The ACE Programme
Improving the early diagnosis of cancer

- Streamlining diagnostic pathways
- Developing symptom based pathways
- Helping to identify cancer sooner
- Expanding the roles of health professionals
- Implementing change successfully

A report from the wave 1 projects - September 2017
The ACE Programme was set up in 2014 to Accelerate, Coordinate and Evaluate a range of innovative approaches being taken across England to help diagnose cancer earlier, on the premise that this should lead to reduced mortality. The objective was to build a body of evidence that would support healthcare commissioners and providers to select the most impactful approaches. ACE was initiated at a time when new benchmarking research showed that cancer survival in the UK was lower than in other comparable countries; increasing the impetus for change.

The first wave of this novel programme of evaluation was formed by selecting 60 of the most promising early diagnosis proposals from commissioners and providers. Concepts to be explored included: direct/rapid access to diagnostics; pathways for patients with vague symptoms; and, proactive approaches to identifying high-risk individuals. These approaches had been identified by senior health professionals and researchers as being most likely to improve patient outcomes and experience.

We are pleased that ACE has something to report on each of these concepts. We have produced 7 evaluative reports that add to the early diagnosis evidence base. These are accompanied by a range of resources that support local implementation such as: project summaries, referral protocols, symptom definitions, referral proformas, telephone scripts and job descriptions. A list of topics covered can be found on the inside cover of the last page.

It is worth briefly referencing some of the changes in health care policy and thinking that have occurred over the period since ACE’s inception. Notably, the revised 2015 NICE guidelines, which reduced referral thresholds for cancer, and the publication in 2015 of a new cancer strategy, which includes an early diagnosis work strand. ACE has been able to present its findings in the context of these changes, with many of the approaches we set out to examine now forming part of the NHS’s broader transformation agenda. We have also established an ACE Wave 2 to pilot and evaluate the multidisciplinary diagnostic centre (MDC) concept, under the umbrella of NHS England’s cancer transformation programme.

This overview report focuses on the 60-project portfolio that formed wave 1. It draws out key themes and highlights from the main body of work and is aimed at healthcare professionals who take a strategic view of cancer service improvements. It does not attempt to reproduce the depth of analysis or full list of recommendations found in the topic-based reports. Instead, our aim is to provide a thought-provoking tour of ACE findings, which we have written in a more informal conversational style.

We would like to thank the many participants in ACE, including: GPs, commissioners, secondary care clinicians, project managers, clinical experts, academics and of course our funders: NHS England, Cancer Research UK and Macmillan Cancer Support. We are proud that ACE is built on the ideas and experiences of cancer health professionals and that we successfully ran networks of people working to solve the same problems in different contexts. At ACE’s core is the belief that we have the power to effect change best when we connect ourselves up and seek to learn from one another.

The ACE Team
About the ACE Programme

INTRODUCTION

The ACE Programme is an initiative focused on testing, evaluating and quantifying the effectiveness of innovations that either identify individuals at high risk of cancer earlier or streamline diagnostic pathways. It was set up to accelerate the pace of change in this area by adding to the knowledge base, and is delivered with support from: NHS England, Cancer Research UK and Macmillan Cancer Support. Evaluation was carried out in collaboration with two of the Department of Health’s Policy Research Units (PRUs).

The first phase of the programme consisted of 60 projects split into various topic-based clusters to facilitate evidence generation and learning. The second phase, conceived in November 2015, with pilots live from January 2017, comprises five projects exploring Multidisciplinary Diagnostic Centre (MDC) based pathways. The learning from ACE is intended to provide ideas and evidence to those seeking to improve local cancer services. The evaluations and findings are based on the data collected and may not reflect the policies of the supporting organisations.

BRIEF CASE FOR EARLY DIAGNOSIS

As set out in the 2007 Cancer Reform Strategy, responding to the challenge of late stage diagnosis could deliver a considerable positive impact on cancer survival, reduced mortality and quality of life if tackled.

