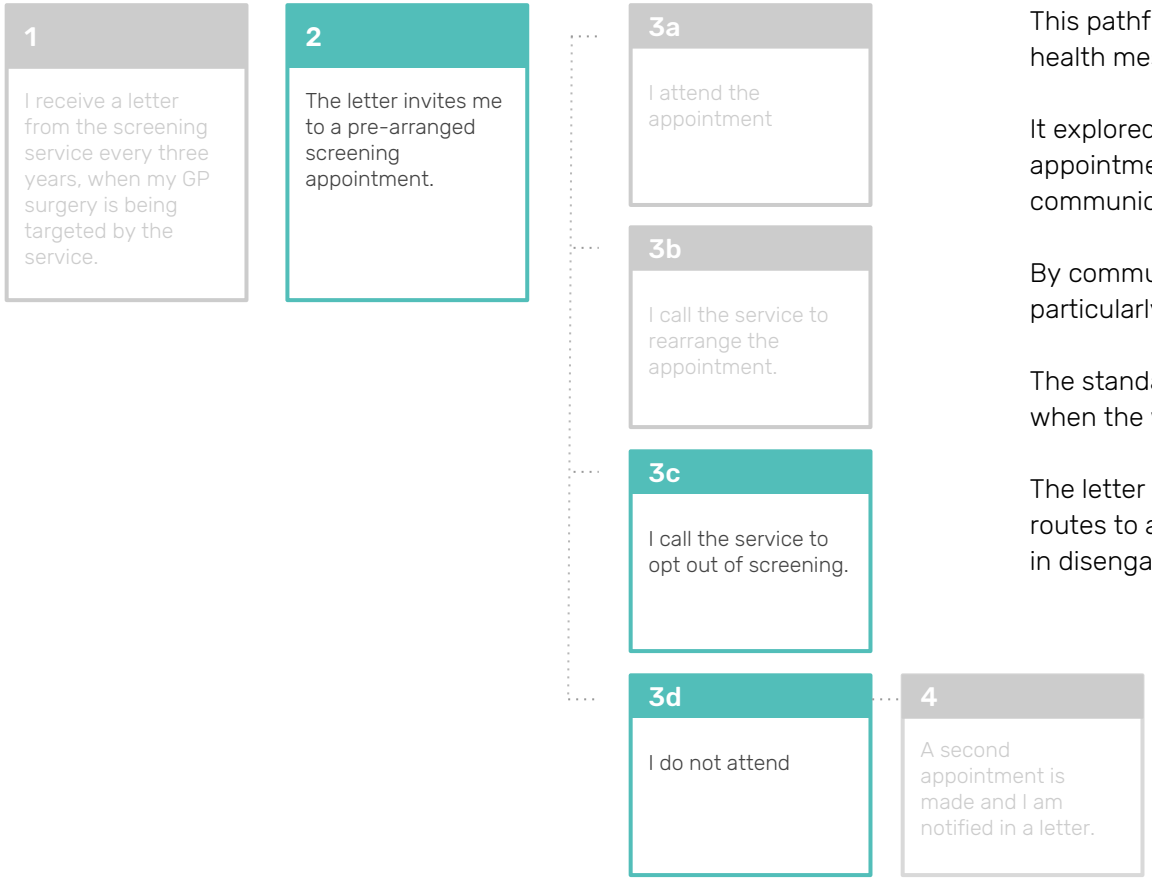
A second appointment is made and I am notified in a letter.

Women eligible for screening are sent an invitation letter every 3 years, when their GP practice is being targeted by the screening service.

3195 eligible women opted out of their screening appointment in 2017-18

4743 eligible women did not attend their screening appointment in 2017-18

Standard user journey



This pathfinder explored an alternative method for public health messaging.

It explored the reasons why women don't attend screening appointments by providing an alternative to the standard communication that women receive about screening.

By communicating through Facebook, the screening unit particularly addressed stage 2 in this user journey.

The standard model creates a pain point at stage 2. This is when the woman receives the invitation to screening.

The letter creates a need for further information, but all routes to access further information are effortful. This results in disengagement from the service.

Personalised communications

There are a number of reasons why women may need more information when they receive the invitation to screening:

- They may have concerns about attending the screening appointment because they do not know what it involves.
- They may be avoiding screening appointments because they have misinformation about what they entail.
- They may need reassurance before they attend the screening appointment.
- They may not be able to attend the pre-arranged appointment and want to rearrange.
- They may not be able to attend the pre-arranged appointment and believe that they have missed the window in which they can rearrange.

These reasons are often personal; they relate to the specific circumstances of the woman. For this reason, direct messaging was able to provide personalised communications.

