BREAST CANCER NOW
The research & support charity

OUR BLUEPRINT TO TRANSFORM BREAST SCREENING BY 2028

#NOTIMETOWASTE


"SCREENING SAVED MY LIFE, I WAS TOLD THE LUMP WAS SO DEEP I WOULD HAVE NEVER FOUND IT, SO I'M LUCKY TO BE ALIVE"
MAMMOMAT Revelation
SIEMENS
Healthineers

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INTRODUCTION

Screening saves women's lives from breast cancer.

The NHS breast screening programme has been operating in England since 1988, and is one of our health system's biggest success stories. Breast screening prevents 1,300 breast cancer deaths every year,[1] and has been instrumental to breast cancer survival rates doubling over the last 40 years.[2]

But the programme has reached a tipping point. Services are understaffed and overstretched. Its IT systems are no longer fit for purpose. And the innovations that could make screening more effective and efficient will face an uphill struggle in getting rolled out nationally.

The government and NHS England (NHSE) have long recognised the need to modernise breast screening, but progress has been slow. More than 3 years since Professor Sir Mike Richards' Independent Review of Adult Screening Programmes was published,[3] many of the urgent problems the report identified still haven't been addressed.

These fundamental challenges have been exacerbated by the pandemic. Routine breast screening was paused for several months in response to COVID-19, and when restarted the proportion of women going to screening when invited hit record lows. Despite the tireless efforts of NHS staff, the backlog of delayed invites and the shortfall in breast screening persist.

As of December 2022, we estimate that there are still 6,736 women in England living with undiagnosed breast cancer due to the pandemic, and most of these missing cases are in the growing group of women who have not been screened. According to previous estimates made by NHSE, the decline in breast cancer screening accounted for around 1/4 of the total shortfall in cancers diagnosed due to COVID.[4]

Like any public health programme, the long-term sustainability and success of the breast screening programme is reliant on the right people being willing and able to take part, at the right time. Without the funding needed to tackle the serious issues we're raising, the breast screening programme may no longer be the powerful, cost-effective tool for early diagnosis it has been for the last 35 years. This would have devastating consequences for women in England, many of whom credit breast screening with saving their life.

The work needed to transform breast screening can't be delayed any longer.

To succeed, the programme must be:

#1 Accessible

#2 Efficient

#3 Transparent

#4 Well-resourced

#5 Ready for the future

Thank you

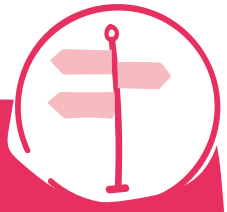
In setting out our blueprint for transformation, we've included the voices of women diagnosed with breast cancer through screening. We're deeply grateful to them for sharing their experiences with us.

OUR BLUEPRINT FOR BREAST SCREENING TRANSFORMATION

Drawing upon data, patient insight, and clinical feedback, we've created a blueprint setting out how the breast screening programme can be transformed in a way that will meet current and future demands.

We urge the government to recognise the critical need for transformation, and provide the investment needed to make it a reality.

By 2028, the breast screening programme must be:



#1. Accessible

- NHSE's public health commissioning team (PHCO) must deliver a national awareness campaign to promote breast screening, especially in communities where uptake is lowest
- NHS regions should incentivise community diagnostic centres (CDCs) to provide breast screening in areas that need it most
- All levels of the service must make sure that breast screening uptake is a core focus of their health inequalities work
- NHSE PHCO should offer more convenient routes into screening services, giving women multiple opportunities to arrange breast screening, or get more information

#2. Efficient

- NHSE transformation directorate must deliver the Digital Transformation of Screening programme
- The National Screening Committee must make recommendations on implementing targeted breast screening for women at increased risk as part of the national screening programme, in line the Richards Review
- NHSE's PHCO should set up an online forum for screening staff that allows units to collaborate and share insights from service improvement work across the regions
- Integrated care systems (ICSs) leads must use new structures to strengthen links between breast screening services and other areas of the health system

