



High Impact Changes Handbook for Diagnostic Teams

Transforming Cancer Services Team

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The Challenge

Demand for diagnostic services is growing and this is a major challenge for the NHS. Sourcing additional radiology and endoscopy capacity to address short or medium-term service pressures is not always possible or appropriate. Diagnostic teams must be able to respond to these challenges and the objectives for cancer in the NHS Long Term Plan :

- Meeting the 62 day referral to treatment standard and faster diagnosis standard (FDS)
- Implementing rapid cancer diagnostic and assessment pathways for colorectal, lung, and prostate referrals; [NHS England Timed Pathways](#)
- Providing Faecal Immunochemical Testing (FIT) for symptomatic and screening patients

Good patient flow and optimal utilisation of diagnostic capacity needs to be an integral part

of service delivery. Now in its fourth year, the Transforming Cancer Services Team's Diagnostic Optimisation Programme has been developed to help radiology and endoscopy teams achieve this through the provision of practical support, guidance, service improvement tools and expertise.

The programme can be used 'stand-alone' or alongside other techniques and tools such as capacity and demand modelling; [NHS England Demand and Capacity programme](#) and the [Bringing Lean to Life Programme](#), <https://improvement.nhs.uk/resources/elective-care-pathway-analyser/>

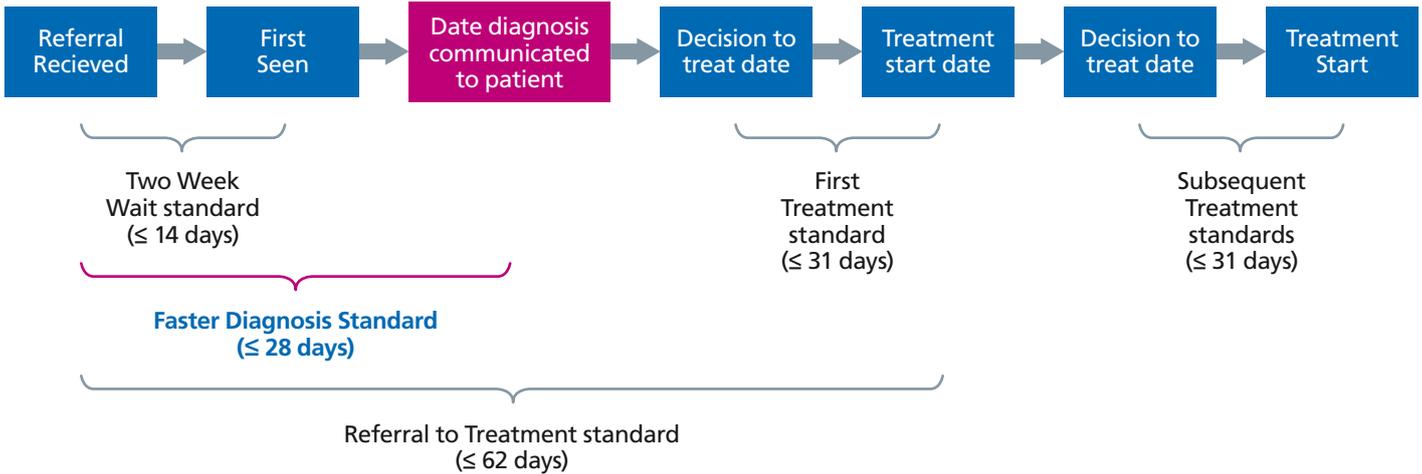
Elective Care Improvement Support Team (IST) pathway analysis and workforce modeling tool: – <https://improvement.nhs.uk/resources/elective-care-pathway-analyser/>



Faster Diagnosis Standard (FDS)

The faster diagnosis standard was due to become a formal standard from April 2020 but this was delayed due to COVID-19. It means that patients referred on an urgent cancer pathway will know within 28 days of referral whether they have cancer or not. Patients with a confirmed diagnosis

can begin treatment as soon as possible; those without a cancer diagnosis can have their minds put at rest more quickly. The introduction of this standard will require the ability to report and communicate test results to patients within 28 days of their referral.



For diagnostic teams the faster diagnosis standard is likely to mean that more patients on a cancer referral pathway will be triaged on to a straight to test pathway.

Purpose of This Handbook

This handbook focuses on five High Impact Change areas which can each make a significant impact on patient flow, capacity utilisation and the patient experience.

The guidance draws on the experience of the Transforming Cancer Services Team (TCST) Diagnostics Optimisation Programme in London after working with over half of London's acute hospital trusts. Examples of improvement practice are referenced throughout the handbook.

Version 2 of the handbook includes a new section on Patient Experience and Inequalities, updated sections on the Faster Diagnosis Standard and Managing Carve Out. In addition, we have included more examples of current working practice from diagnostic teams across London.

The diagnostic optimisation programme helps services maximise their existing capacity by adopting proven techniques and solutions with support and expertise from the TCST. The programme plays an important role as part of the wider STP framework supporting the delivery of waiting times for cancer, diagnostics and routine referrals, and improved patient experience and outcomes.

Ed Nkrumah – NCL STP Cancer Lead 2019

The Five High Impact Change Areas

The Five High Impact Changes areas are:

1. Referral management
2. Planning and managing workload
3. Appointment scheduling, reducing DNAs and cancellations
4. Patient preparation
5. Environment and facilities

“It is clear that demands on diagnostic services are going to increase and steps like these to improve efficiency will be vital in meeting that demand. The points addressed here reflect a good awareness of the patients’ needs.”

David Jillings – Patient and Trustee, the Pelvic Radiation Disease Association

Develop clear referral protocols and keep to them!

Referral protocols should set out the clinical eligibility criteria and supporting information required from the referrer to triage and vet a referral effectively. Referrers who don't follow these guidelines should always be followed up.

Vetting and triaging referrals and assigning clinical protocols

There should be a clear consistent process for vetting and triaging referrals, deciding the appropriate test and clinical protocol. This task can often be carried out by nurse endoscopists and radiographers with only the most complex cases needing the input of a consultant.

HIC Area 1 Referral Management

Know your demand and your main referrers

Make a point of reaching out to the referrers who make up the majority (up to 80%) of your demand – these might include particular hospital specialties or GP practices. Designing a clear referral process with these specialties will make a positive impact on your whole workflow.