This function was particularly important for women who are historically excluded from mainstream health care. These women need additional support to help them to understand and access the screening service and direct messaging provided a route for this to happen:

> Published over Facebook is a very positive move. We are able to highlight positive screening experiences for hard to reach client group, who report of negative healthcare experiences. By adding the comment underneath, we are encouraging the trans ladies to interact and directly message the page. This direct messaging allows the client to remain a certain level of anonymity.

Messaging allowed the screening service to follow-up an open communication with personalised health messaging. This route also allowed excluded people to communicate safely and with a degree of anonymity.

Improved representation of service

By providing personalised communication through Facebook, this pathfinder also highlighted areas of the screening service which are commonly misunderstood.

This was particularly relevant for the public understanding of the **eligibility criteria** for screening and how eligible women can **self-refer** to the screening service.

Feedback to the screening service suggests that users believe the service to be less flexible than it actually is.

We believe that these misconceptions are sustained by the standard model for screening communications. Because the standard model works within criteria and on a cycle, these functional features of the mass screening programme are perceived to be immutable features of the screening service as a whole.

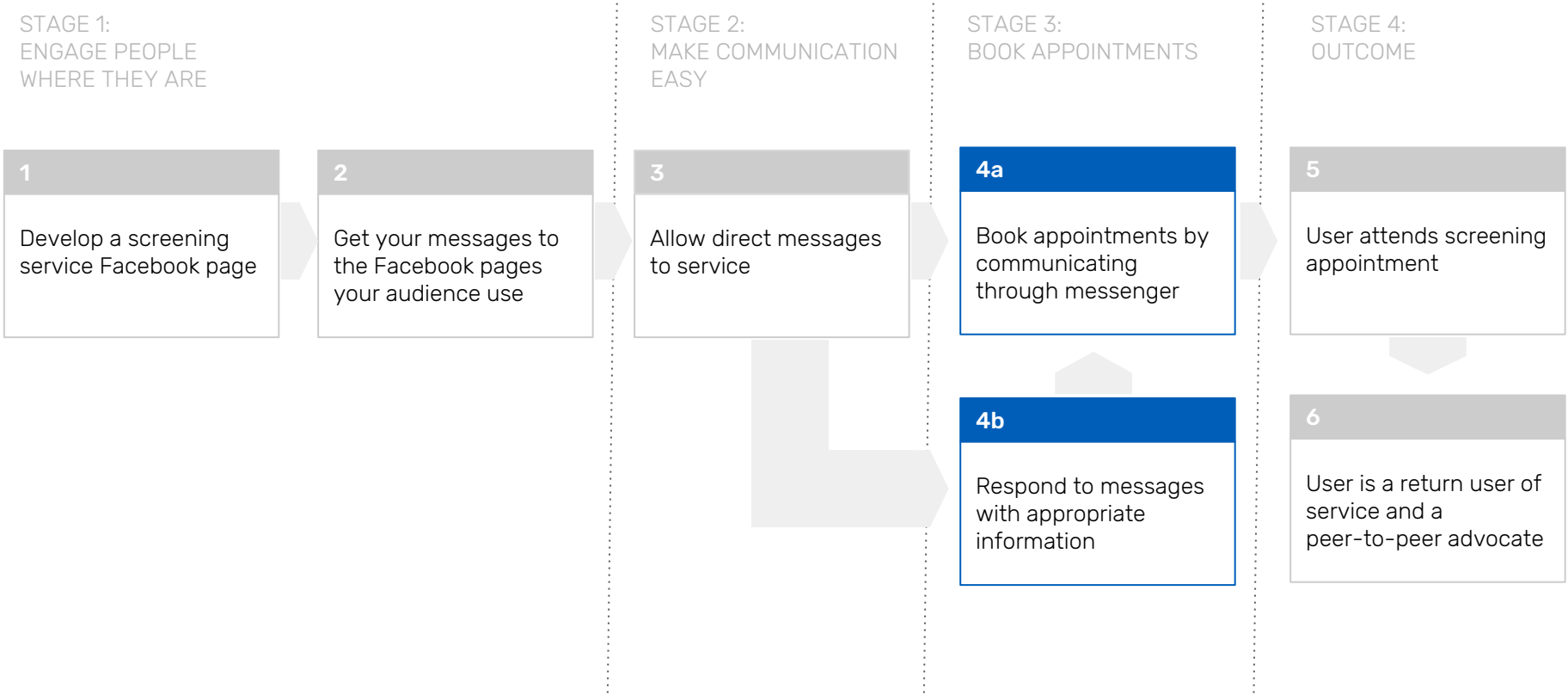
The use of Facebook has increased the number of self-referrals to the screening service. This is because the service is better able to provide detailed communications which directly answer preconceptions about the service.