#3.
Well-resourced

- The department of health and social care (DHSC) must make sure that essential investment in breast screening services is protected
- NHSE PHCO should give regional leads the tools needed to reduce spending on short-term, external staffing
- NHSE workforce directorate must address gaps in training for all staff roles in the breast screening programme

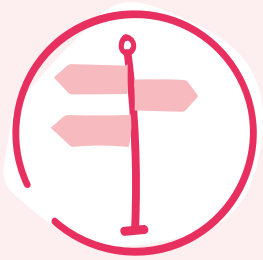
#4.
Transparent

- NHSE workforce directorate should publish projections of the workforce needed to deliver the breast screening programme over the next 5, 10 and 15 years, based on the expected levels of rising demand
- NHSE transformation directorate must make sure that units have timely access to performance data, including on breast screening inequalities

#5.
Ready for the future

- NHSE transformation directorate should produce a horizon scanning report on how breast screening is likely to evolve over the next decade
- NHSE PHCO should ensure changes in the breast screening programme are future-proof and able to evolve

#1. Provide convenient, flexible, and equitable access to screening



There are a number of ways that breast screening can be made more accessible, especially for those who face greater challenges when trying to get screened.

Deliver a national awareness campaign to promote breast screening, focusing on areas and communities where uptake is lowest

The biggest shortfall in cancers diagnosed during COVID-19 were in breast, prostate and lung cancer.[5] NHSE has partnered with Prostate Cancer UK on an awareness campaign which successfully increased referral and diagnosis rates,[6] and similar work is ongoing in lung cancer.[7]

The remaining shortfall in breast cancer diagnoses is largely due to the sustained decline in breast screening, rather than GP referrals. In 2020/21 screening uptake fell to 62% - the lowest level ever recorded, with little improvement seen in 2021/22.[8]

Despite this, there are no plans for a national campaign to promote breast screening as a way to reduce the number of missing diagnoses, even though awareness campaigns have been run recently for bowel and cervical screening.[9, 10]

- A sustained national awareness campaign promoting the importance and availability of breast screening is needed to help reverse the long-term decline in uptake, with targeted messaging in areas and towards communities that are less likely to engage with screening services
- There's no time limit on breast screening invites, and breast screening promotion must make it clear that it's never too late for women to take up their screening offer

Incentivise community diagnostic centres (CDCs) to provide breast screening in areas that need it most

CDCs were designed to help increase early diagnosis and decrease health inequalities – ambitions that breast screening should be central to achieving. NHSE is aiming to rollout a network of 160 CDCs by 2025, with at least 1 CDC in each ICS.[11]

However, mammography is not one of the core diagnostic services CDCs are required to offer.[12] Of the 90 CDCs already operating in England ICSs in June 2022, only 6 provide mammography.[13]

- ICSs should be given direction and incentives to expand the capacity of local breast screening units through CDCs so screening services can access various funds, including the £2.3 billion investment in diagnostics set out in the 2021 spending review.[14] For example, ICSs should be able to use elective recovery funding to expand breast screening capacity as part of their increased activity plans[15]
- Mammography should be included as a minimum requirement in the CDC service specification when it's next reviewed and updated

Make breast screening uptake a core focus of national, regional, and local health inequalities work

Rates of early diagnosis and survival in breast cancer vary significantly, driven in part by unequal uptake of screening. Women from some ethnic minority communities and those living in more deprived areas are the least likely to undergo routine screening,[16,17] while also being at greater risk of late-stage diagnosis and poor outcomes.[18, 19]

- NHSE's CORE20PLUS5 framework is designed to address inequalities in key areas including early cancer diagnosis.[20] Health inequalities leads in ICSs should use Core20PLUS5 funding and resources to improve breast screening performance among populations who do not currently engage with screening services, in line with their regional screening team's inequality strategy

Offer more convenient routes into screening services, offering multiple opportunities to arrange breast screening, or get more information

Currently women are sent 2 letters inviting them to breast screening, with some units also sending text reminders. Previously screening invites included a timed appointment slot, but post-COVID many screening services ask women to schedule their own appointment (otherwise known as an "open invite" model). There's no requirement for services to follow up with women who don't arrange or go to their breast screening appointment.