Bowel cancer, for example, sees more than 9/10 people survive five years when diagnosed at stage I, compared with less than 1 in 10 when diagnosed at stage IV. Unfortunately, fewer than 2 in 10 people with bowel cancer are diagnosed at stage I.

Similarly, for lung cancer, with around 50% of cases diagnosed at stage IV, considerably less than 1 in 10 people diagnosed at stage IV survive five years.

Source: Cancer Research UK statistics

SURVIVAL BY STAGE OF DIAGNOSIS

Data for patients diagnosed in the East of England between 2003 and 2006

Source: Cancer Research UK statistics
**SCOPE OF THE ACE PROGRAMME**

ACE projects were spread across the patient’s diagnostic journey

- **Examining proactive approaches that identify individuals at high risk of cancer**
- **Encouraging people to complete screening kits, focusing on bowel screening uptake in non-responders as well as finding better ways to engage hard to reach groups**
- **Trialling use of electronic Cancer Decision Support Tools in GP practices as a way of supporting GPs to identify potential cancers**
- **Expanding the scope of health professionals’ roles within both primary and secondary care, including optometrists, pharmacists and clinical nurse specialists**
- **Streamlining diagnostic pathways in secondary care from the point of referral through to diagnosis, for patients on lung and colorectal cancer pathways as well as developing new pathways for patients with vague symptoms**

**ACE PERSPECTIVE**

**Developing pathways around the patient**

Projects addressed the gap in service for patients presenting with symptoms that do not immediately suggest a particular suspected primary tumour site. Through trialling pathways that cater for those who are too ill to wait and those with “non-specific but concerning symptoms” they have offered less restrictive access to investigative testing from primary care and shown improved experience for the patients involved; as well as cancer conversion rates at a level suggesting there is a need for pathways like this to exist.

Additionally, putting in place both direct access and triage based referral systems from primary care has worked to better ensure patients receive the most appropriate investigation at the right time.

**Being less reactive, and more proactive**

Shortening diagnostic pathways can only benefit patients once they are in the system. Opportunity to realise stage shift in this, usually symptomatic, cohort is limited and so it is important to continue efforts that appropriately encourage people to participate in screening programmes and to present at the earliest onset of their symptoms. ACE projects found that advocacy and engagement from primary care professionals had a positive impact on people’s awareness and attitudes to cancer.

**Using existing resources to greater effect**

We can do more with what we have. Through more efficiently designed pathways, triaged referral mechanisms and more flexible and effective use of job roles, ACE projects have shown an ability not only to reduce an individual patient’s time to diagnosis but also to release capacity that can be used to see more patients, more quickly and reduce variation.

We have investigated expanding referral routes for other healthcare professionals, including enabling optometrists to refer directly into secondary care. This, among others, allows the best use of existing resource – freeing up time elsewhere, whilst speeding up the diagnostic process.

**Spending time anticipating the challenges of change**

Successfully embedding these innovations into standard practice takes time and effort and requires an adaptive approach. Research carried out into ACE projects shows the importance of spending time up front critically assessing what resources and skills are required to deliver the project. It is also important to identify where resistance may come from and to take the time to address concerns.

**In summary, as health and research professionals pursue the early detection and diagnosis of cancer, ACE highlights the importance of continued innovation across the patient’s whole diagnostic pathway.**
ACE projects successfully explored different ways of giving patients direct or rapid access to diagnostics, which resulted in more efficient pathways and a reduction in the overall time to diagnosis. We believe that by applying the logic behind the various approaches in other pathway settings, similar benefits could be achieved.

**REDUCING TIME TO DIAGNOSIS BY DESIGNING MORE EFFICIENT PATHWAYS**

In the colorectal pathway, nine projects focused on implementing a ‘Straight To first diagnostic Test’ (STT) referral pathway for GPs. All aimed to streamline the patient pathway by eliminating unnecessary outpatient appointments (OPA) and by providing a flexible and responsive specialist service. The results indicate that the interval – from GP referral to confirmed diagnosis – is shortened by around 1-2 weeks.