Sequencing of vetting and scheduling for MRI and CT referrals

In radiology, vetting and scheduling differs for MRI and CT patients. MRI referrals are usually vetted *before* being scheduled for a scan. This is because MRI scans can take up to an hour or more. CT scans are usually no more than a few minutes duration, these can usually be scheduled first and vetted and protocolled afterwards.

A clear and simplified set of protocols for radiographers approved by all radiologists means less errors and delays.

Nothing (except CT Colonographies) should need 'vetting' and this allows all requests to be booked by clerical staff at time of request.

Cate Savidge – CT Superintendent Radiographer, The Royal Marsden NHS Foundation Trust

Furthermore, carving-out capacity can actually make things worse for patients on the waiting list. Although the numbers of patients waiting will usually remain constant, the waiting time for patients that are not part of the 'carved-out' groups will increase.

This is a really important point. Approximately 50% of patients diagnosed with cancer are not referred via the urgent cancer route (www.ncin.org.uk). The practice of protecting capacity for one group of patients can disadvantage others who will eventually receive a cancer diagnosis which may have been delayed as a result of a carve out model.

What do we recommend?

A 'first-in-first-out' system is proven to deliver a faster service to all patient groups through flexible use of capacity which helps to keep work flow and waiting lists under control.

When it is necessary to protect slots for certain patients or procedures (e.g. if specialist equipment or skill is required), the following actions can help ensure good asset utilisation is maintained:

- The volume and timing of any carved-out slots should be based on an agreed, shared set of assumptions with referrers about clinical need and demand, not activity
- The actual utilisation of protected slots and the impact on diagnostic waiting times should be monitored closely and ideally in 'real time' to identify any trends such as increasing waiting times
- Identify all separate queues and measure the activity and backlog for each of them
- Hold weekly meetings to look ahead at the next few weeks and review utilisation of protected capacity retrospectively and monitor the reasons for any unused slots
- Ensure that booking teams have clear rules and processes for filling unused carved out slots at short notice and identify any carved out slots that regularly go unused

HIC Area 2 Planning and Managing Workload

'Carve out'

Carve out is the act of protecting capacity (e.g. endoscopy lists, CT/MRI slots) for use by a specific cohort of patients.

Why does 'carve out' occur?

A degree of 'carve out' is unavoidable: some patients are clinically more urgent than others. The development of cancer pathways for specific cancers (lung, prostate and lower GI) plus more challenging waiting time standards all increase the pressure for 'protected' capacity in endoscopy and radiology.

Why is Carve Out a problem?

Protecting capacity often leads to multiple 'queues' and complicated booking processes.



HIC Area 3 Booking Appointments, Reducing DNAs and Cancellations

The critical role played by booking and scheduling systems

Booking and scheduling systems impact directly onto patient flow and the utilisation rates of scanners and endoscopy rooms.

Scheduling systems in MRI departments are especially critical because an average scan can take up to and over 30 minutes to perform. If a patient DNA's or cancels on the day, this can have a knock on effect on the rest of the day's schedule, patient flow and scanner utilisation.

Booking templates

Booking templates need to match the turnaround times required for patient preparation and the investigation / scan being performed. The majority of tests can usually be accommodated by three or four appointment lengths without the need for complex booking templates. The cycle times audit tool helps services identify the appointment lengths which would suit around 80% of their patients and improve scanner utilisation.



The CT team started our QI journey in late 2017 with an analysis of our service where we were introduced to Demand, Activity, WIP (Backlog), statistical process control charts and cycle times, touch times and lead times. Using these, we changed the scheduling system to match the touch times for 80% of our scan types (shorter slots), introduced more face to face bookings and walk-ins (less work for the admin team) and increased cannulation outside of the scanner room.

We have recently completed a second cycle times audit at both sites and seen the number of scans per day increased to 30 at the West Middlesex site and are now scanning an additional 5 patients per day at the Chelsea site.

Dr Suzanne Wakely MRCP FRCR – Consultant Radiologist & Clinical Director Clinical Support Services, Chelsea and Westminster Hospital NHS Foundation Trust

Patient facing bookings

Involving patients in the scheduling of their diagnostic appointments can minimise DNA's and wasted appointment slots. Setting up dedicated booking arrangements in outpatients with services referring high volumes of patients is one approach adopted by diagnostic teams. Working proactively to reduce DNA's and cancellations not only helps with waiting list management and capacity utilisation but can also save a significant amount of administrative resource needed to rework appointments.

I fully support the continuing effort to more fully involve the patient in the planning, preparation and delivery of his/her diagnostics and treatment.

Peter Storfer – patient and Senior Lecturer

For example, access to the endoscopy booking systems in gastroenterology or urology clinics enable patients to leave outpatients with the date

High Impact Changes for Diagnostic Teams

of their test and a clear understanding of any preparation they need to do beforehand.

“If you can leave a clinic always knowing when and where your next appointment is going to be, you have some certainty to take home with you, especially at times when other things may not be so clear.”

David Jillings – Patient and Trustee, the Pelvic Radiation Disease Association

All newly diagnosed colorectal and prostate cancer patients require a CT scan and in addition all rectal cancer patients require MRI. It helps these patients significantly if they are able to book a date for these tests directly from clinic.

“Patients feel empowered, valued, and more committed if they have an active role, through whatever media, in setting appointments.”

David Jillings – Patient and Trustee, the Pelvic Radiation Disease Association

Telephone access and text reminders

Patients need easy telephone access to contact the diagnostic service before their appointment to make booking changes or raise any questions. Admin staff answering these calls must be trained in dealing with queries.

Often a telephone service is not accessible to all patients as it's limited to 'core hours' and patients complain they can't get through which can result in DNAs.

Services should think about whether they can be more flexible around when phone access is available for patients to contact the department at a time convenient to them.

Text reminders should include a telephone number for patients to call if they need to change their appointment. We do not recommend using a two-way text services, as this can give patients

implicit permission to cancel their appointment, possibly at too short notice to reallocate their slot and can generate additional workload for booking clerks. One-way texts have the further benefit of being easier and cheaper to set up.