Most women don't have the option to schedule or rearrange their appointment online. And some women who get an open invite have reported not being able to get through to their local unit to arrange screening, or being told that there were no appointments available.

- A systematic, evidence-based follow up process should be put in place which can:
  - Arrange screening for women who haven't booked, or faced problems booking
  - Address invitees' questions, concerns, or misconceptions about screening
  - Allow women to make an informed choice not to get screened and opt out of the programme, while giving them guidance on breast health and self-checking
- The effectiveness of the COVID-19 vaccination programme in allowing many people to book and reschedule their vaccination online or through the NHS app is an exemplar of a quick, efficient way for patients to schedule appointments and receive health information. This should be replicated in breast screening

"BREAST CANCER SCREENING SAVED MY LIFE - I HAD NO IDEA I HAD A TUMOUR AND WORKING AS A TEACHER IN A SECONDARY SCHOOL I DIDN'T TAKE TIME OUT TO GET SCREENED UNTIL THE SUMMER HOLIDAYS AS I COULDN'T FEEL ANYTHING - BY WHICH TIME I NEEDED CHEMOTHERAPY"

#2. Maximise the efficiency of the breast screening programme

There are opportunities to improve how breast screening is delivered, to better allocate resources and enable more women to get screened.

Follow through on the digital transformation of screening

A central finding of the Richards Review was that the breast screening programme's current IT systems are "clunky", "prone to breakdown", and "in urgent need of renewal".[3] Poor digital infrastructure is limiting the programme's efficiency by:

- Requiring hospital scans and other data to be inputted manually
- Limiting the ability to share digital images between services, which prevents workloads being shared across sites
- Having a highly complex process for transferring information between providers if a patient moves
- Having multiple versions of the IT system exist across service providers, which prevents upgrades from being done centrally
- NHSE has set up a strategic delivery programme for the digital transformation of screening.[21] This must prioritise delivering a robust IT system for breast screening that reduces the administrative burden, frees up workforce capacity, links to other health records, and provides robust data reporting, including on inequalities

Coordinate piloting, innovation, and evaluation across screening teams and regions

A lot of different groups within the NHS are interested in breast screening and how the screening programme could help achieve some key cancer ambitions. As a result, it's challenging for individual screening units to balance:

- Involvement with local activity related to breast screening, for example work led by Cancer Alliances
- Alignment with the priorities of the breast screening programme at a national level, as set out by the NHSE PHCO team
- Awareness of new approaches being trialled in other screening units and regions

This complexity runs the risk of pilot projects and other service improvement work being duplicated across different regions, and insights from previous initiatives getting lost.

- A virtual forum should be established, open to all staff involved with breast screening, to strengthen links between screening units, coordinate new initiatives, and accelerate the sharing of data and best practice

Strengthen links between breast screening services and other areas of the health system

Breast screening is run through individual screening units and managed by regional public health commissioners, which can lead to screening services being isolated from their local ICSs and trust leadership.

- ICS leadership should develop close working relationships with local screening leads through integrated care boards and partnerships, to make sure that resources are being allocated fairly across screening and symptomatic services, and performance is maximised for both pathways
- Greater coordination would allow for primary and community health services to play a greater role in promoting breast screening to eligible women using a "Making Every Contact Count" (MECC) approach.[22] Primary care networks should be incentivised to support breast screening through schemes like the Impact and Innovation Fund (IIF)

Deliver breast screening for all at-risk women risk through the national programme

Women at increased risk of breast cancer due to family history or a genetic alteration should be offered screening earlier or more frequently, in line with NICE guidance.[23]

Currently only women who are classified as very high risk, most of whom have a genetic alteration, get screened by the national breast screening programme. Women at moderate or high risk should be offered screening through locally-commissioned breast clinics. However, in practice the provision of at-risk screening in breast clinics is sporadic and inconsistent, and results in preventable breast cancer deaths.[24]

The recommendation made in the 2019 Richards Review that "women identified as being at elevated risk of breast cancer should then be offered tailored screening within the NHS breast screening programme"[3] must be implemented.