In particular, personalised communication has allowed the screening service to highlight the following accessibility features:

1. **Self-referral is possible**: because the standard model books appointments automatically, many women believe that this is the only route for an appointment.
2. **Self-referral can happen outside the 3 year cycle**: because the standard model books appointments for women on a 3 year cycle, many women believe that it is only possible to have an appointment when they are being targeted by the service.
3. **Over 70s can self-refer**: the standard model targets 50-70 year olds. Women over 70 can self-refer, as can 47-50 year olds in areas that take part in the age-extension trial.

Facebook communications have given more information to eligible women and this has improved attendance.

STAGE 3: Book Appointments

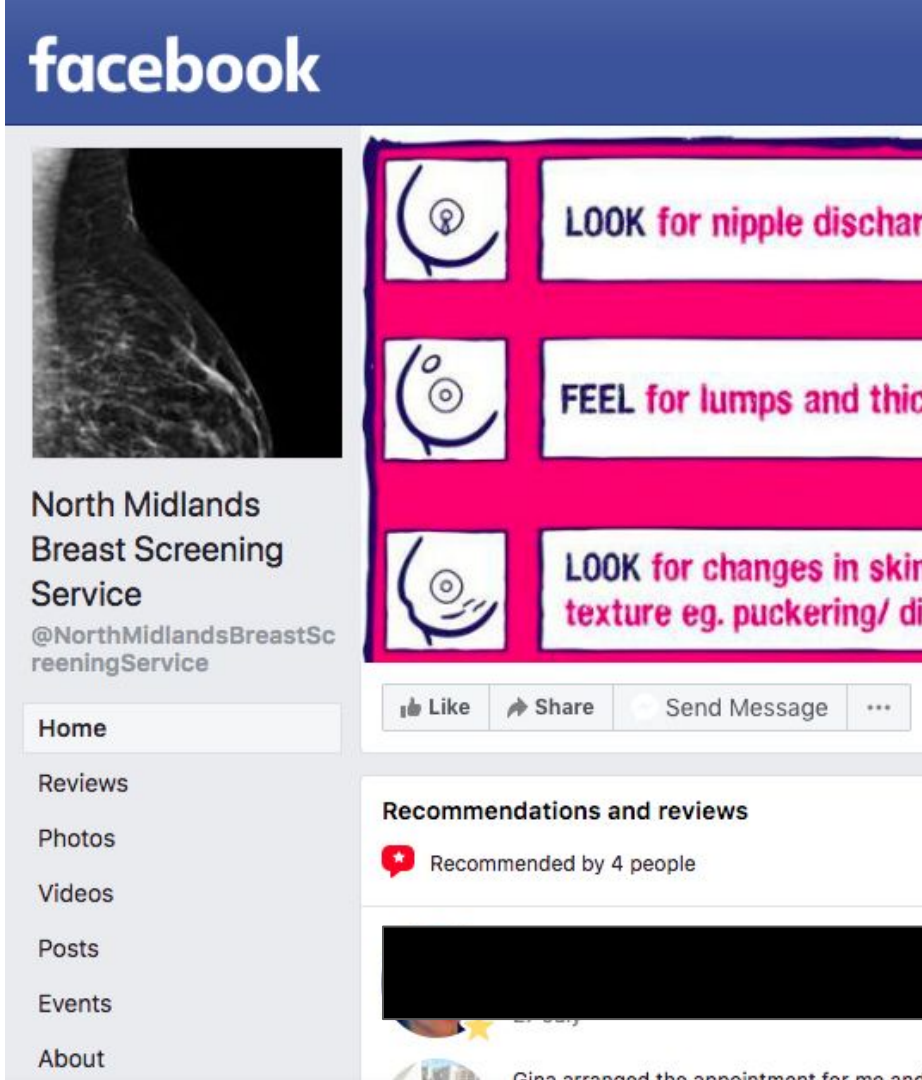


Book appointments

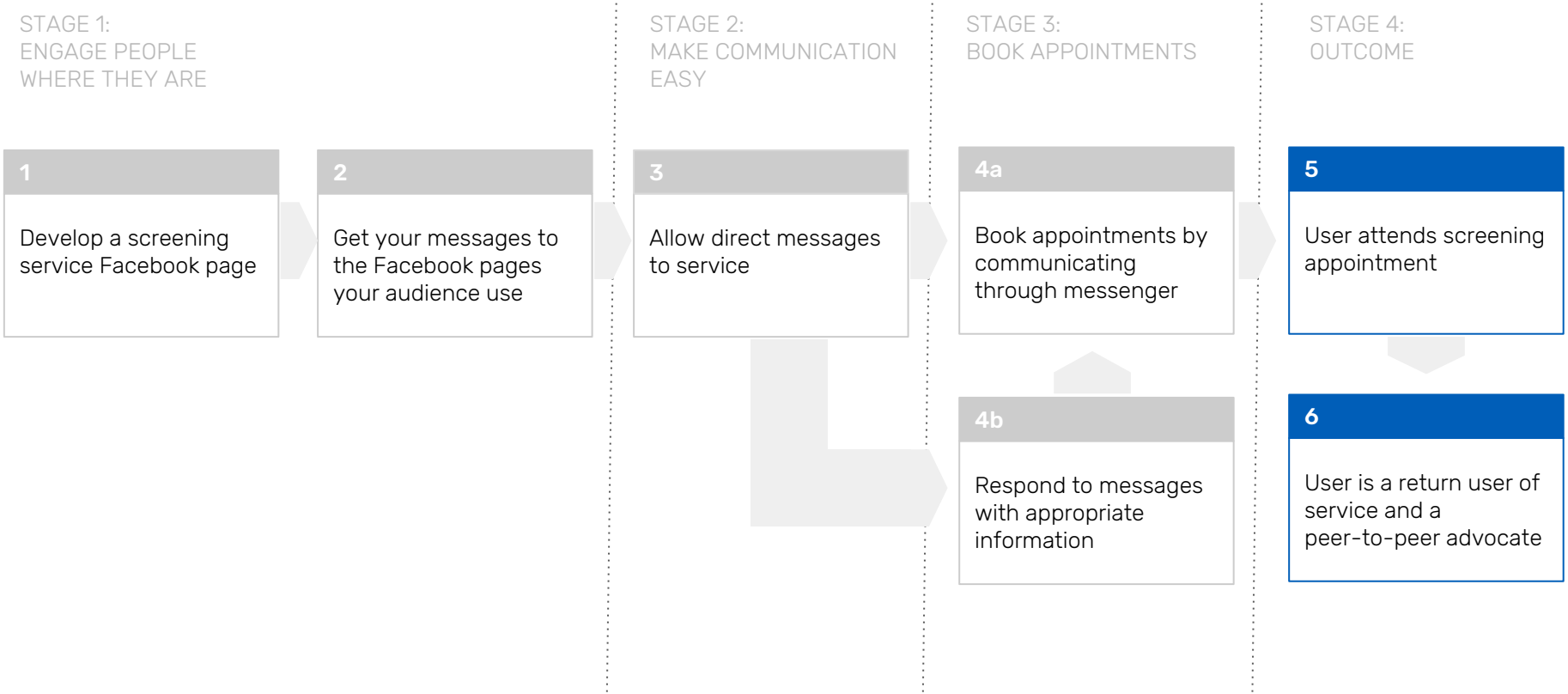
Facebook allowed the screening service to reach eligible women with targeted and personalised health messaging.

This created engagement which in turn created a demand for appointments. The service was able to respond to this demand by arranging and booking appointments through Facebook messenger.

This way of booking appointments provided a way to arrange appointments that was more accessible for patients with little extra work for the Health Improvement Practitioner. In this case, communication through Facebook replaced the phone communication that would usually be necessary to arrange an appointment.



STAGE 4: Outcome



Improved user journey

Our user research showed that the current screening model produced non-attendance. It did this by creating friction in journey between communication from screening service to attendance at the appointment.

It is especially important to make this process as easy as possible because breast screening is a sensitive process with emotional barriers to engagement.

By engaging eligible women through Facebook, the North Midlands breast screening service was able to directly engage with women who needed more support to attend screening.

We believe that this created a service which helped people to engage with screening. It did this by employing a number of devices identified by the Behavioural Insights Team as ways to encourage new behaviours.*

* The Behavioural Insights Team, EAST: Four ways to apply behavioural insights [Online].

In comparison to the standard model, the Facebook service was:

Timely
Facebook communications allowed the service to target women multiple times, on a platform which they were already spending time on.

Easy
The Facebook service allow women to interact directly with the screening staff through Facebook messenger. This reduced the effort required to phone the service. Reducing the effort required can increase uptake.

Social
Direct communication with the screening staff created a commitment between the patient and staff. Social commitment can help people to follow through on their intentions.

The diagram on the following page shows the user-journey for an eligible woman interacting with the Facebook service. It shows the different facets of the Facebook service and describes the impact of these interactions in the words of a service user.

