It's time to act. The NHS Long Term Plan should seek to optimise existing service delivery, and to resource additional capacity for innovation. Breast Cancer Now have set out our 10 priorities for the Plan:

55,000 Reasons:

Why the NHS Long Term Plan must invest in breast cancer

Every year around 55,000 people in the UK are diagnosed with breast cancer. At Breast Cancer Now, our vision is that if we all act now, by 2050, everyone who develops breast cancer will live – and live well.

Whilst welcome progress has been made in breast cancer survival over the past 30 years, significant challenges remain. The NHS Long Term Plan, supported by the funding settlement announced by the Prime Minister in June 2018, offers an opportunity to stop more breast cancer deaths. It's time to act.
It’s time to act.
Breast Cancer Now’s 10 priorities for the NHS Long Term Plan.

Priority 1
Fund specific interventions to prevent the 23% of breast cancer cases that are attributable to lifestyle factors in England every year.

Priority 2
Prevent over 1,200 breast cancer deaths by increasing breast screening uptake from the current decade low of 71.1% to the 80% standard set for breast screening units.

Priority 3
Urgently invest £39 million in recruitment to the breast imaging and diagnostic workforce to enable breast services to cope with increasing demand over the next ten years.

Priority 4
Adopt new technologies, such as tomosynthesis and Artificial Intelligence, into the breast screening and symptomatic services as soon as proven effective.

Priority 5
Transform breast screening to risk stratified screening to spearhead the prevention and earlier diagnosis of breast cancer over the next ten years based on evidence as it emerges.

Priority 6
Ensure that innovative, clinically effective cancer treatments are quickly available to NHS patients at a price that is fair and affordable, including by reviewing the NICE appraisal methodology.

Priority 7
Introduce a Catalyst Fund worth £3 million to incentivise generic manufacturers to make it quicker and easier for patients to routinely access cheap, off-patent drugs found to be effective in new uses.

Priority 8
Fund new Clinical Nurse Specialist posts to support secondary breast cancer patients in over 120 Hospital Trusts without a dedicated post.

Priority 9
Improve the Cancer Dashboard by including more detailed data on performance across Cancer Alliance geographies to identify inequalities within and between Alliances.

Priority 10
Provide multi-year funding for Cancer Alliances, to increase confidence and encourage long-term thinking to drive investment in innovation, including a dedicated fund to address pathway variation.

It’s time to act. Breast Cancer Now’s 10 priorities for the NHS Long Term Plan.

‘I miss my mum every single day’

Around 55,000 people are diagnosed with breast cancer every year.

Each of their stories – and those of their families and friends – represent at least 55,000 reasons why breast cancer needs more investment.

10 priorities for the NHS Long Term Plan

breastcancernow.org

#55000Reasons
We have seen much welcome progress in breast cancer survival as a result of advances in diagnosis and treatment. However, the scale of the challenge is greater than ever.

Nearly 11,500 women and 80 men in the UK still lose their lives to breast cancer each year. The failure to address the increasing numbers of people being diagnosed with the disease, means the number of breast cancer deaths could rise within four years, if trends continue as projected.

At the same time, there are significant challenges in tackling breast cancer. In England, breast screening attendance is at a record low, waiting times vary widely and access to best practice in treatment and care still depends on where you live. Secondary breast cancer – also known as metastatic, advanced or stage four breast cancer – remains incurable. Welcome improvements in treatment mean that these patients are living longer. But their needs are complex and often unmet.

The NHS Long Term Plan, and the funding settlement that will support it, offer an opportunity to address these challenges and stop more breast cancer deaths.

The Plan should seek to optimise existing service delivery and to resource additional capacity for innovation.
**Priority 1**

**Fund specific interventions to prevent the 23% of breast cancer cases that are attributable to lifestyle factors in England every year**

Breast cancer is the most common cancer in England, and incidence is increasing rapidly.4

We are missing opportunities to prevent breast cancer. Regularly drinking alcohol and being overweight or obese can increase the risk of developing breast cancer, while regular physical activity can reduce the risk.