"THANKS TO THE FAMILY HISTORY CLINIC BREAST SCREENING PROGRAMME IN BLACKPOOL MY LIFE WAS SAVED. ALL WOMEN SHOULD HAVE ACCESS TO THIS SCREENING COUNTRYWIDE"

#3. Ensure the breast screening programme has the resources it needs to succeed

Screening workforce issues that existed pre-COVID-19[25] have been exacerbated by pandemic burnout, and may get even worse given the high rates of expected retirement in professions like radiology.[26] In some areas, funding allocated to support breast screening during the pandemic was delayed or diverted, which has also hindered recovery efforts.

Reform funding structures to protect investment in breast screening services

Pre-COVID-19, Section 7a funding was ring-fenced for spending on public health services like breast screening. For the last 2 years, this restriction was removed and NHSE was directed to "manage provision within the totality of its resources".[27] Additionally, some breast screening providers have reported extended delays in accessing COVID support funding, as well as resources that were intended to support screening being used to address issues in the symptomatic pathway.

- To make sure that the breast screening programme is sustainable, we recommend returning to a ringfenced funding model for Section 7a public health spending
- DHSC must provide further detail on how they will ensure the annual Section 7a funding given to NHSE for commissioning public health functions like breast screening keeps pace with demand
- Trusts should be given clear direction that any additional funding provided specifically to support the breast screening programme can't be reallocated to other diagnostic services

Reduce spending and dependency on short-term, external staffing

Recovery in many areas has relied heavily on the independent sector workforce. However, dependence on locum staff has led to significant variation in agency fees within regions, and has left some units struggling to secure enough staff in places where pay rates are very competitive.

- In the long term, a fully funded workforce plan is needed to address current staffing vacancies and meet the growing levels of demand for screening and other breast cancer services
- However, in the interim, NHSE should engage with regional leaders and screening teams to consider whether a consistent funding cap for agency fees in their area would help ensure staff are appropriately distributed across screening units
- During the pandemic, NHSE developed a "COVID-19 digital staff passport" (DSP) to allow for the flexible movement of staff between services, a tool that is now being used to support routine workforce planning.[28] NHSE should help screening teams consider the benefits a DSP system could offer and identify the roles it should cover, with the dual aim of offering mutual support between neighbouring services, and letting staff gain experience working in different settings

Address long-standing gaps and inefficiencies in the training of breast screening staff

Breast screening training budgets can be fragmented across multiple funding streams and training opportunities are often sent out in insolation with limited notice to apply. Training and development for essential administrative and clerical (A&C) staff isn't mandated, and as a result is often limited by resources.

- The process of advertising and accessing training resources should be simplified and consolidated, and remote learning should be coordinated across training centres to avoid duplication
- Single-year funding allocations for training and development prevent long-term investment, and act as a barrier to recruiting educators. Future funding decisions should be made in a way that enables sustained, strategic investment in training and development
- New training and workforce models that can increase capacity, like mammography associates or remote supervision of assistant practitioners, should be rolled out in suitable settings and further innovation in the delivery of breast screening should be explored
- The work of A&C staff in the breast screening programme is increasingly technical and complex, and there should be a robust, well-resourced training offer to support A&C staff, as well as development opportunities to improve recruitment and retention

"SCREENING SPOTTED MY CANCER AT A STAGE WHEN TREATMENT WAS QUICK AND RELATIVELY EASY. WITHOUT IT I WOULDN'T HAVE KNOWN UNTIL MUCH LATER."