Improved user journey

Timely communications through channels already used by target group.	Easy and sensitive communication.	Direct communication gives opportunities to describe flexibility of screening service.	Immediate response improves likelihood of re-arranging appointment.	Direct communication with clinician creates an emotional commitment.	Improved confidence in service creates return user and advocate.
“I’m always on Facebook, and I just happened to be looking at a site for where I live. They they were advertising that the mobile unit was in town, so I thought, right, this is it. I’m going to go.”	“I am used to messaging, and I do spend quite of time on my iPad on Facebook, and it was just, it was so convenient for me. I didn’t have to pick up the phone, because I don’t like talking on the phone, so it ticked all my personal boxes for how I wanted to be in touch.”	“I contacted them via Facebook Messenger, and Gina replied and said, ‘it’s moved on from your area, but we can secure you an appointment at the hospital’. So, I said, ‘yes, that’s fine’, because now I’ve started the process, I’ve got to see it all the way through.”	“The response was almost immediate. Each time I’d got a query, or when I needed to change the date, Gina came back to me, and just made it really easy.”	“This person really cares, and really, really wants to sort out that I go for this appointment,”	“From dealing with Gina to the outcome everything was good all the way along, it would just encourage me to do it again next time. I just feel it was so positive, so much so that I’ve encouraged other people.”

Picture by Redmoor Health

Attendance Outcomes

This improved user journey has happened for women across each site within the remit of the breast screening unit.

Across 7 sites the number of first-timers has **increased by an average of 12.9%** between screening cycles* in 2014 and 2018.

The minimum increase at a single site was 9% and the maximum was 26%.

This means that there has been a significant increase in first time attendance over the course of a single screening cycle.

The tables on the following pages present screening attendance data across all sites managed by the North Midlands breast screening service.

*Breast Cancer Screening works on a rotating 3 year cycle for each geographical ward. Hence, adjacent data points are 3 years apart for comparison.

Site G	Year	Overall	**Prevalent**	Incident
	2009	79%		
	2012	79%		
	2015	76%	**25%**	84%
	2018	76%	**51%**	84%

Site G May 2018 - Jun 2018

Site F	Year	Overall	**Prevalent**	Incident
	2009	79%		
	2012	85%		
	2015	80%	**51%**	86%
	2018	78%	**62%**	86%

Site F Mar 2018 - May 2018

Site E	Year	Overall	**Prevalent**	Incident
	2009	79%		
	2012	79%		
	2015	78%	**53%**	85%
	2018	78%	**62%**	86%

Site E Jan 2018 - Mar 2018

Site D	Year	Overall	**Prevalent**	Incident
	2009	84%		
	2012	80%		
	2014	78%	**54%**	85%
	2017	80%	**65%**	89%

Site D Jan 2018 - Mar 2018

Site C	Year	Overall	**Prevalent**	Incident
	2008	79%		
	2011	79%		
	2014	75%	**49%**	84%
	2017	78%	**64%**	85%

Site C Nov 2017 - Jan 2018

Site B	Year	Overall	**Prevalent**	Incident
	2008	80%		
	2011	79%		
	2014	76%	**51%**	84%
	2017	79%	**62%**	84%

Site A - Sept 2017 - Nov 2017

Site A	Year	Overall	**Prevalent**	Incident
	2008	82%		
	2011	80%		
	2014	76%	**49%**	84%
	2017	78%	**61%**	85%

Site A - June 2017 - Aug 2017 (concept testing before pathfinder and during Discovery)

Gina Newman & Jess Johnson
Health Improvement Practitioners

Picture by Redmoor Health

Thanks

This is how the screening service broke ground in Stoke-On-Trent.

We want to thank the people who made it happen:

Gina Newman, Health Improvement Practitioner, North Midlands breast screening service
Jess Johnson, Health Improvement Practitioner, North Midlands breast screening service

Marc Schmid, Redmoor Health
Dr Ruth Chambers, Stoke-on-Trent CCG

If you would like to discuss how you might be able to try something in your area please contact pete@goodthingsfoundation.org

With input from;

- Redmoor Health Social Enterprise
- West Midlands Academic Health Science Network (WMAHSN)
- Keele University - School of Pharmacy
- Tean Surgery
- Community Health Voice
- Stoke-on-Trent City Council
- Workers' Education Association
- Christ Church
- Audley General Practice
- North Staffordshire Diabetes UK
- British Heart Foundation
- University Hospital of North Midlands
- Donna Louise Trust Children's Hospital
- Voluntary Action Stoke-on-Trent
- Staffordshire County Council
- Stoke-on-Trent CCG
- Wavemaker
- Stoke-on-Trent City Council