In 2016 the DNA rate in Endoscopy was 23% and a same day cancellation was 8% – about 20 patient each month as a result of poor bowel prep, needing to be rebooked – a huge waste of resource. Telephoning patients to remind them of how valuable the appointments were and how important this was for them to have this test resulted in DNA rate reducing incrementally to <5% and we captured patients that wanted to rearrange but couldn't navigate through the hospital system saving the same day cancellations, reducing this to 6%

Janet Edwards – Service Manager Medicine and Marietta Reyes – Endoscopy Manager, Whittington Health

Audit the reasons for DNAs and cancellations

Conduct regular audits of why patients DNA or cancel their appointment and use the findings to prioritise processes and protocols requiring improvement. For instance, an audit could highlight the need to make changes to patient preparation, appointments systems, telephone access or information provided to the patient.

An audit template to help with this is available by e-mail from the TCST: England.TCSTLondon@nhs.net. The tool will analyse the reasons for DNA's/ cancellations and represent this graphically.

Patient involvement can only be of benefit for both the provider, who should experience far fewer DNAs and cancellations, and the patient, who will feel more involved and empowered in their own treatment.

Peter Storfer – patient and Senior Lecturer

Example Analysis from DNA and Cancellation Audit Template

Breakdown of reasons for cancellation of test by patient or service												
TOTAL	Bowel prep failure	%	Patient choice	%	Booking error	%	Clinical reason	%	Equipment failure	%	DNA	%
238	66	28%	92	37%	26	11%	31	13%	1	0%	22	9%

As the lead nurse, I developed the audit tool after collating data for a period of about four months. This showed me the biggest cause of DNAs and although there were various causes of cancellations, the main one was inappropriate bowel preparation, and based on this a Pre-Assessment Clinic (PAC) was set up within 6 weeks from idea to implementation. Results show that pre-PAC the DNA rate was an average of 45/month vs post-PAC this has reduced to 11/month, with cancellations of less than 24hours notice reduced from average 21/month to 2 during the audit period.

Rachel Gachuma – Endoscopy Unit, Queen Elizabeth Hospital, Woolwich. Lewisham & Greenwich NHS Trust (data provided by David I'Anson, South East London Accountable Cancer Network)

HIC Area 4 Patient Preparation

Documented protocols

Preparing patients for their investigations involves several steps, some of which happen prior to and some on the day of the test. For example:

- clear information about the purpose of the test and what to expect (all patients)
- safety questionnaire to assess risks (for MRI)
- point of care testing for blood tests (radiology)
- dispensing and taking a bowel prep (endoscopy)
- cannulation (radiology/endoscopy)
- consent (all patients)

As a result of the start/ stop audit undertaken, the importance of pre-assessment and its role in cancelled slots was recognised and a pre-assessment nurse has been appointed.

Janet Edwards – Service Manager Medicine, and Marietta Reyes – Endoscopy Manager, Whittington Health

There should be a clearly defined documented process for patient preparation including assigned timings and responsibilities. The absence of a clear process can increase the risk of patients being cancelled on the day of their test leading to wasted capacity which can't be given to another patient at short notice.



Clearly assigned responsibilities

There should be clarity on who provides the patient with information about the test, any preparation required beforehand and when in the pathway this information and advice is given. These roles and responsibilities will vary for inpatients, outpatients, adults and paediatrics.

Local arrangements should clearly define who is responsible (endoscopy, outpatients, inpatient wards, the individual patient) for the collection or despatch of endoscopy preparation and the timing of this in the pathway before the endoscopy procedure. Different arrangements will be required for inpatients and outpatients and will vary according to whether the pathway is straight to test or not.

HIC Area 5 Environment and Facilities

Physical layout – how it impacts on patient flow

The layout of existing facilities and the age of equipment all make an impact on patient flow through a diagnostic department. For example, 'back to back' CT or MRI scanners can facilitate speedier patient flow and enable a more efficient and flexible use of resources. Separate single sex changing areas allow mixed lists to run efficiently in endoscopy.



With two scanners, we operate a back to back service with a shared control room, with defined roles of one radiographer taking all calls and managing queries and inpatient demands. Outpatients are cannulated outside of the rooms in most cases which allows us to operate at 82% utilisation on average.

Anne Geoghegan – Lead Superintendent Radiographer CT Scanning, Croydon Health Services NHS Trust, Croydon University Hospital

- patient consent
- cannulation
- dedicated recovery and discharge area (particularly for endoscopy patients)

The CT team had been trying for some time to create a cannulation area outside of the CT scanner room. By using the TCST CT audit tool, we were able to make the case to trust management and prove that we were not using the scanner and room to the full potential, due to performing cannulation inside the scanner room.

We identified that we could perform an extra 8 scans per day if we were able to cannulate our patients outside the scanner room. We were delighted when the local cancer manager secured some funding to convert an area in the dept and the trust management matched it- enabling us to do the extra scans and enabling us to meet the 14 and 62day cancer targets consistently and be ready for the FDS.

Leila Gipson-Blackett – Cross Site CT Superintendent Radiographer, Barking, Havering and Redbridge University Hospitals NHS Trust

Space for pre and post scanning and scoping tasks

It's usually not possible to find additional space in the short term but there are often opportunities to change the use of existing space. Where additional space is needed, collecting data (e.g. through a cycle times audit) can demonstrate the impact of the current space restrictions on patient flow and utilisation of a scanning/ endoscopy room.

Ideally, the following processes should always be conducted in a suitable space outside the scanning/endoscopy room.

- final health and admin checks
- safety questionnaires (MRI)

Key Enablers of Improvement and Optimisation

This section of the handbook focusses on the key enablers needed to facilitate service improvement and optimisation.

Leadership and Engagement

For change to deliver sustainable improvement, senior clinical and executive leadership support play a significant role.

Some changes and improvements can be achieved relatively easily as 'quick wins'. Many optimisation actions are more strategic and will need the commitment and involvement of other departments and functions in the trust. These include referrers, senior managers and clinical support services.

Senior executives and clinicians can help facilitate joint working across different clinical specialties. This will enable delivery of complex change and redesign and secure trust board support and resources, where necessary.

My advice as clinical lead is to be brave – don't be too proud to shine a spotlight on yourself. Review constantly. If it doesn't work, try something else.