Research has estimated that 23% of breast cancers are attributable to lifestyle factors.5 This means there were approximately 10,600 preventable cases in 2016.

An estimated £102 million in treatment costs could have been saved in 2016 if all of these cases had been prevented. Based on the projected increase in new cases over the next nine years, if we prevented all the avoidable cases – over 89,000 – we could save the NHS in England almost £2 billion in this period.6

In England, local government is tasked with helping people make positive changes to their lifestyles. However, public health budgets in 2017/18 were 5% less in real terms than in 2013/14.7

The NHS Long Term Plan should fund an integrated prevention agenda – working with Department of Health and Social Care and Public Health England – including specific interventions at ‘teachable moments’, such as at a breast screening appointment, to reduce the risk of breast cancer developing.

We also need to ensure that all cases of incurable secondary breast cancer are being prevented where possible, through lifestyle advice at the end of primary breast cancer treatment and access to medicines that could reduce the risk of secondary breast cancer returning where appropriate.
**Priority 2**
Prevent over 1,200 breast cancer deaths by increasing breast screening uptake from the current decade low of 71.1% to the 80% standard set for breast screening units

Breast screening uptake is the lowest it has been in ten years, with stark variation across the country.\(^8\)

We estimate that we could see upwards of 1,200 additional deaths prevented per annual cohort of eligible women if we increase screening uptake to 80%\(^9\) – the current target for individual breast screening units.\(^10\)

It is important, however, that consideration is given to over-treatment to the one in five women whose breast cancer is picked up by screening, when their cancer might not have caused problems in their lifetime.\(^11\)

**Priority 3**
Urgently invest £39 million in recruitment to the breast imaging and diagnostic workforce to enable breast services to cope with increasing demand over the next ten years

The breast imaging and diagnostic workforce is in crisis. But demand on the service is higher than ever, and increasing. Only 18% of breast screening units are adequately resourced with radiography staff in line with breast screening uptake in their area.\(^12\)

Further pressures will arise over the course of the Long Term Plan due to the age of this workforce: for every three breast radiologists that retire over the next five years, only two are expected to replace them.\(^13\) This is a serious issue that urgently needs addressing.

Specific interventions to model and invest in this workforce based on increasing patient demand are crucial to deliver ambitions around early diagnosis in breast cancer.

Investing an estimated £39 million in the breast imaging and diagnostic workforce over the next ten years would cover the cost of training to fill clinical radiologist vacancies, and to address the current shortfall of radiographers working in the screening programme.\(^14\)

‘Too many of my friends have died’
Priority 4
Adopt new technologies, such as tomosynthesis and Artificial Intelligence, into the breast screening and symptomatic services as soon as proven effective

Beyond mammography, there are other technologies that are more effective at detecting breast cancers, such as tomosynthesis and ultrasound in women with dense breasts. Breast cancer is also likely to be an early adopter of Artificial Intelligence (AI) innovations due to the volume of data that is captured. AI could relieve some workforce pressures by reducing the need for “double reading” of mammograms, and has the potential to support risk stratified screening.

Priority 5
Transforming breast screening to risk stratified screening to spearhead the prevention and diagnosis of breast cancer over the next ten years, based on evidence as it emerges

Risk stratified screening would involve measuring breast cancer risk based on genetic factors (SNPs), breast density and a lifestyle questionnaire. Women at a higher risk of breast cancer would be screened more frequently, with technologies which are more effective in these women. Those at a lower risk may be screened less frequently. The screening programme would also be used as a “teachable moment” to deliver lifestyle interventions for all women to encourage them to lower their risk.

Research has shown that the 19% of the population who were at high or moderate risk of developing breast cancer within ten years are five times more likely to develop a stage 3 or 4 breast cancer than the low risk group. Personalising screening based on risk potentially offers an opportunity to increase the number of lives saved, and may also reduce demand on the NHS.

If 10% of breast cancers were diagnosed a stage earlier, an estimated 290 lives could be saved in one year, which could represent a one year treatment cost saving to the NHS of over £14 million. Over five years, around 1,100 breast cancer deaths could be prevented.

