

iPLATO's Population Health Service

Cervical cancer screening attendance doubled across NHS East of England

1 in 4 women miss their smear test

Across the UK, one in four women do not take up their invitation to cervical cancer screening. NHS East of England estimated this meant 450,000 women across the region did not attend their last cervical cancer screening appointment.

Tasked with increasing screening attendance in line with national screening recommendations made by Professor Sir Mike Richards in 2021, NHS East of England commissioned iPLATO's patient engagement solution.

Patients twice as likely to attend screening

After six months of using iPLATO Population Health Messaging results showed that:

- 29,000 extra screenings: in 5 month period, and those who received communications were twice as likely to attend, compared to those who only received a letter
- Earlier attendance: those who received a reminder attended their screening sooner.
- Equal success within deprived communities: engagement methods achieved equal increases in screening attendance.

Saving hundreds of lives, and the NHS thousands of pounds in treatment costs

Each year more than 3,200 women are diagnosed with cervical cancer in the UK, with 850 women dying from the disease. However, 83% of cervical cancer deaths could be avoided if all eligible women participated in cervical screening, a saving of 706 lives.

The average cost to the NHS of an individual diagnosed with stage 2 or later cervical cancer amounts to £19,261, whilst for those at stage 1a, the cost is around £1,379 per person. Sending text message reminders can make the difference between someone getting the treatment they need and saving the NHS thousands of pounds in treating patients with late stage cervical cancer.

Other evidence from NHSE/I London-region cervical screening invitation programme:

- Screening attendance increased by 6.3%
- Women attended screening on average 17 days earlier if receiving an SMS (54 days v 71 days).
- Success across all age groups: 4.8% increase in women aged 25-49 and 5.9% increase in women aged 50-64



"When we sent an SMS reminder, women were twice as likely to attend screening than those who were only sent a letter. This equates to an extra 29,000 screenings in first 5 months across the East of England region."

Samar Pankanti, Public Health System Transformation Lead at NHS England/Improvement

1. NHS England, The Independent Review of Adult Screening Programmes. https://www.england.nhs.uk/wp-content/uploads/2019/02/report-of-the-independent-review-of-adult-screening-programme-in-england.pdf. Accessed October 2022.
2. British Journal of Cancer, Impact of Cervical Screening on

Cervical Cancer Mortality. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5117785/.

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3. Jo's Cervical Cancer Trust. Behind the Screen Report. https://www.jostrust.org.uk/get-involved/campaign-0/behind-

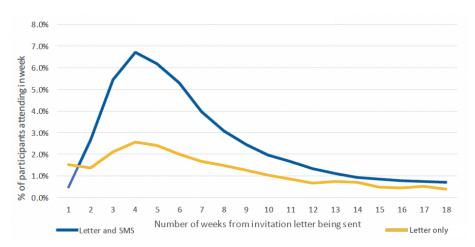


Six-month evaluation of regional text message reminder service for Cervical screening

By Dr Charlotte Cuddihy and Samar Pankanti NHS England and NHS Improvement, East of England - March 2022

Time to attendance

Time to attendance data (below) reiterates that those receiving an SMS as well as a letter were more likely to book an appointment. It also shows that those in the text reminder scheme tended to book appointments in the weeks immediately following the reminder, resulting in a more condensed peak of invitation acceptance than with letters only.





This pattern was replicated at STP level, with each area recording fewer days on average between invitation letter and attendance in those who had received an SMS and letter compared to letter only. At the CCG level this pattern was largely replicated but interestingly in Castle point and Rochford and Herts Valley the average number of days between invitation letter receipt and attendance was lower for those who received a letter only.

Deprivation

Whilst the SMS addition increased probability of attendance across all deprivation deciles, the most deprived groups (IMD 1 and 2) were still less likely to attend screening than the least deprived groups (9 and 10), regardless of invitation method used.

The positive effect of receiving an SMS is also lower for those living in more deprived areas - 1.9 times more likely to attend following receipt of SMS compared to 2.3 times more likely in the least deprived group.

IMD Decile	Letter	Letter & SMS	Increased probability of attending after receiving an SMS	Est. number of additional attendances after receiving SMS **
1	18.1%	34.3%	1.89	762
2	17.1%	34.8%	2.03	1,454
3	22.5%	41.0%	1.82	1,835
4	21.5%	43.0%	2.00	2,639
5	23.6%	45.3%	1.92	3,119
6	22.7%	47.2%	2.08	3,599
7	23.9%	47.3%	1.98	3,171
8	22.2%	49.3%	2.23	3,853
9	25.2%	51.5%	2.05	3,837
10	23.3%	53.9%	2.31	4,252