Dr Suzanne Wakely MRCP FRCR – Consultant Radiologist & Clinical Director Clinical Support Services, Chelsea and Westminster Hospital NHS Foundation Trust

Workforce

A more flexible workforce with the right skill mix balance can help with more efficient service delivery and provide career development opportunities which benefit recruitment and retention of staff.

Extended scope practitioners

Examples of increasingly common extended roles in diagnostic teams include nurse consenting and HCAs cannulating patients, radiographers reporting on images and professionals outside of medicine performing endoscopy procedures.

Committing investment into training helps ensure staff are clear and confident in their roles, responsibilities, skills and levels of expertise expected.

Health Education England runs the following workforce development programmes aimed at role development in diagnostic services:

- [Non-Medical Endoscopy training](#) – aimed at nursing and AHP staff, providing training in Upper GI (OGD) or Flexible Sigmoidoscopy (Flexi Sig) procedures. From May 2020, HEE will begin piloting a 40- week training programme to upskill clinical endoscopists to perform colonoscopy.
- Radiographer reporting training – providing a training package to upskill radiographers in image interpretation and reporting.



Recently, we've put trainees through the HEE programme. With this, our trainees have a support system in place, guaranteed access to training lists for the practical experience, academic lectures and are trained and supported on all aspects of endoscopy. The skillset of the department has vastly improved with greater flexibility in the department, including running pre assessment services.

*Ed Seward – Consultant Gastroenterologist,
University College London Hospitals NHS
Foundation Trust.*

Protect vital support roles

All staff should be working within their specific roles and responsibilities, in line with their banding.

Health care assistants, administrators, clerks and porters all fulfil vitally important support roles across the patient pathway, ensuring processes run smoothly and to time. These staff groups cost less to employ than clinically qualified staff and can release the higher banded staff to focus on more specialised tasks.

A diagnostic department with insufficient support staff is likely to have qualified staff carrying out duties that are not within their remit such as admin or portering tasks to fill the gaps. This is both inefficient and poor value for money in terms of staff time and service delivery.



Quality Improvement Training

Process mapping

Process mapping is a technique used to identify all the interconnected pathway steps and decisions in a process and converts this information into a visual diagrammatic form.

Process mapping can identify a variety of issues such as areas for error and confusion, blockages and bottlenecks. This technique draws out ideas to help redesign processes and pathways and should include everyone involved in the pathway to contribute their knowledge.

The following NHS guide is a useful source of information on process mapping and redesign: [Improvement leaders guides – NHS England](#).

London Improvement Training Faculty

The London region has a group of accredited trainers who can run and certify improvement courses. The programmes are based on tried and tested tools and approaches, covering a wide range of service improvement skills. They are designed for both clinical and non-clinical staff and award CPD points. The programme includes:

- Quality Service Improvement and Redesign (QSIR)
Series of face to face modules run over 5 days spread over 6 months.
- Improvement Fundamentals Programme
A series of online, self-directed mini courses in quality improvement (QI) for those involved in health or social care services.

The courses are designed to provide bite-sized, practical and collaborative quality improvement training that you can access at your desk or on the go.

More information about both programmes is available here: NHS England Improvement Fundamentals <https://www.england.nhs.uk/sustainableimprovement/improvement-fundamentals/>

“We know that factors affecting workflow such as bookings, and organisation of lists can allow the CT scanner to be used sub-optimally. Service improvement techniques tell us that reducing queues and complicated booking systems, as well as standardising protocols and processes improves flow and utilisation, so we made some changes”

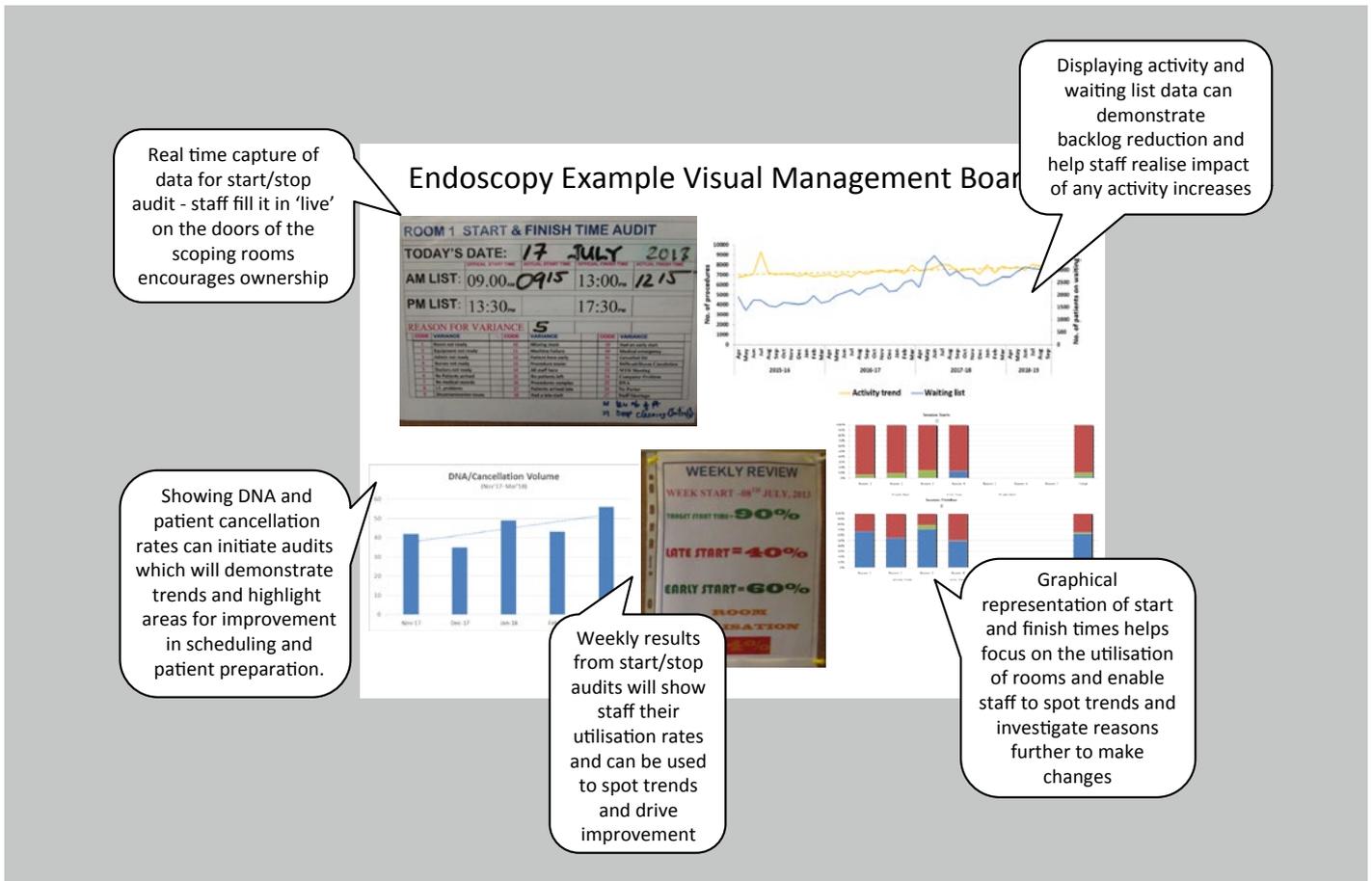
*Cate Savidge – CT Superintendent
Radiographer, The Royal Marsden NHS
Foundation Trust*

