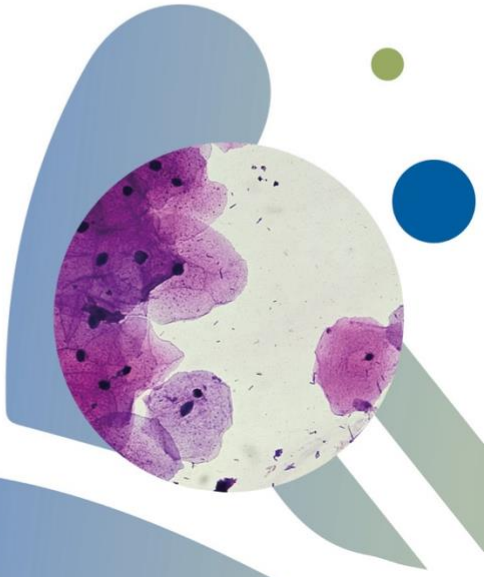
Cervical Screening Video Texting

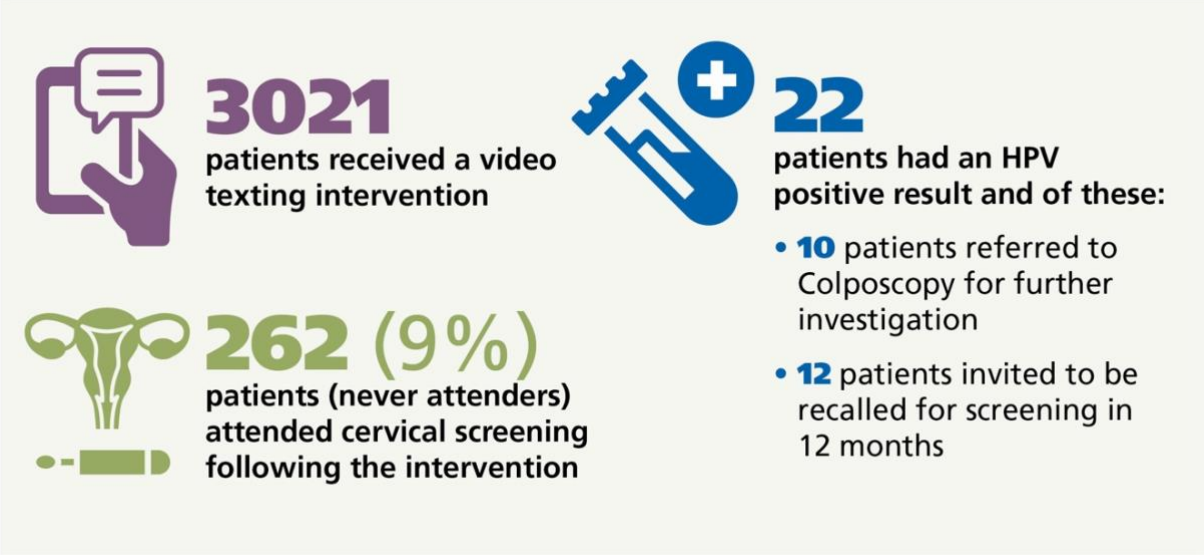
Extended Pilot 2024-25 Evaluation



Cervical screening Video texting – Extended Pilot 2024-25 Evaluation

This report outlines the details and results of the 2024-25 video texting pilot looking to increase cervical screening in those that had never previously attended.

Headlines



Aims

This extended pilot replicates the original Dorset video texting pilot in a further 20 practices across Dorset with the aim of:

- Improving cervical screening uptake of cervical screening in targeted cohorts by 5%
- Evidencing the video texting intervention effectiveness and replicability on a larger scale
- Analysing the demographic data and suitability of video texting intervention based on population characteristics

Background

In the UK cervical cancer is the 14th most common cancer in females and there are around 3,200 new cases of cervical cancer diagnosed every year[1]. In 2023, NHS outlined their ambition to eliminate cervical cancer by 2040 by increasing uptake of the HPV vaccination and cervical screening. [2] The strategy aims to achieve this in several ways including: a focus on access, reducing inequalities, raising awareness and improving digital capabilities.