The analysis also showed that on average it was possible to eliminate the initial outpatient appointment for 59% of patients referred for triage to a STT colorectal service.

Most of the ACE projects applied STT just to the two week wait referral cohort, but, if the eligibility criteria were to be widened (as they were in three ACE projects) there is potential for a greater improvement in the time to diagnosis for those patients who might otherwise have had a routine referral.

In the lung pathway two projects focused on implementing a ‘Straight to CT’ pathway, where a patient is directly referred for a CT scan following an abnormal chest x-ray (CXR), rather than being referred back to the GP for further action. The results indicate that the CXR to CT referral interval is shortened by on average 12 days.

ACE research also considered which should come first - outpatient appointment or CT scan? The consensus from experts is that in the majority of cases the CT scan should be undertaken prior to the OPA, with patients vetted to check suitability for the test. The OPA should then be scheduled at the same time the test results are available, ensuring a more informative consultation. Sequencing the pathway in this way reduces the overall number of OPAs needed and releases capacity.

Additionally, delays occurred where GPs had not included sufficient clinical information on referral forms, thus requiring extra steps later to rectify this. Also, where patients had not been appropriately prepared and did not know what next steps to expect, an extra OPA was necessary.

**EXAMPLE PATHWAY STREAMLINING FEATURES:**

- **One-stop diagnostic clinics** e.g. jaundice, lung, vague symptoms
- **‘Hot’ (same day) reporting** of diagnostic tests
- **Standardised communications** e.g. between radiologists and GPs
- **Flexible follow-up** e.g. use of telephone (vs. clinic) to communicate unremarkable results
- **Use of Clinical Nurse Specialists** as coordinators of patient care and to act as a point of care for urgent results
- **Improved communication** and electronic advice from secondary care to GPs
If we can say that only 8% of people referred to secondary care with suspected upper GI cancer are diagnosed with a cancer, then 92% of patients referred are finding out that they do not have cancer on average 16 days earlier via a straight to test referral.

REDUCING VARIATION

As well as shortening times to diagnosis, a reduction in the variability of timings was seen following the adoption of a more efficient pathway – meaning more patients were seen within a similar timeframe; making the service more predictable.

The results produced by ACE projects are consistent with those found in organisations that use mainstream continuous improvement methods, such as Lean. By applying iterative cycles of improvement, based on analysis of current performance using Lean principles, it can be demonstrated that removing ‘waste’ and making use of new technologies frees up capacity and results in a reduction in service variability. A number of NHS trusts (outside of the ACE projects) follow Lean practice, an approach that may be of help to those trusts whose services are pressured.

Illustrative example - Continuous improvement theory
At the outset of ACE there were a number of discussions around what is the right first/next test for a patient. In the colorectal pathway the debate was about the relative effectiveness of ‘Straight to Test’ approaches. Should the GP refer to an endoscopy provider directly with an open or direct access arrangement or to a hospital-based triage system, where the colorectal specialist team virtually reviews the referrals and then organises the most appropriate investigation?

The evidence from the ACE projects is that both approaches can work if there is strong local commitment and leadership. It is important to note, however, that in both set-ups an initial outpatient consultation remains entirely appropriate for some patients.

One project’s experience provides an interesting example, where the choice of first appointment changed quite dramatically following the introduction of a new triage-based STT pathway; with colonoscopies and outpatient appointments selected over flexible sigmoidoscopies (see diagram).

On balance, ACE recommends a STT service based on a triage algorithm that confirms the indication for investigation, fitness and willingness of a patient to have a definitive investigation; potentially also considering urgency. This will help ensure the right first test for the individual patient is selected.