Data and Information

Collecting and analysing the data enabled us to come together as a team and challenge our perceptions of what we thought the problems were; furthermore, we used the information to drive our improvement work.

*Andrew Rochford – Consultant
Gastroenterologist, Newham University
Hospital*

Almost all improvement projects need data and information to support the case for change and set a baseline. This might include data collected routinely, extracted from local IT systems or data recorded and reported as part of local audits. Dashboards and visual displays can play an important role in the day to day management of services and tracking the sustainability of any improvement initiative.



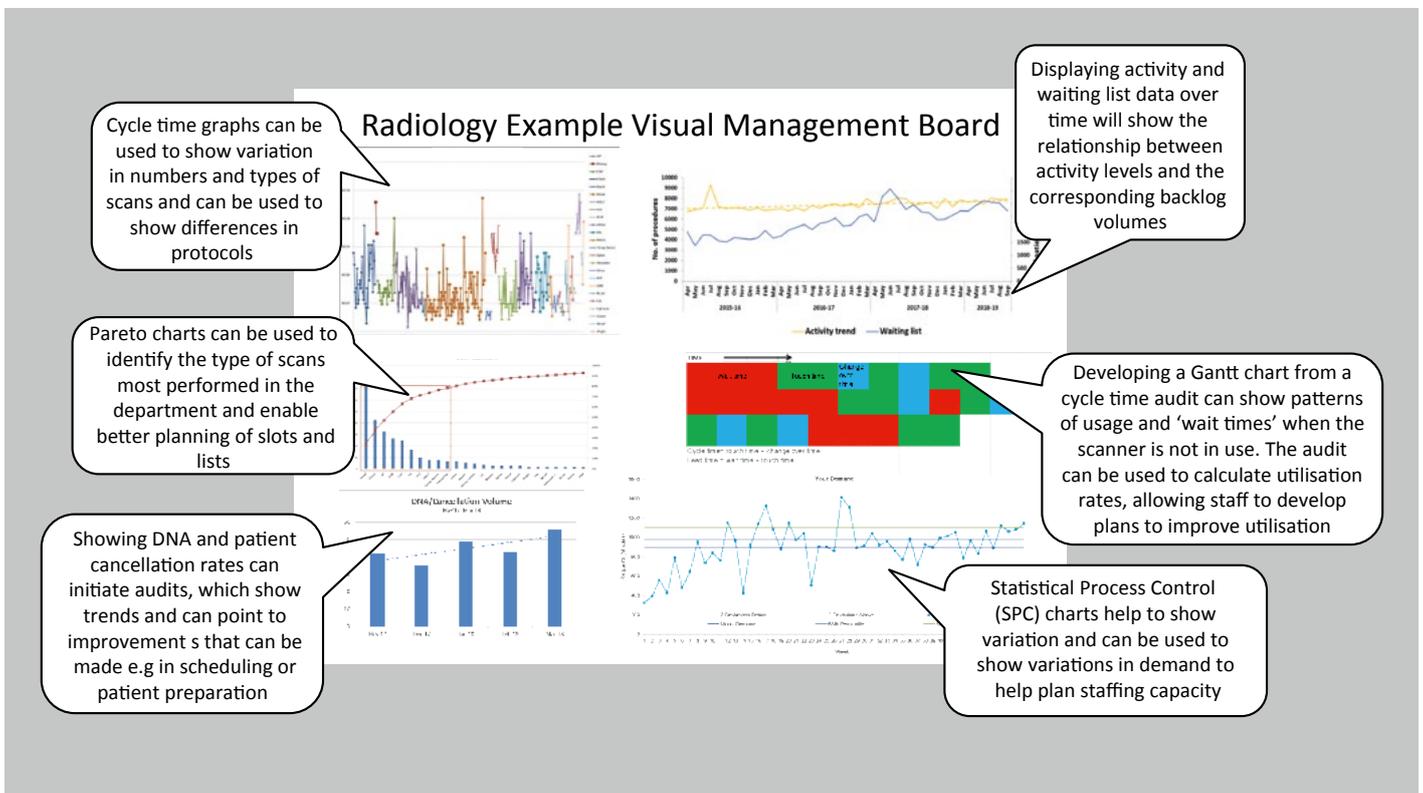
Real time capture of data for start/stop audit - staff fill it in 'live' on the doors of the scoping rooms encourages ownership

Displaying activity and waiting list data can demonstrate backlog reduction and help staff realise impact of any activity increases

Showing DNA and patient cancellation rates can initiate audits which will demonstrate trends and highlight areas for improvement in scheduling and patient preparation.