#4. Increase data reporting, transparency and accountability within the screening programme

Greater availability of robust data, analysis, and forecasting is needed to allow for evidence-based decision making and long-term planning in breast screening services.

Publish projections on the future levels of demand for breast screening, and the workforce and funding needed to continue delivering the service

As the population continues to age, the number of women eligible for routine breast screening will also rise.[29] Demand will increase even further if screening is extended to more women based on their family history, or the eligible age range is expanded.

- The breast screening programme needs to set out a long-term workforce plan for meeting the growing demand for screening, and the estimated cost of delivering the programme in the future
- Local services often don't have the resources to model demand or capacity in detail. They should have access to a centralised data platform to log, verify, and access workforce data for planning purposes. National support must sit alongside this, to make sure that all regions use the same approach to workforce modelling

Provide timely access to performance data, including on breast screening inequalities

The screening programme does collect some data to evaluate the programme's performance, but the quality and completeness of this data varies, and its integration with other datasets is limited.

These issues must be addressed before screening data can be used to reliably inform decision-making in the breast screening programme. For example, to target community engagement or evaluate the success of initiatives aiming to make breast screening more accessible.

- NHSE must guarantee all regional and local screening teams access to robust, real-time performance data on screening, including granular data reporting on inequalities. Insights into breast screening inequalities must be integrated into the annual breast screening programme reports to allow for external scrutiny
- The focus on inequalities in ethnicity and deprivation is welcome, but the programme should also consider other factors that could impact screening access, like rurality

"THROUGH BREAST SCREENING AN AREA OF SUSPICION WAS INVESTIGATED AND REMOVED. A TUMOUR WOULD HAVE FORMED IF IT HADN'T BEEN. I WAS LUCKY AND SAVED FROM VERY UNPLEASANT TREATMENT."

#5. Prepare to adapt to future demands and implement new innovations

There's a massive amount of ongoing research and piloting of different tools and technologies that could help detect more cancers, earlier and more efficiently.

Produce a horizon scanning report on how breast screening is likely to evolve over the next decade

Many of the innovations being piloted in breast screening will require the programme to change significantly, if the evidence shows they're effective. The NHS transformation directorate should collaborate with the sector on a review to explore what new elements could be introduced, and what the key barriers to integrating them would be. This should cover the use and impact of:

- Risk-stratification and personalising the screening offer
- Expanding the eligible age range for routine screening
- Genomic testing
- Artificial intelligence
- Alternative imaging techniques
- Multi-cancer site early detection testing

Ensure changes in the breast screening programme are future-proof and able to evolve

While research into new screening methods and technologies is ongoing, there are steps we can take now to make sure the programme is ready to introduce new tools and maximise their impact.

- The IT improvements made through the digital transformation of screening must be able to deliver a targeted programme and accommodate new tools being introduced into the screening pathway
- Long-term workforce planning work must take into account how the expertise and skills mix required in breast screening is likely to change, and expand the training offered to meet this need

KEY MILESTONES IN BREAST SCREENING TRANSFORMATION

Previous efforts to modernise breast screening have struggled to make progress, and targets to recover the COVID-19 backlog of screening invites have been repeatedly missed.

It's vital that there's an agreed transformation timeline with specific, measurable milestones.

Year 1
Recover standards

Breast screening units must be given ring-fenced funding and support to meet core performance standards.[30]

By 2024

- Deliver a national awareness campaign promoting breast screening
- Meet the minimum performance targets nationally for:
  - *Uptake 70%
  - **Round length 90%
  - ***Waiting time for assessment 98%
- Reduce the gap in uptake between the least and most deprived groups
- Create a breast screening forum to connect and support the workforce

*Uptake
The proportion of eligible women who undergo screening within 6 months of being invited.

**Round length
The proportion of eligible women invited to screening within 3 years of their last appointment.

***Waiting time for assessment
The proportion of women offered an appointment within 3 weeks of their screening if they are referred for assessment.