Significant research on the effectiveness of a risk stratified screening approach is underway. This innovative approach would be world-leading, but the NHS must be ready for it. As well as the right workforce and the most effective technology, the NHS also needs to be ready to communicate this new approach to women.

‘I want a world where cancers are spotted and treated early, so no one has to go through what me and my sister have’
Priority 6
Ensure that innovative, clinically effective breast cancer treatments are quickly available to patients on the NHS at a price that is fair and affordable to the NHS

Ensuring that the best treatments reach patients quickly and consistently will be fundamental to fulfilling the long-term ambition of the NHS to improve cancer outcomes.

However, issues with patients’ ability to access treatments threaten to limit this ambition. The current renegotiation of the Pharmaceutical Price Regulation Scheme (PPRS) provides an opportunity to ensure that the best medicines are available to patients at a price that is fair and affordable to the NHS and taxpayer.

In particular, we want to see the new PPRS commit to a review of the NICE appraisal methodology to ensure that it is fit for the innovative cancer treatments that are emerging.

This review must specifically address the issue of combination treatments – a growing area of therapy – which often struggle to be deemed cost-effective as all the treatments in the combination count towards the NICE cost effectiveness threshold.

Priority 7
Introduce a Catalyst Fund worth £3 million to incentivise generic manufacturers to make it quicker and easier for patients to routinely access cheap, off-patent drugs found to be effective in new uses

A Catalyst Fund of £3 million should be established to address the off-patent drugs issue.

Patients can struggle to access cheap drugs that have been found to be effective for new uses in addition to those for which they were originally licensed.

To incentivise manufacturers to licence off-patent drugs for new uses in breast cancer and other conditions, and establish the UK as a leader in this area, a Catalyst Fund of £3 million should be established for the next five years to cover the costs of the manufacturer in doing this.18

‘I want to be a mum, wife and daughter for as long as I can’
Priority 8
Fund new Clinical Nurse Specialist posts to support secondary breast cancer patients in over 120 hospital trusts without a dedicated post

Access to a named Clinical Nurse Specialist (CNS) or key worker is the biggest contributor to a positive patient experience. However, those living with secondary breast cancer often do not have access to a CNS: only 21% of Trusts in England have a dedicated CNS for secondary breast cancer patients, despite their needs often being much more complex than patients with primary breast cancer.

Secondary cancers must be a priority as more and more patients with this incurable condition are living longer with unmet needs.

Priority 9
Improve the Cancer Dashboard by including more detailed data on performance across geographies to identify inequalities within and between Cancer Alliances

We estimate that more than 1,100 lives could have been saved in 2016 if all Clinical Commissioning Groups (CCGs) in England had reduced their mortality rates to match those with the lowest rates. Data is key to addressing variation. There are still worrying gaps in data, including the number of people living with secondary breast cancer.

Cancer Alliances must collect this data and have breakdowns readily available. This allows them to better identify inequalities locally and nationally, where they can improve outcomes to prevent more breast cancer deaths.
Priority 10
Provide multi-year funding for Cancer Alliances to increase confidence and encourage long-term thinking to drive investment in innovation, including a dedicated fund to address pathway variation

Cancer Alliances play a key role in identifying and addressing local variation, alongside the necessary funding to deliver improvements.

It is essential that the NHS Long Term Plan secures the future of Cancer Alliances beyond 2020/21 through a continued commitment of at least £200 million per year, in line with inflation.

These should be multi-year budgets to allow Alliances to focus on investing in the future of services – including the staff and mechanisms to deliver genuine transformation.

It is vital this is fully distributed, and not based on achieving process targets. This must also include a fund to specifically target improvements in areas with inequalities, which will allow sustainable investment to prevent more cancer cases and diagnose more breast cancers earlier.

If you have any questions about this briefing or would like to support the 55,000 Reasons campaign, please email publicaffairs@breastcancernow.org

‘I am indebted to the NHS’
References


2. Breast Cancer Now commissioned York Health Economics Consortium to conduct modelling based on historical data of breast cancer deaths, as well as projected figures (based on the application of projected ASRs from Smittenaar et al. (2016) to the projected population of females in England (aged 15–90 years) in each year (derived from ONS, 2016c).