Weekly results from start/stop audits will show staff their utilisation rates and can be used to spot trends and drive improvement

Graphical representation of start and finish times helps focus on the utilisation of rooms and enable staff to spot trends and investigate reasons further to make changes



Cycle time graphs can be used to show variation in numbers and types of scans and can be used to show differences in protocols

Displaying activity and waiting list data over time will show the relationship between activity levels and the corresponding backlog volumes

Pareto charts can be used to identify the type of scans most performed in the department and enable better planning of slots and lists

Showing DNA and patient cancellation rates can initiate audits, which show trends and can point to improvements that can be made e.g in scheduling or patient preparation

Developing a Gantt chart from a cycle time audit can show patterns of usage and 'wait times' when the scanner is not in use. The audit can be used to calculate utilisation rates, allowing staff to develop plans to improve utilisation

Statistical Process Control (SPC) charts help to show variation and can be used to show variations in demand to help plan staffing capacity

Demand, activity and backlog

Measuring demand, activity and backlog can help identify patterns to allow improved management of a process.

The mismatch between capacity and demand is one of the main reasons why waiting lists and backlogs develop causing waiting times for patients to increase.

MRI services mainly focus on capacity and demand but ignore the importance of utilisation of the MRI scanners. Until you can definitively know the utilisation of your machine you will never know if the demand matches the capacity you have available.

Rebecca Joy – Senior MR Radiographer, Bart's Health NHS Trust

Activity and waiting list information is reported by trusts as part of the DM01 and can be accessed at the NHS England and Improvement website: [DM01 Extracts](#). There are specific tools and spreadsheets to help with collection of this information and NHS England/NHS Improvement can provide specific support to assist with data collection and interpretation. <https://www.england.nhs.uk/ourwork/demand-and-capacity/about/>

Measuring impact

Once you have started to make changes, it is important to evaluate if the change is an improvement. From the beginning, establish what data should be collected in order to measure and evaluate the impact. This booklet will help you to select measures to use: [First Steps Towards Quality Improvement](#)

Patient Experience and Inequalities – Considerations for Diagnostic Teams

This section of the handbook presents some suggested actions diagnostic teams can take to improve patient experience and allow for inequalities in their service design and delivery arrangements. Examples of existing practice in London are provided below.

Cancer Patient Experience Film

The TCST recently made a short film focussing on a patient's experience of MRI and CT scans while he was being diagnosed and staged for prostate cancer. The film highlights how a few simple actions taken by diagnostic teams can make a positive difference to the experience of patients referred on a cancer pathway at what is a highly stressful time for them and their families. The film can be viewed here: <https://www.healthylondon.org/patient-voice/>

The patient called Stewart highlights three ways to give patients back a measure of control at a time of great uncertainty:

- Check how patients want to be addressed, don't assume they are happy to be called by their first name without checking with them first
- Acknowledge their fears, anxieties and concerns – don't be tempted to give patients false assurance about their test results

- Give clear information about when and how patients will receive their test results and what they should do if they don't hear anything within the time scale

Check the TCST website regularly for updates and further patient experience resources. <https://www.healthylondon.org/our-work/cancer/>

Being Mindful of Inequalities when Organising and Delivering Diagnostic Services

The term 'inequalities' can refer to a range of population groups who may be marginalised and often not able to access mainstream health services. Some examples of these groups and characteristics may include:

- undocumented migrants, street homeless, sex workers
- people with severe and enduring mental illness
- people with drug and alcohol dependency
- people in contact with the criminal justice system
- people from a lower socio-economic status
- people living in particular areas (geographical inequalities)
- people with 'protected characteristics' such as age, sex, religious belief, learning or physical disability, sexual orientation or ethnicity

Diagnostic teams should think through the points below and identify what they can do to make their service more accessible.

Organising appointments (HIC Area 3)

- Can people understand the invitation letters and communications sent out? Are these available in different languages?
- Are familiarisation visits arranged for people with anxiety or learning disabilities?
- If the appointment offered isn't convenient, how easy is it to change?
- Are multiple appointments necessary? This could be challenging and expensive for some people, especially anyone with severe or enduring mental illness or people who need to be accompanied.
- When a patient DNAs, is this followed up to find out why? They may have multiple appointments to attend or are unable to travel easily.

At the North Middlesex Radiology suite in North Central London, a pre visit texting service sends reminders prior to people's appointments, so that if they have any problems attending, they can ring the unit for advice.

North Middlesex Radiology sends text messages 7 and then 2 days before radiology appointments, and patients can conveniently rebook or cancel via text.

A reminder telephone call to each patient is made the evening before, so that Radiology staff can check all transport and translation services have been booked. It's a team effort with the entire booking team getting on the phones at 3pm, to spread the load. North Middlesex has a 5% DNA rate across the department (having started at 12%), with CT at 2-3%, MRI at 5% and Ultrasound a work in progress at 9%.

This service innovation makes sure that patient needs can be understood well in advance, in order to avoid 'do not attends' and make sure the suite is welcoming and patient focused.

Dawn Hopkins – Radiology Manager

At the Whittington Endoscopy Unit in North Central London, an endoscopy nurse contacts all the patients by telephone before their procedure to check whether they have extra needs, disabilities, or would like a familiarisation visit with carers. This makes sure that all patients' unique needs can be understood well in advance, in order to avoid 'do not attends' and make sure the unit is welcoming and patient focused.

Marietta Reyes – Endoscopy Unit Sister

At Epsom and St Helier, endoscopy scheduling staff send the endoscopy PILS (patient information booklet) with the outpatient appointment letters which explains the endoscopy appointment to patients in different languages so that they are clear and can be understood by patients who may not speak English as a first language.

Badriya Maghrabi – Director of Operations Cancer & Clinical Services

Preparing for a test (HIC Area 4)

- Is the test information easy to understand and available in other languages if needed?
- Can the preparation be simplified for people with physical disability/dexterity problems?
- Is a bathroom (in a house) needed to prepare for the test?
- Are people excluded simply because they can't prepare at home for the tests?

National Cancer Patient Experience Survey 2017

“Beforehand, did you have all the information you needed about your test?”

Differences by deprivation – There was a significant difference between people’s perceptions of having all the information they needed for their tests, 95% of the richest people felt they had all the information, compared with 92% of the poorest people.

Differences by ethnicity – 94% of White patients thought they had all the information they needed... .. while 91% of BME patients thought that they had all the information they needed.

The South East London Breast Screening Program based at King’s College Hospital can accommodate clients with a wide array of disabilities. Wheelchair access is available throughout Breast Radiology and the unit is equipped with a customised mammography chair allowing clients to have their mammograms while seated.