In lung pathways the first two tests are likely to be CXR and CT scan. The issue here is how quickly patients get access to a CT scan following either an abnormal CXR result or a normal CXR result where clinical suspicion remains high. In both of these circumstances the National Optimal Lung Cancer Pathway now specifies that a CT scan should be provided either on the same day or at least within 72 hours of the CXR result.

There are different ways of providing rapid access to CT scans. For example, one ACE project established a GP direct access to CT pathway, to be used following a normal CXR where symptoms persist but don’t meet the risk threshold for a two week wait referral. The pathway had a 2.4% cancer pick-up rate and a 4% pick-up rate for non-malignant abnormalities that required treatment. Most of the cancers diagnosed were late stage, highlighting the unreliability of the CXR in identifying lung cancer.

**Choice of 1st appointment for colorectal patients**

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<tr>
<th>Colonoscopy</th>
<th>Flexi sigmoidoscopy</th>
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<tbody>
<tr>
<td>Outpatient appointment</td>
<td>Other</td>
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Plan in more clinic time per complex patient...

Since introducing STT, our colorectal outpatient clinic is seeing more complex, highly dependent patients, necessitating the length of the appointment slots to be increased.
Who has the expertise to select the right diagnostics for the patient?

One project established an electronic referral system with advice for GPs on the most suitable imaging for patients presenting with vague symptoms suspicious of cancer that did not meet two week wait referral criteria. This proved to be a valuable service and had a cancer pick-up rate of 12.3%.

In the colorectal STT pathway, diagnostic expertise is delivered at the beginning of the process, either through hospital based triage or a GP direct access arrangement. Whilst in the lung pathway, a patient will be vetted for suitability before having a CT scan, and then further diagnostics are most effectively selected with the expertise of a lung cancer physician or a diagnostic MDT.

ACE PERSPECTIVE

Improving efficiency increases capacity whilst also improving patient experience

The ACE experience suggests that there is inefficiency in cancer diagnostic pathways. Removing it can increase capacity for the same resource profile, which can then be used to help shorten the time from referral to diagnosis and to offset some of the growth in patient demand. This in turn will help trusts to meet the new faster 28-day referral to diagnosis standard as well as the existing 62-day cancer waiting times standard.

Running efficient processes will also help to ensure any new resources are used to maximum effect. Data collected from service improvement activities will show how well current capacity meets demand, making it easier to justify and quantify any additional resource requirements.

ACE came across a number of examples where meeting national standards or competing organisational drivers led to inefficient pathway design. Sometimes this was the result of inaccurate interpretation of guidelines but not always. As called out in ACE’s colorectal pathways report, a telephone triage assessment, on a STT 2WW pathway, does not count as a first consultation. This means it does not "stop the 2WW clock" - disincentivising the adoption of STT practice.

Suggestions on how to improve efficiency include:

• Follow a proven service improvement approach. The logic underpinning the ACE examples included: improving the flow by removing unnecessary steps or re-ordering them; using data to understand current performance and inform improvement activities – all components of quality improvement methods such as Lean, which support continuous innovation.

• Review pathways for a particular tumour or symptom group as a whole. Approaches to streamlining pathways often started by focusing on a specific innovation (e.g. ‘straight to CT’) but this can result in a piecemeal approach and a disjointed set of pathways. In the lung pathway, our analysis showed that there was no one feature that assured improved performance. Instead, taking a more holistic approach based on local services' own data, allows local needs, capability and resources to be considered in the round, which should yield greater efficiencies and a service designed around patient needs.

• Design referral systems that provide for some level of patient specific advice. The ACE experience suggests that there is no one right answer for all patients, so getting the patient to the right diagnostic test requires some flexibility in referral pathways.

Inform the patient up-front what could happen next...

Where GPs are able to prepare patients for the possibility that a CT will be needed following the CXR, this reduces potential delay and is likely to improve patient experience
Developing pathway for patients with ‘vague symptoms’ is picking up traction with GPs and commissioners. ACE has a number of projects exploring ways of achieving swifter diagnosis of cancer for this group of patients, who are not served well by existing referral guidelines and pathways.