3. Breast Cancer Now commissioned York Health Economics Consortium to conduct modelling on the projected incidence of breast cancer. These graphs present historical data (ONS, 2016a) on BC incidence, measured as the absolute number of new cases, as well as projected figures (based on the application of projected ASRs from Smittenaar et al. (2016) to the projected population of females in England (aged 15–90 years) in each year (derived from ONS, 2016c). These data are females aged 15 to 19 years in England only.


6. Breast Cancer Now commissioned York Health Economics Consortium to model how many lives and cost to the NHS we could save by preventing preventable cases of breast cancer from developing. The number of preventable cases is based on a proportion of breast cancer cases that are preventable of 23% (Brown et al., 2018). This figure takes account of the effects of lifestyle and behavioural factors. The proportion is applied to the number of new breast cancer cases reported in 2016 (ONS, 2018) to give the total estimated number of preventable cases in 2016. Treatment costs are calculated based on incidence costs reported by Laudicella, 2016 (Laudicella M, Walsh B, Burns E & Smith, PC. 2016. Cost of care for cancer patients in England: evidence from population-based patient-level data. British Journal Of Cancer, 114, 1286. Available: http://dx.doi.org/10.1038/bjc.2016.77). These include all hospital (inpatient and outpatient) treatment costs. Chemotherapy and radiotherapy treatment costs are included. The costs of primary care (e.g. GPs) and/or social care services are not included (although the authors note that these are expected to be a small proportion of total costs). These costs have been inflated to 2016/17 prices using the Hospital and Community Health Services (HCHS) inflation index (Personal Social Services Research Unit (PSSRU). 2017. Unit Costs of Health & Social Care 2017, Canterbury, University of Kent. Available: http://www.pssru.ac.uk/project-pages/unit-costs/2016/). Costs of new cases over the period 2018 to 2027 are based on projected changes in incidence reported by Smittenaar CR, 2016 (Smittenaar CR, Petersen KA, Stewart K & Moitt N. 2016. Cancer incidence and mortality projections in the UK until 2035. British Journal of Cancer, 115 (9), 1147-1155. Available: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5117795/) and 1 to 9 year incidence costs reported by Laudicella et al. (2016).


9. Breast Cancer Now commissioned York Health Economics Consortium to model how many more breast cancer deaths could be prevented if breast screening uptake increased. NHS Digital Breast Screening Programme Report 2016-17 states that 80% uptake is the target level for breast screening units (BSUs). Estimated numbers of lives saved are based on a hypothetical increase in uptake (e.g. 8.9%) and 35 year survival outcomes for screened and unscreened women reported by Pharoah et al. (2013) (Pharoah PDP, Sewell B, Fitzsimmons D, et al. 2013. Cost effectiveness of the NHS breast screening programme: life table model. BMJ : British Medical Journal, 346. Available: http://www.bmj.com/content/346/bmj.f2618.abstract). The total population eligible for screening, which was used to estimate the populations of screened and unscreened women at each hypothetical level of uptake, was derived from the NHS Digital Breast Screening Programme Report 2016-17. It is worth noting that these results do not consider the impact of increased uptake of screening on over-diagnosis of breast cancer, which is known to have a negative impact on patients’ quality of life.


11. Over-treatment occurs to one in five women whose breast cancer is picked up by screening. (M G Marmot, D G Altman, D A Cameron, J A Dewar, S G Thompson, M Wilcox, and The Independent UK Panel on Breast Cancer Screening, 2013: The benefits and harms of breast cancer screening: an independent review. A report jointly commissioned by Cancer Research UK and the Department of Health (England) October 2012. British Journal of Cancer, 108(11): 2205–2240). This is because in some cases, breast screening can detect a very early form of cancer called ductal carcinoma in situ (DCIS). For some women, DCIS will be so slow growing that it would not cause a problem in her natural lifetime whereas, for others, it can become invasive breast cancer. At the stage of diagnosis, doctors cannot tell whether or not a case of DCIS will become invasive breast cancer. Therefore, in most cases, treatment will be recommended. Some people believe that this treatment is unnecessary and consider this to be overtreatment.


