

Delivering behaviour change via a Facebook Messenger Bot

supporting older socially isolated women to become more active

Aim

Physical inactivity is responsible for one in six UK deaths⁽²⁾ (equal to smoking) and is estimated to cost the UK £7.4 billion annually (including £0.9 billion to the NHS alone).⁽³⁾

As you get older, you're far more likely to become inactive: 42 per cent of people aged 55 and over are inactive compared to 29 per cent of the adult population.⁽⁴⁾

This intervention tested the use of a Facebook Messenger Bot to deliver individual behaviour change support to help older adults become more active.

Method

We used Facebook adverts to recruit older women to register for support to join a local walking group. The adverts were shown to women aged 55+ who lived within 1 mile of a walking group.

Once registered we contacted them via Facebook Messenger, SMS and email. Over a 4-week period we provided them with a series of messages designed to inspire, motivate and help them overcome their individual barriers to becoming more active.

Most messages were automated and incorporated several behaviour change techniques.

This automated process was supplemented by a remote health coach who was able to step in and answer more complex questions.

Results

- 4,123 older women registered for support.
- 71% of these women were classed as less active.
- 521 women (13%) went on to attend a local health walk.

Conclusions

Using Facebook ads was an effective way to recruit our target audience of older, less active women.

Facebook Messenger Bots offer an innovative way to deliver individual behaviour change support to a large number of people.

Take home messages

Further research is needed to measure the effectiveness of Messenger Bots as a channel for delivering behaviour change support.

Further work is needed to make this approach scalable, including being better able to answer complex questions and further personalisation of the behaviour change techniques used.

References

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 2) Lee I-M, et al. (2012) Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. The Lancet 380: 219-29

3) Scarborough P, Bhatnagar P, Wickramasinghe KK, Allender S, Foster C, Rayner M (2011) The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006-07 NHS costs. Journal of Public Health 33 (4): 527-535

4) Sport England: Active People Survey 10, Q2, 2015-16.



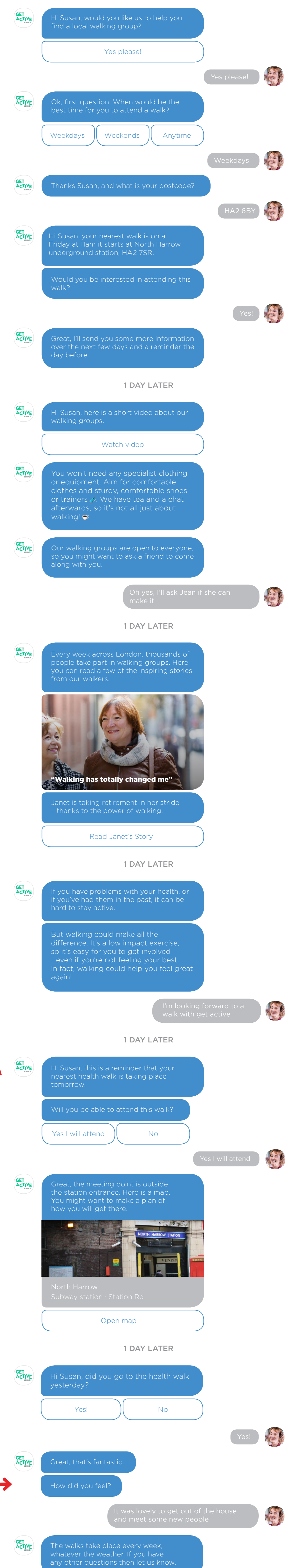
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Organisations:

London Sport in partnership with Make Sport Fun, Ramblers Walking for Health and 13 London boroughs ⁽¹⁾.

Example Conversation



Behaviour Change Techniques

Demonstration of the behaviour



Instruction on how to perform a behaviour



Social support



Information about other's approval



Information about health consequences



Prompts/cues



Commitment



Action Planning



Monitoring of behaviour by others without feedback



Social reward



Monitoring of emotional consequences