In the community, the recently installed mobile screening unit at Queen Mary’s Hospital, Sidcup is also equipped to meet the needs of clients with disabilities. This includes an external bariatric lift allowing clients with mobility scooters access to the mobile unit. Plans are underway to replace other mobile units, some of these will also have bespoke facilities for disabled clients.

Longer appointment slots are offered to clients with disabilities. All mammographers undertake learning disability training and familiarisation visits for clients ahead of their screening appointment can be arranged to encourage attendance.

Ann Briody – Service Manager, Breast Radiology

Travelling to an appointment (HIC Areas 3 and 5)

- Is the department accessible to wheelchair users?
- Are the hospital and departmental signs easy to follow for people with dementia or with a visual impairment?
- Is effort made to avoid appointment times when travelling is more expensive or crowded, for example during commuter time, which could prevent some patients from attending?

Communicating test results to patients

- Is there information available which clearly explains the arrangements for reporting the results to patients?
- Are patients given a contact telephone number to call after the test if there are any problems or they have queries?
- Does the department have a process in place to contact people who are street homeless or in prison?
- Are results given in a private, appropriate area with time to ask questions?
- Are the results explained clearly and followed up in writing?

National Cancer Patient Experience Survey 2017

“Were the results of the test explained in a way you could understand?”

Differences by ethnicity – 78% of White patients thought the test results were explained in a way they could understand... while only 68% of BME patients thought so

Differences by deprivation – 74% of the poorest patients felt their test results were explained in a way they could understand... While 80% of the richest patients felt that way

Next Steps

This handbook has been developed to provide radiology and endoscopy teams with an accessible source of ideas, practical advice and information based on real experience. It highlights a range of actions which can be put into practice to make tangible, measurable improvements for all patients on cancer and non-cancer pathways.

Recent capacity and demand reviews in diagnostic services and 62-day breach analysis in London have all highlighted scope to make existing diagnostic capacity more productive by optimising working practices and processes.

Many radiology and endoscopy services have experience of service improvement however, time and headspace to work through and prioritise actions to optimise patient flow and capacity utilisation is increasingly constrained. The TCST's diagnostic optimisation programme, including this handbook and self-assessment tool, provide an easy to use framework to help teams surface and solve issues to increase local resilience and effectiveness.

We are keen to hear your views and feedback on this handbook which will be updated regularly to reflect the latest guidance, learning and experience. Please direct your comments to: England.TCSTLondon@nhs.net.

Appendices

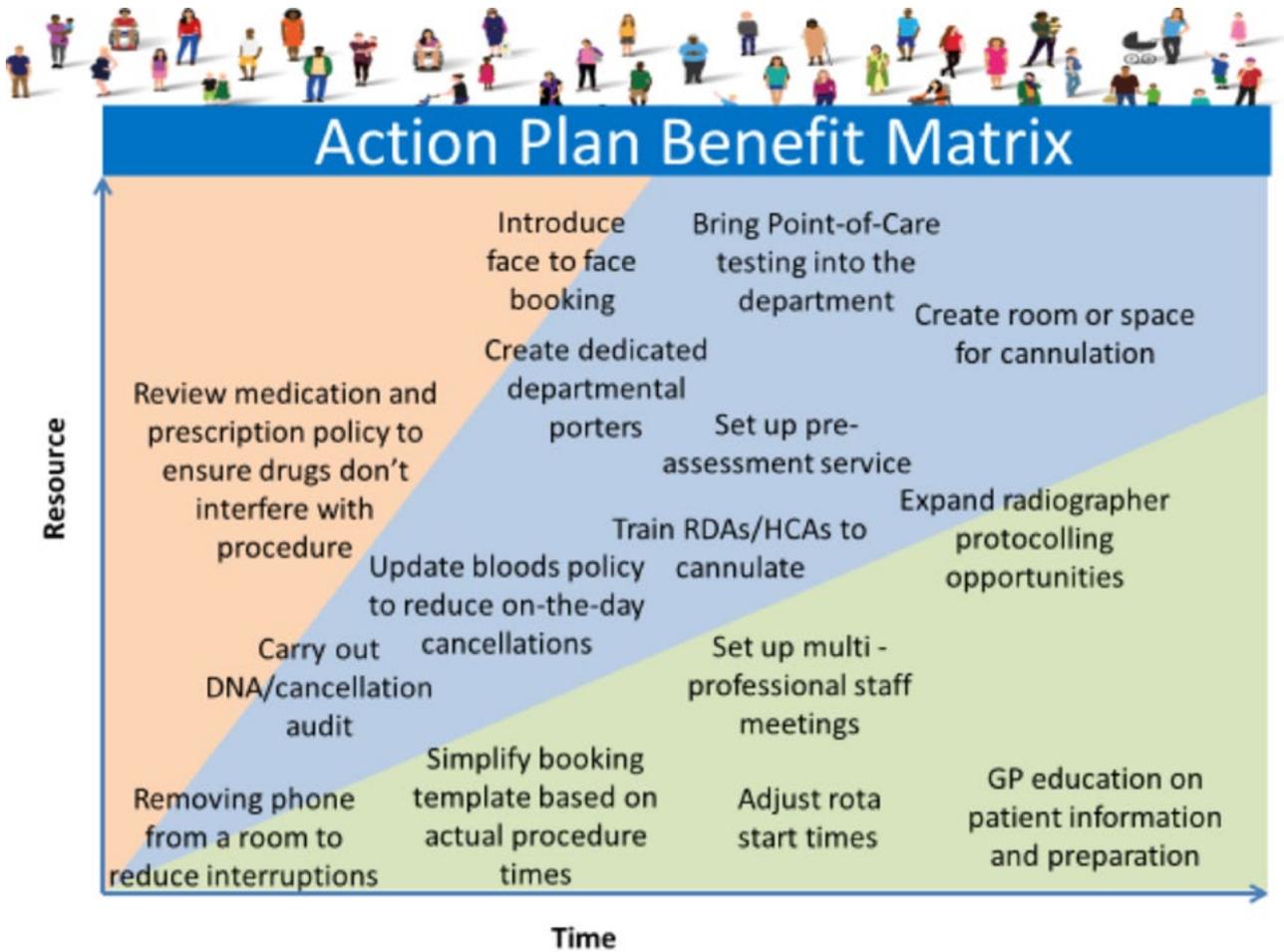
High Impact Change Areas – Resulting Benefits for Patients, Staff and Clinical Services