**PATHWAYS FOR PATIENTS WITH NON-SPECIFIC BUT CONCERNING SYMPTOMS**

The aim is to create a defined referral pathway for patients whose symptoms are not suggestive of a particular primary tumour site nor meet the criteria for a tumour specific urgent referral pathway. This could be achieved either by improving access to investigative tests from primary care or by referring to a diagnostic centre.

ACE has set-up a cohort of projects to explicitly explore the concept of multidisciplinary diagnostic centres (MDCs), based on the learning and experience in Denmark. The distinguishing features of an MDC-based pathway are:

- As far as possible tests are conducted in the same visit (i.e. one stop shop)
- The diagnostic MDT comprises a broad mix

Nine MDC sites will be operational in 2017, with full evaluation completed by the end of 2018. **One of the first objectives is to understand the current diagnostic journey for this cohort of patients**, which will enable us to define how much scope there is for improvement. An interim report will be available in early 2018.

Two different referral pathway examples are given on the right, and although we are still building the economic case (expected in 2018), we think that there is a case based on patient need and benefit for pathways built around a patient's symptoms.

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*Data presented here correct at publication of ACE Vague Symptoms Pathway report*
There are generally a lack of rapid investigation options under current managed referral pathways for patients with suspected cancer that are too unwell to wait for a 2WW referral but are not so ill that they need admitting to hospital. As such, GPs often end up referring these patients to accident and emergency.

ACE recommends addressing this gap through approaches that either provide rapid direct access to diagnostics (ideally within 24 hours) from primary care or fast track referral to access secondary care diagnostic clinics / multidisciplinary diagnostic centres.

For example, pancreatic cancer patients often present with jaundice, but there may not be a rapid referral pathway available for these patients. One ACE project set-up a one-stop jaundice clinic that offered same day radiological imaging for patients presenting with obstructive jaundice not due to gallstones. The clinic's merit was proven by a high cancer pick-up rate. An alternative approach, taken by London Cancer, was to include jaundice in the referral criteria for their MDC pathway.

ACE PERSPECTIVE

Is the benefit broader than cancer?

As the NHS starts to build the benefits case for diagnostic pathways for patients with vague symptoms, further thought and discussion should be given to the contribution they make to diagnoses for other serious diseases, particularly where differential diagnosis is challenging. Consideration as to what is an appropriate (cost-effective) diagnostic pick-up rate will be needed. By accepting lower (cancer) conversion rates it is possible that the reward will be more cancers detected at an earlier stage as well as other serious diseases identified more quickly, all of benefit to the patient.

Additionally, if the NHS wants to encourage adoption of this new pathway, thought should be given upfront to addressing likely barriers, particularly financial dis-incentives - which might be addressed through the use of best-practice diagnostic tariffs.
Helping to identify cancer sooner

A variety of ACE projects looked at ways healthcare professionals could actively set about identifying cancer sooner. In some projects this involved encouraging GPs to think about cancer as a possible diagnosis when a patient presents to them and in others it involved identifying and engaging with higher risk patients.

ENCOURAGING BOWEL SCREENING UPTAKE THROUGH PRIMARY CARE

Bowel screening is shown to save 1 life from bowel cancer for every 490 people screened. Current uptake averages around 58%, with significant geographical variation (33% - 67%). This suggests that it will be a stretch to meet the 75% uptake target set for 2020.

ACE projects showed that engagement by primary care can make a difference. For example, explicit endorsement by a person's own GP improved participation by 3%. This type of personalised communication is now being designed into the national Bowel Cancer Screening Programme (BCSP), and GPs are encouraged to 'opt-in' when they are asked.

A variety of methods were used to re-engage non-responders including: GP-endorsed reminder letters, phone calls and proactive conversations during patient consultations. Particular focus should be given to those who have had a positive screening result but failed to attend the colonoscopy appointment. The main conclusion is that different messages are needed for different people.