Cervical screening is an effective way to prevent or diagnose cervical cancer at an early stage and reduce mortality. The NHS Cervical Screening Programme invites women and people with a cervix aged 25 to 64 for routine screening, yet uptake has declined over the last decade. In England, the overall screening coverage among eligible women aged 25 to 64 was 68.7% in 2023, falling below the national target of 80%.[3]

Participation in the cancer screening programmes has also been shown to be lower in the most deprived communities and other factors such as ethnicity have been shown to be important predictors of low cervical screening attendance. [4] Core20PLUS5 is an NHS England initiative to target populations most likely to experience health inequalities. It has a focus on the most deprived 20% of the national population as identified by the national Index of Multiple Deprivation (IMD), inclusion health or socially excluded groups and other populations identified locally e.g. ethnic minority communities. Improving cervical screening goes some way to achieve one of the five clinical priority areas of the Core20PLUS5 framework Early Cancer Diagnosis; Aiming for 75% of cancers to be diagnosed at stage 1&2 by 2028 (A strategic target set in the national long-term plan in 2019.)[5]

The most recent 10-year plan[6] focuses on a need for digital solutions and a shift towards prevention.

Text messaging has emerged as a low-cost, scalable strategy to promote attendance for cervical screening and has been associated with improved screening uptake.[7] Evidence suggests that tailored SMS reminders can increase cervical screening participation by reminding individuals of upcoming appointments and addressing barriers through supportive messaging. [8]

To explore this approach further, in 2023-24, Wessex Cancer Alliance collaborated with NHS England Screening & Immunisation Teams and Dorset ICB to run a small pilot in 4 local practices. The pilot trialled the use of a locally developed video text message for eligible patients that had either never attended their screening or has missed at least two previous screening round invitations.

Out of 1365 patients who were sent the local video message, 86 patients were successfully screened (7%).[9] As these were patients that had not previously engaged in cervical screening, this was a positive achievement. The sample size however was relatively small, and this was the reason for the plan to replicate and expand the pilot to a further 20 practices. This extended pilot also aims to analyse the patient demographics of those in the intervention group to understand insights into ethnicity, age and deprivation decile with the aim of exploring how this digital solution may impact on health inequalities in cervical screening uptake.

Method

Identifying eligible patients – A SystmOne clinical system search was developed by Wessex Cancer Alliance and exported for use by all the practices for included in the extended pilot. This meant that all practices were using the same inclusion/exclusion criteria for the pilot which helped with consistency.

Inclusion criteria- Women and people with a cervix who are registered with a Dorset GP practice who are:

- *30-34 years old who have never attended cervical screening*
- *49-64 years old who have missed at least two previous screening rounds*

This inclusion age group does not correspond with the national screening programme age groups. The rationale for this was to ensure that the intervention was targeted at 'never attenders' or those that had missed the previous two screening rounds so that it was possible to get a more accurate measure of the intervention effectiveness i.e. those invited below 30 would not at that stage be considered a 'never attender.'

Exclusion criteria

- Those with a prior diagnosis of cervical cancer
- Those who have been removed permanently ceased or deferred from the cervical screening register
- Those receiving end-of-life care
- Those without a mobile phone number on the primary care record.

Recruitment of GP practices

Practices were identified based on Public Health Fingertips data profiles and those with highest deprivation and lowest cervical screening rates in Dorset were invited to take part in the pilot. Each participating practice was offered £500 non-recurrent funding for their involvement. This funded the additional administration time, and additional time required to attend meetings relating to the pilot. This did not cover additional sample taker resource as this is already funded via core funding and QoF funding, however practices were advised to ensure that there were adequate sample takers and clinic capacity for the potential increase in cervical screening requests.

Sending the invite

Practices used Accurx text messaging service to send a bulk text message which consisted of a short text message (Appendix A) and a link to the same locally developed video, all provided by Wessex Cancer Alliance. This text message was sent in addition to and not in place of any existing reminder/recall process.

Note: *The cervical screening programme at the time of this pilot sent a standard invitation letter followed by a reminder letter 18 weeks later to all women and people with a cervix who are eligible for cervical screening between 24.5 years and 64 years at intervals of 3 years up to age of 49 and every 5 years to the age of 64 (changing to 5 yearly intervals for both age groups as of July 2025). Where the call and recall services had not received a test result from the relevant cytology lab within 224 days (32 weeks) of the call or recall letter being sent, the individual became a 'non-responder'. At this point their GP practice was notified so they could take any follow up activity and to send a third letter.*

The video

The video that was used in this intervention was the same as the video developed for the original pilot. The original script was developed using research on barriers to participation of cervical screening and then signed off by NHS England Screening & Immunisation Teams. The video was recorded by a local production company and contained a local GP and sample taker from one of the practices involved in the original pilot. A link to the video can be found in Appendix A.