"IF I HADN'T BEEN CALLED UP FOR ROUTINE SCREENING AGE 50, I MIGHT NOT HAVE BEEN HERE TODAY. MY STAGE 2 CANCER WAS FOUND AT THAT ROUTINE APPOINTMENT."

Year 3
Tackle underlying issues

The underlying issues that limit the breast screening programme's current performance must be addressed.

By 2026

- Have an online booking system
- All individual screening units meeting the minimum performance targets
- Reduce the gap in uptake across all groups who are less likely to attend screening
- Introduce the new IT system
- Review the initial Age X trial data and whether it supports expanding the eligible age range for breast screening

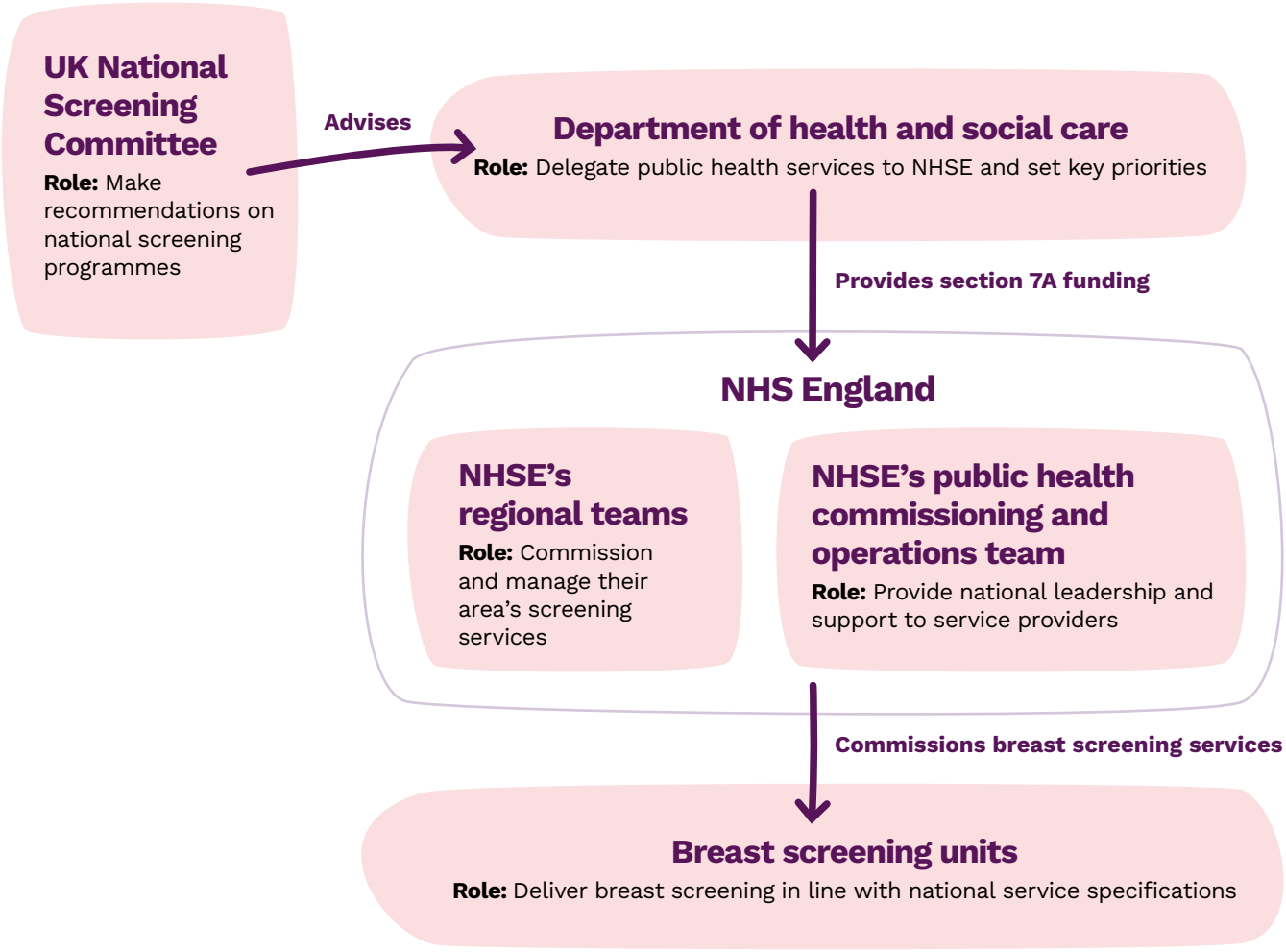
Year 5
Prepare for the future

Any changes to the breast screening programme must be able to support and meet future levels of demand, and successfully integrate new innovations and research.

By 2028

- Meet the achievable performance targets for:
  - Uptake – 80%
  - Round length – 100%
  - Waiting time for assessment – 100%
- Provide enhanced breast screening for women at increased risk through the national screening programme
- Expand the age range for routine screening, if supported by Age X trial results
- Have the capability and capacity to implement risk stratification and AI tools

APPENDIX 1
NHSE breast screening programme structure



- NHSE's national breast screening programme currently offers routine asymptomatic mammogram screening to women aged 50 up to their 71st birthday
- Eligible women are identified using GP registration data, with all women receiving their first invitation at some point from the age 49 and before they turn 53
- Women who undergo breast screening and receive a normal mammogram result should be invited to their next routine screening within 3 years of their last appointment
- Currently 78 providers across England are involved in delivering the national breast screening programme through their breast screening units. Most screening units are part of an NHS trust, although a small number are run by the independent sector
- Most screening units offer breast screening at a least 1 hospital site, as well as through mobile screening vans which are intended to make accessing breast screening more convenient

APPENDIX 2
COVID-19 impact on the breast screening programme in England

- In March 2020, all 78 individual breast screening units in England decided to pause screening to redeploy staff and protect patients