EQUITABLE ACCESS TO HEALTH SERVICES

A number of bowel screening projects were set up to focus on increasing uptake in groups of people known to be less likely to respond to the usual bowel screening invitation. An ACE project successfully added a standardised flag to denote people with learning disabilities in GP IT systems, making it clear which people needed additional support; they are now keen to take a national leadership role in the development of practical resources and sharing of good practice - enabling teams to learn from each other to tackle inequalities.

Projects looking at proactively identifying patients at high risk of lung cancer set up their projects on a very localised basis - tailoring the approach to reach the communities they were working in. A project in Liverpool profiled each community within its target geography so that they could provide information materials translated appropriately, together with materials specifically relevant to the people being approached - for example talking about the effects of shisha in communities where its use is prevalent.
ACE projects wanted to better understand the benefits of Cancer Decision Support (CDS) Tools as a way of supporting GPs to identify patients who are at risk of cancer. The projects have shown that the CDS Tools were beneficial in helping GPs to “think cancer” during patient consultations. This may have particular utility for patients presenting with either vague or complex symptoms, when it is not immediately clear to the GP what decision to make. In addition, a background knowledge of the calculated risk score has helped GPs to legitimise their decisions to either refer or not refer a patient for further tests.

Lung cancer is most frequently diagnosed at stage IV. Seeking to identify individuals at high risk of lung cancer, and to diagnose cancers at an earlier stage, projects invited a cohort of people for a ‘lung health check’ based on a variety of risk factors such as age and smoking history. A low dose CT scan was offered to those who were assessed as meeting a defined level of risk during the check, as calculated by the chosen algorithm. The selection methods used and algorithms employed are still being debated by a range of experts. Early results from one project show 75% of cancers being diagnosed at stage I, with many patients having their tumour resected. Both the public and health professionals have positively engaged with this initiative, suggesting that people are receptive to a more proactive approach to identifying cancer than is the norm.

ACE PERSPECTIVE

Heightened awareness and engagement
People trust GPs. Exploiting this fact by ensuring GPs are engaged in early diagnosis improvement initiatives, and ensuring that they are supported to do so, is important. Cancer Decision Support Tools are one way of helping GPs as they encourage the GP to ‘think cancer’, particularly in patients with complex symptoms. These tools are just one support mechanism and should be considered alongside other engagement and awareness activities that keep cancer front of mind in all health professionals.

The positive impact of GP advocacy has been seen across ACE; notably in bowel screening uptake projects. There is a trend towards proactive patient engagement, tailored to specific audiences, varying in the level of effort required to set-up and execute. We would suggest that as far as possible new interventions are designed so they can be supported by automated systems. Decisions by commissioners, public health and primary care professionals, as to where to invest limited resources will inevitably be determined by weighing up cost/effort against opportunity for improvement.
Optometrists have the skills, knowledge and equipment to identify the symptoms of potential brain tumours and mini strokes (TIA). Usually, on spotting these warning signs, they are only able to refer a patient to see their GP.

Although on a small scale, an ACE project has provided ‘proof of concept’ for a pathway that enables optometrists to refer patients directly into neurosciences. For patients that present with clear symptoms, at say a routine eye test, this quick and direct referral to neurosciences delivers a clear benefit as it avoids unnecessary steps and appointments, and if there is a problem requiring urgent treatment - it gets the patient there faster.

An example pathway for this project is given below.

Pharmacies probably have the greatest level of contact with the community, and may well be the first stop for an individual with symptoms. ACE projects focused on how best to train and up-skill pharmacy staff, as well as trialling some specific, proactive options including direct referral for chest x-ray by pharmacists.