Monitoring

On sending the message, GP practices were asked to code all patients that were sent the text message using two SNOMED codes:

(XE1TM) Advice on cervical cytology

(6793.) Health education on cervical cytology

The rationale for this was to ensure that the intervention patients were easily identified when searching for outcomes and avoided the issue of individual codes being used for other purposes and affecting the data. Wessex Cancer Alliance and Dorset ICB worked with Dorset Intelligence and Insight Service (DiiS) who had access to the local primary care system data to monitor those with the 'double code' that were adequately screened following the intervention. The DiiS team were also able search for certain demographic data including age, ethnic background deprivation decile of those that attended the screening following this intervention.

Results

Following a period of at least 12 weeks from the messages being sent, DiiS ran a search of the clinical systems.

The results showed that **3021** patients had the 'double code' meaning that they had been sent the video message. Out of those patients, **262** had a screening code following the text message intervention. This meant that out of all the people being sent the message **9%** of those people went on to have their screening. This was higher than the original pilot that averaged 7%.

Total Patients Invited	Patients Screened	% Screened of those invited
3,021	262	9

Out of the 262 patients that were screened, the results showed that 10 (4%) patients were referred on to colposcopy for further investigation. A further 12 (5%) patients had an HPV positive result meaning that they will be more closely monitored through yearly recall.

Some results were less clear. 14 patients were coded as cervical screening negative (old code) without details on HPV result, so it is unclear whether these patients were HPV positive with negative cytology or HPV negative. Practices ensuring up to date codes are used for cervical screening is something that could be explored further following this pilot.

The other figure that is less clear is the number of patients with 'No result.' This is often due to sample errors where the lab rejects a sample. 42 patients (16%) had no results. This is concerning and another area to explore further following this pilot.

Result	Number of patients	%
HPV Negative	184	70
HPV Positive (12 Monthly recall)	12	5
Referrals to Colposcopy	10	4
Cervical screening negative (HPV result unclear -old coding)	14	5
No result	42	16

Demographic data

The DiiS team were able to share some of the demographic data for the patients that were receiving this intervention. The data included deprivation data, age and ethnicity.

Age

The table below shows the numbers of patients from two different age groups. The results show that the 49-65 age group had the highest percentage of uptake following the intervention.

Age group	Patients invited	% of total	Patients screened	%
30-34	1166	38.6	87	8
49-65	1854	61.4	175	9

Deprivation

The table below shows the numbers of patient's part of the intervention that were screened or not screened by Index of Multiple Deprivation (IMD) with 1 being the most deprived and 10 the least deprived. When looking at the percentage of the patients within each group that were screened, this is consistent across the IMD group with IMD 3 showing to be the highest with 11% of patients from this group being screened following the intervention. This demonstrates that this intervention has been effective in targeting those from more deprived areas but also has adequate reach across all deprivation deciles.

IMD	Patients invited	% invited (of total)	Screened	% of total screened
1 (most deprived)	257	8.5	16	6
2	261	8.6	27	10
3	373	12.3	41	11
4	629	20.8	55	9
5	400	13.2	33	8
6	435	14.4	32	7
7	295	9.8	25	9
8	190	6.3	18	10
9	147	4.9	13	9
10 (least deprived)	32	1.1	2	6
Unknown	2	0.1	0	0

Ethnicity

The first table shows that out of the patients that were sent the video message, 31% were from an ethnic minority background (where known from GP clinical system).

According to Dorset Council data, 6.1%[7] of Dorset residence are from an ethnic minority. This disparity in numbers of those receiving this intervention reflect the low screening uptake in ethnic minority groups across the Dorset practices. Out of the patients from ethnic minority backgrounds that were invited via video message, 10% were successfully screened following the intervention. This is higher than the overall 9% found across the pilot which demonstrated that this is an effective intervention to engage ethnic minority groups.