14. Breast Cancer Now commissioned York Health Economics Consortium to model how much it would cost to fill the gaps in the breast imaging and diagnostic workforce. This is the total investment in training incurred to fill all unfilled breast radiology posts (RCR, 2018), and to address the shortfall of breast radiographers working in the screening programme (PHE, 2017). Radiology vacancies are for all vacancies in the UK, while radiography vacancies are for mammographers working in breast screening in England only. This includes the total investment in training incurred (by the wider NHS and individuals undertaking the training) “during the working life of the professional after allowing for distribution of the costs over time”. Does not account for possible future requirements due to changes in the population eligible for screening (ageing population, possible introduction of risk-stratified screening) and prevalence of breast cancer. The cost of training to fill all radiologist vacancies is based on 46 vacancies for consultant clinical radiologists with a primary interest in breast radiology (RCR, 2018) and a total training cost for one consultant of £513,151. The cost of training one consultant (medical – non-specific to radiology) is based on the total cost reported in Unit Costs of Health and Safety Care (PSSRU, 2017), which includes the total investment in training incurred (by the wider NHS and individuals undertaking the training) “during the working life of the professional after allowing for distribution of the costs over time”. For radiographers, training costs are based on a shortfall of 221 radiographers working in mammography (PHE, 2017), the distribution of different tiers of radiography staff in the breast screening workforce (Public Health England (PHE), 2016. NHS Breast Screening Programme: National radiographic workforce survey. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/564515/Final_radiographic_workforce_report_25-10-16_colinbabb_gateway_number_2016416.pdf), national profiles of Agenda for Change (AFC) band for each tier, and total training costs for each tier. For each tier, the costs for training one radiographer are based on the total cost for radiographers working at each AFC band reported in Unit Costs of Health and Safety Care (PSSRU, 2017).
15. SNPs – Single nucleotide polymorphisms (SNPs) are variations in the genetic code that are associated with higher breast cancer risk. Identification of SNPs will help us to identify those women who are at higher risk of developing breast cancer and tailor screening and other lifestyle interventions for those women.


17. Breast Cancer Now commissioned York Health Economics Consortium to model how many deaths and how much we can save in treatment and care if we detect more breast cancers at an earlier stage. These calculations do not take into account the costs associated with any interventions to improve prevention and/or earlier detection of breast cancer. The impact (on mortality and costs) of prevention or a shift in diagnosis is assumed to occur in a uniform way across all stages of cancer. Current lives lost and treatment costs estimated using: Breast Cancer costs by stage (9yr incidence costs): £25,693 for stages 1/2 and £39,353 for stages 3/4 (Laudicella et al., 2016) – non-inflated costs used. 1 and 5 year survival by stage (Office for National Statistics (ONS), 2016a. Cancer survival by stage at diagnosis for England (experimental statistics): Adults diagnosed 2012, 2013 and 2014 and followed up to 2015 [Online]. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancersurvivalbystageatdiagnosisforenglandexperimentalstatistics/adultsdia gnosed20122013and2014andfollowedupto2015; Cancer Research UK (CRUK), 2015. Breast Cancer Survival by Stage at Diagnosis [Online]. Available: https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/breast-cancer). Current distribution of stages at diagnosis (ONS, 2016a). ‘What if’ scenarios: Estimated lives lost and costs if 10–30% BCs were detected one stage earlier (not including stage 1) i.e. stage at diagnosis shifted (this is a ‘slide-rule’ approach not based on evidence around the expected shift in diagnosis).

18. AMRC and drug repurposing working group, December 2017. Facilitating adoption of off-patent, repurposed medicines into NHS clinical practice. Available at: https://www.amrc.org.uk/Handlers/Download.ashx?idMF=c1a3904c-78de-47ed-813c-b34b57ca567c


20. Breast Cancer Now commissioned York Health Economics Consortium to model how many lives we could save if the best outcomes were reached everywhere. The projected lives saved figure is based on all CCGs achieving the age-standardised mortality rate for the first quartile CCG (30.4 deaths per 100,000), using data from the Cancer Dashboard in 2016.