- In April 2020, NHSE directed systems to restart key non-COVID services, including breast cancer screening, as soon as possible, prioritising the very high risk screening group. All breast screening units had restarted routine screening by September 2020
- The pause resulted in a backlog of women waiting to receive their invite and undergo screening. COVID-19 restrictions and control measures limited screening capacity, as well as staffing shortages caused by sickness, self-isolation, and redeployment
- Actions were taken to bring down the number of delayed screening invites, including:
  - Stopping further recruitment into the AgeX Trial, which was screening women outside the eligible age range, and redirecting the additional capacity to catch up with the backlog in routine screening
  - Suspending the option for self-referral into breast screening for those aged 71 or over, a restriction which didn't end until October 2020
  - Switching to an open invite model that requires invitees to arrange their own appointment, which may improve clinical efficiency but can also impact uptake
- COVID-19 concerns, especially for those affected by shielding or self-isolation, are also likely to have contributed to fewer women getting screened during this period
- Since breast screening for women at moderate or high-risk is commissioned locally rather than through the national programme, it isn't possible to measure the impact COVID-19 had on screening for this cohort. However, given the significant pressures on locally-led breast services during the pandemic, it's reasonable to assume COVID-19 also had a negative effect on moderate and high risk screening provision

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ABOUT BREAST CANCER NOW

We're Breast Cancer Now, the research and support charity. We're the place to turn to for anything and everything to do with breast cancer.

The brightest minds in breast cancer research are here. Making life-saving research happen in labs across the UK and Ireland. Support services, trustworthy breast cancer information and specialist nurses are here. Ready to support you, whenever you need it. Dedicated campaigners are here. Fighting for the best possible treatment, services and care, for anyone affected by breast cancer.

Why? Because we believe that **by 2050, everyone diagnosed with breast cancer will live** – and be supported to live well. But to create that future, we need to act now.

WHATEVER YOU'RE GOING THROUGH.
WHOEVER YOU ARE.
WE'RE HERE.

#NOTIMETOWASTE

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