Patients Invited	% Invited (of total)	Number of Patients Screened	% Screened of those invited
979	32	95	10

Ethnicity	Patients invited	%invited (of total)	Number of patients Screened	% of total screened
Bangladeshi or British Bangladeshi	10	0.3	1	10
British or Mixed British	1505	49.8	138	9
White & Black Caribbean	9	0.3	2	22
Chinese	30	1	0	0
Indian or British Indian	149	4.9	9	6
Irish	12	0.4	1	8
Other	94	3.1	4	4
Other Asian	133	4.4	10	8
Other Black	37	1.2	9	24
Other Mixed	23	0.8	2	9
Other White	455	15.1	36	8
Pakistani or British Pakistani	17	0.5	1	6
White & Asian	17	0.6	3	18
White & Black African	87	2.9	17	20
Unknown	443	14.7	29	7

It is however unclear from this data if there are certain ethnicities that may respond to this intervention better than others, so below is the breakdown by ethnic group. Although numbers are small, it gives some indication of which ethnic groups have taken action following the video message intervention and which haven't.

Notably, no patients from a Chinese ethnic background invited as part of this intervention were successfully screened. There may need to be some further exploration into this patient group to understand if there are any unique or specific barriers for this population.

The data shows that 443 (15%) of patient's did not have an ethnicity recorded on their patient record. Improved recording of ethnicity on patient records may help support more tailored engagement and targeted messaging.

Conclusion

The results demonstrate that video text messaging sent from a patient's GP practice can be a low-cost effective method to engage with those that have never attended cervical screening. This intervention has shown to be most effective for those from more deprived areas, patients from ethnic minority backgrounds in the 49-64 age group.

Limitations

One of the practices that was part of the pilot notified the project team that they had sent out the bulk message to patients with the double code but much later than the agreed cut off. This meant that for one practice, the data does not reflect a full 12-week period following the intervention from when the data was exported. This may mean that there were additional patients that were successfully screened following the intervention that were not reflected in the data.

This pilot does not include a control group so it is unclear how much the video itself contributed to the uptake in cervical screening or whether the reminder via text message without a video attachment would have yielded similar results. With the lack of patient feedback following the intervention it is not possible to ascertain the direct cause.

Next Steps/Recommendations

- Ensure Dorset video is available to all practices in Dorset giving them the option to incorporate this as an addition to their recall reminder for all non-attenders.
- Consider the use of video reminders for other screening programmes e.g. Bowel screening.
- Share outcomes from this pilot with Southwest screening team to inform how videos could be used in cervical screening recall.
- A national video will be piloted in Southampton to test effectiveness of more generic video.
- Explore issues around coding and rejected samples with Southwest Screening Team.

- Work with communities that have lower engagement e.g. Chinese communities to understand barriers to cervical screening.
- Improving ethnicity data in practices may help improve understanding of uptake in ethnic minority groups.

References

1. Cancer Research UK. (2023). *Cervical cancer statistics*. Cervical cancer statistics | Cancer Research UK
2. NHS England (2023) *Cervical cancer elimination by 2040 – plan for England* NHS England » Cervical cancer elimination by 2040 – plan for England
3. NHS Digital. (2023). *Cervical Screening Programme, England - 2022-23* Cervical Screening Programme, England - 2022-2023 [NS] - NHS England Digital
4. PHE Screening inequalities strategy (2020) PHE Screening inequalities strategy - GOV.UK
5. NHS Long Term Plan (2019) NHS Long Term Plan » The NHS Long Term Plan
6. Department of health (2025)*10 Year Health Plan for England: fit for the future* *10 Year Health Plan for England: fit for the future - GOV.UK*
7. Ardron, D., Wood, H., Szatkowski, L., et al. (2021). *Effectiveness of SMS text messaging to increase cervical screening uptake: A systematic review and meta-analysis*. Preventive Medicine, 148, 106562.
8. Huf, S., Kerrison, R.S., King, A., et al. (2021). *Text message interventions in primary care to improve cervical screening attendance: a systematic review*. BMJ Open, 11(6), e045546.
9. Cervical Screening Video Texting Pilot - Welcome to Wessex Cancer Alliance
10. State of Dorset Diversity 2024 Diversity Topic Data - Dorset Council

Appendix

Appendix A – Text message template

Dear [name inserted]

This is an important message from your GP Practice. Our records show you are due a cervical screening (smear test). The following video explains what happens at the appointment and why it is important to attend:
https://vimeo.com/1012491850/4c79619178?ts=0&share=copy

Please contact us to make an appointment [insert phone number?].

Screening Saves Lives