Pharmacists in the direct referral project received IRMER-based training, which resulted in “exemplary” referrals, as judged by the radiologists. However, as it is such a large extension of their current role, patients were not always clear on why the pharmacist was referring them for a test. This suggests that a more progressive approach might be more readily accepted – providing the pharmacists with more cancer awareness training, and slowly increasing their responsibilities.
The most heartening thing for me was that the project started breaking down some of the professional barriers that exist and generated a much greater enthusiasm to look at how we can work more collaboratively with opticians.

Working across professional silos yields results for patients...

One project looked at improving its lung cancer pathway by re-thinking how they managed the demand for CXR reporting, including testing the idea of training radiographers to report. The analysis showed that CXR reporting is a specialised skill that should be confined to a small number of appropriately trained professionals, ensuring both quality and consistency. They concluded that it is possible to successfully train reporting radiographers. As a result they reduced their reliance on outsourced reporting services, reduced CXR reporting turnaround time to less than 24 hours; all delivered more cost-effectively. To note that radiographers involvement in reporting is currently under discussion amongst professional groups.

Projects focused on improving the diagnostic pathway for colorectal cancer patients have noted the importance of having a Cancer Nurse Specialist (CNS) involved to assist patients throughout their journey.

The service offered to patients can be greatly improved by utilising a member of staff who has dedicated time to appropriately triage referrals, talk with patients and encourage informed, shared decision making. This expanded role for the CNS enables them to cover important tasks that may not be completed without their involvement.

ACE PERSPECTIVE

Breaking down barriers
There can often be hesitation when seeking to broaden roles but the ACE experience suggests that when professionals who have limited interaction with each other work together, relationships based on trust and respect emerge. Success was achieved when attention was given to: jointly designing processes, providing tailored training, and listening to/addressing concerns. Our view is that there is benefit in an increased and more flexible role for health professionals, such as optometrists, radiographers and pharmacists, in improving how suspected cancer is identified.

Making the case from small numbers
Some projects, such as the optometrist direct referral initiative, are always likely to yield small numbers of cancers diagnosed when viewed from a local (optometrists) vantage point. This means that although the effort to implement is low making the case for rollout is challenging. The benefit comes from expanding initiatives like this nationally, where increased referrals lead to an increased potential for identifying people with cancer sooner. We encourage local decision makers to act based on benefit at a national level.
Implementing change successfully

ACE’s qualitative research provides clarity on how to improve the likelihood of implementing change projects successfully. The summary below outlines the factors observed to make a difference. We believe that a critical assessment up-front of the shared understanding and commitment within and between organisations, and of the capacity, capability and skills required to deliver the project, would be of benefit to those embarking on complex change.

SETTING A PROJECT UP FOR SUCCESS

Project management
Projects benefited by having dedicated project management resource. This gave them the capacity to drive the project forward and where they followed a structured project management method, they managed dependencies and issues proactively. Determining if / how the project will be sustained into ‘business-as-usual’ should also be part of the remit.

Stakeholder engagement & communication
It took time and energy to secure buy-in and commitment to a project. Most change in the NHS crosses several organisational boundaries, which can make it harder to line up interests. A stakeholder map and communications plan were found to be helpful tools and ensured all bases were covered. Communicating the vision, project objectives, and clear roles for participants was critical to progress.

Transformational leadership
A leadership style that inspired others to follow a clear vision was prevalent and particularly effective when influencing professional peers. It is a style that empowers others and is not reliant on one individual. Clinical leadership was also key, as was taking a strategic perspective. Personal qualities such as being charismatic and passionate about quality improvement were also frequently commented upon.

Patient engagement
Engaging with those affected by cancer was an important means of improving the effectiveness of interventions. Most value was gained when patients were involved throughout the project lifecycle. Key benefits included: understanding service barriers and attitudes; improving communication and information materials; identifying how best to reach different communities; and, feedback on patients’ experience of current and new service.