HIC Impact Area	The types of benefits which can result from making High Impact Changes			
	Service Delivery	Clinical Outcomes	Patient Experience	Staff Experience
Referral Management	<p>Clear referral criteria.</p> <p>Imaging referral guidelines</p>	<p>Tests undertaken according to clinical need</p> <p>Reduced time spent returning referrals to referrers & querying referrals</p>	<p>Quicker pathway</p> <p>No unnecessary scans</p>	<p>Less time spent chasing referrers by clinical staff and less re-work by admin staff</p>
Planning and Managing Workload	<p>Fewer queues and less complexity</p> <p>Demand managed more effectively</p>	<p>Appropriate use of clinical slots</p>	<p>Quicker pathway</p>	<p>Fewer queues and reduced complexity is easier for staff to manage</p>
Appointment Scheduling	<p>Reduced patient DNA's and cancellations. Fewer wasted appointment slots</p> <p>No set lists or complicated patterns to follow</p>	<p>Appropriate use of clinical slots</p>	<p>Patient chooses appointment date</p>	<p>Reduced time spent rescheduling patient appointments Less pressure to double book slots</p>
Patient Preparation	<p>Timely patient preparation. Reduced on the day cancellation</p> <p>POCT - point of care testing</p>	<p>Patients ready for tests</p> <p>Clinical risks have been mitigated.</p> <p>Huge time savings</p>	<p>Patient informed of what to expect and what to do to ensure test can be done properly</p>	<p>Confidence the procedure will take place, and not have a wasted slot</p>
Environment and Facilities	<p>Efficient and effective use of expensive equipment and rooms</p> <p>Cannulation outside of the room</p>	<p>Appropriate use of equipment and rooms</p> <p>Scanner used for purpose</p>	<p>Procedures carried out in right place by appropriate staff</p>	<p>Staff not pressurised to move patients on faster than appropriate</p>

HIC Impact Area	The types of benefits which can result from making High Impact Changes			
	Service Delivery	Clinical Outcomes	Patient Experience	Staff Experience
Enablers	Continuous improvement culture is adopted	Staff are constantly thinking of new ideas to improve the service and can test changes in a safe way	<p>Staff are aware of the full patient journey and so can connect parts of the pathway to reassure and explain to patients</p> <p>Services are planned and delivered in a manner mindful of what is important to patients, including those from marginalised groups</p>	<p>Enhanced nurses / therapists' roles</p> <p>Training opportunities Reduced duplication and non-value-added time</p> <p>Enhances timely decision making</p>

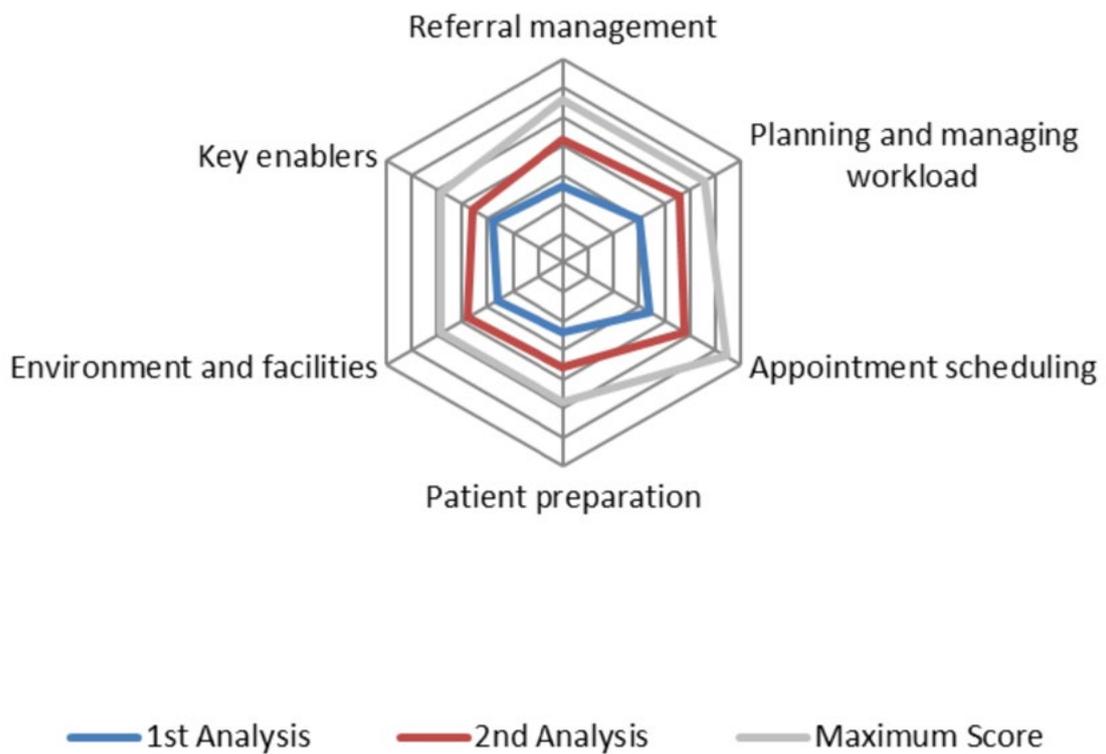
Action Plan Benefit Matrix

The matrix below presents several actions described in the handbook in terms of the resource and time involved in their implementation.



Self-Assessment Tool

The TCST have created a self-assessment tool for diagnostic teams to review where they are positioned in relation to each High Impact Change area. This can help prioritise actions for improvement as well as demonstrate improvement over time.



Please contact TCST team for guidance and access to this tool: England.TCSTLondon@nhs.net

Bibliography

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Simple guide to Improving Services – <https://www.england.nhs.uk/improvement-hub/publication/first-steps-towards-quality-improvement-a-simple-guide-to-improving-services/>

Productive Endoscopy box-set – For your copy please e mail: England.TCSTLondon@nhs.net.

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