Change leadership
All projects experienced some level of ‘resistance’ to their ideas. This is a natural response to any big change but what’s interesting is that whilst the specifics of the challenges are unique to the project the challenges themselves are generic (e.g. not enough time), making it possible to anticipate them. Projects that were able to think ahead were less likely to be de-railed. Leaders needed to invest more time upfront building relevance and securing commitment from a diverse set of stakeholders. They also need to pay constant attention to the change dynamics, adjusting tactics as necessary.

Organisational capacity
Project teams needed to spend more time upfront quantifying the demands on resources. Firstly, the resources (people, time, money) required to deliver the project e.g. for project management, participation in design sessions, etc.; and secondly, the demands resulting from the implementation of the innovation itself e.g. incremental demands on endoscopy or radiology services, or on GP practice staff. Once the impact is understood it is much easier to identify the right tactics and tools to address any issues.

The right skills for the right tasks facilitated by the right governance structure...

We are all committed to the project, and feel it’s a really important piece of work. The way we’ve managed the project with the work streams has gone well; we (steering group members) lead work streams where we have the most expertise so we really do understand the issues faced. We then feed back progress and issues to the steering group, this approach really does work very well indeed.
SHAPING THE CONTEXT TO MAKE SUCCESSFUL IMPLEMENTATION MORE LIKELY

Organisational culture
A stable environment which has a proactive attitude to service improvement will be more conducive than one characterised by firefighting. Where this is supported by a structured and organised approach to quality improvement there is likely to be more shared ownership and responsibility.

Drivers of change
Projects tended to link local needs (i.e. internal driver) with national cancer priorities (i.e. external driver), which helped to create impetus. Being part of the ACE Programme, a national NHS initiative, was also of help in this regard.

FACTORS ASSOCIATED WITH SUCCESS IN QUALITY IMPROVEMENT

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<thead>
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<th>Kaplan et. al (2010)</th>
<th>ACE qualitative evaluation</th>
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<tr>
<td>Leadership from senior management</td>
<td>Key facilitator. The lack of it was a barrier</td>
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<td>Supportive organisational culture</td>
<td>One that is open to change and whose values are in line with the proposed initiative</td>
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<tr>
<td>Data infrastructure and information systems</td>
<td>Barrier when systems differ in partner organisations. Data sharing agreements very complex</td>
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<tr>
<td>Previous involvement in quality improvement</td>
<td>Acted as a facilitator and motivator for new partnerships</td>
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<td>Physician involvement</td>
<td>Consistent clinical leadership critical</td>
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<td>Micro-system motivation to change</td>
<td>Professional gain. Lack of job security works against change. Common belief in value of ACE programme</td>
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<tr>
<td>Resources</td>
<td>Availability of project management and/or data analysis</td>
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<tr>
<td>Team leadership</td>
<td>Champions at team level</td>
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Source: Qualitative Realist evaluation of the ACE

ACE PERSPECTIVE

Building change capability in the NHS
We suspect that the lessons learnt here will be familiar to many, and whilst it is not always a popular message, it is clear that complex change takes time. Helpfully, there are things the NHS can do to improve its performance in this area and, reassuringly, our findings are consistent with approaches set out in the disciplines of project and change management.

One suggestion is that a critical review of a project’s set-up is conducted at the planning stage using the success criteria identified in the ACE research, or other transformational frameworks. This would be in line with the approach taken in central government which runs a formal ‘gateway’ review process throughout the implementation life cycle of major projects.

Another suggestion is that rather than focusing improvement activities on tightly defined innovations, which lead to a more piecemeal approach, a continuous improvement approach that considers the whole service or pathway is adopted instead. These approaches are based on a continual assessment of performance (from an initial baseline) which would, for example, provide a more systematic way of achieving the NHS optimal pathways that are currently in development.

We believe that leading change requires an adaptive approach, which combines the benefits of structure that project management has to offer with the ability to evolve an initiative in response to performance feedback and new organisational priorities.
Reports & Resources

Use the buttons below to access all of ACE’s published reports and resources.

References

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