

GRS

Global Rating Scale

JAG

Joint Advisory Group
on GI Endoscopy

NHS

Improving Quality

The Productive Endoscopy Unit

*Building teams for safer care*TM

Operational Status at a Glance

This document is for endoscopy managers, matrons, nurses, unit coordinators, administration staff, endoscopists, gastroenterologists, GI surgeons and improvement leads





Purpose of this module

All who work in an endoscopy unit know what a complex environment it is. Safety and quality are paramount for optimal patient outcomes, and there are many conflicting pressures and many goals to achieve during an endoscopy list:

- Unit rooms are ready to go
- All equipment available and working
- The right staff are in the right place
- Lists start on time
- No cancellations
- No delays
- Lists finish on time.

When unexpected issues arise can you identify and escalate issues in a timely and effective manner? In the event of a problem can you change the 'flight plan' to bring the day back on schedule?

This module will support you and your team to develop a system that will enable you to do this.

▶ **Endoscopy units in the UK who commit to the JAG Accreditation Pathway are assessed annually. The JAG (Joint Advisory Group) in Gastrointestinal Endoscopy are the body responsible for setting patient centred, workforce and training standards for endoscopy in all sectors and accrediting them. The JAG operates within the Clinical Standards Department of the Royal College of Physicians and its mission is to provide UK wide support not just for endoscopy services but for the workforce, ensuring that they have the skills, resources and motivation necessary to provide the highest quality, timely, patient centred care.**

Operational Status at a Glance is a visual management tool which allows those responsible for coordinating resources and staff in the endoscopy unit to understand operational status, at any point throughout the day, in real-time. This helps to manage any quality, safety or operational issues as they arise. This module will help you develop the systems to coordinate and actively manage your whole endoscopy unit.

While the Global Rating Scale (GRS) standards do not specifically refer to visual management or visual control as described in this module of the Productive Endoscopy Unit, the GRS includes standards on ensuring staff are listened to in the 'Workforce' domain which includes team meetings where staff members are able to contribute views and ideas on improving services for patients and there is documented evidence to that effect. This module is produced in association with the JAG.

More information can be found at www.thejag.org.uk or in the toolkit where you can find the documents 'JAG Accreditation Standards & Evidence Requirements' and 'JAG Accreditation online Checklist.'

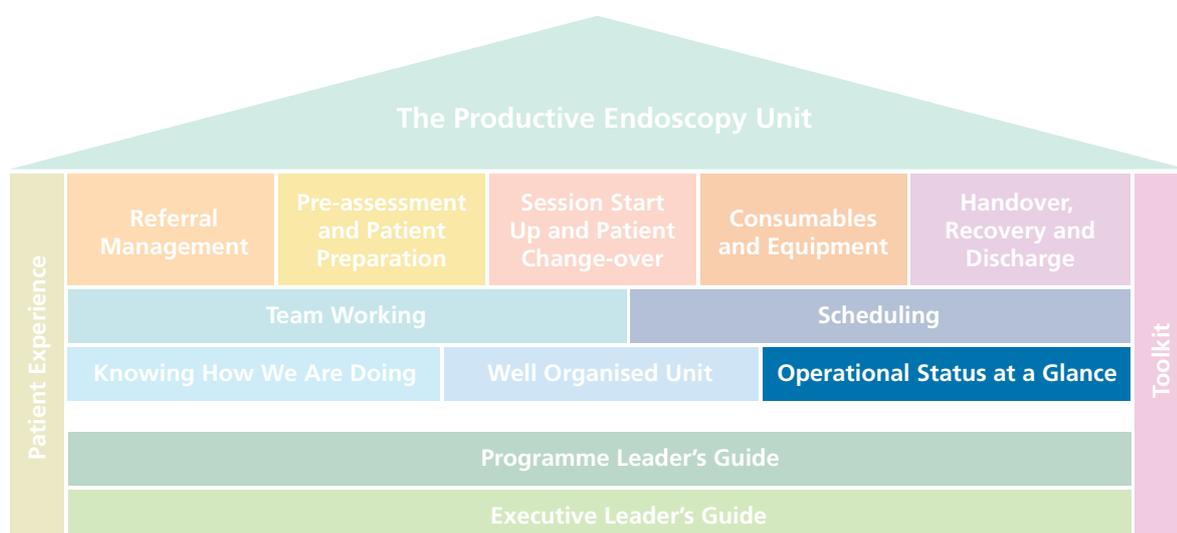
Operational Status at a Glance can be used in a variety of ways and each endoscopy team will decide how they want to implement it according to their needs and local situation. The key principle is making sure that real-time information, about the progress of lists and deployment of staff in the unit, is instantly visible to everyone who needs to see it.

Information can be displayed so that everyone is aware of how things are going and anyone can identify an issue as soon as it arises. This offers an opportunity to rectify issues and bring the day back on track to avoid delays and cancellations. By being in control of the situation, there is less need for firefighting. Interruptions and stress levels will be reduced.

Questions for the team to consider

- Is each endoscopy room on your 'radar' or do you manage by exception when the crisis occurs?
- How often do you review the whole picture across the department and organisation?
- Do your coordinators and team leaders have clear definitions of roles and responsibilities in daily session management?
- Is this a collaborative relationship with information going in both directions?
- Are you often interrupted by staff who want information from you that could easily be displayed and made available?
- Could more clearly structured information help you?
- How quickly can you change the 'flight plan' to resolve a situation?
- Are situations managed effectively or do situations manage themselves?

These modules create The Productive Endoscopy Unit



Contents

1. What is Operational Status at a Glance?	7
2. The three questions	12
What are you trying to accomplish?	13
How will you know that a change is an improvement?	14
What changes can you make that will result in an improvement?	15
3. Plan	17
Ideas that have worked	22
Example one: Using visual management to co-ordinate six endoscopy rooms - Royal Liverpool and Broadgreen University Hospital NHS Trust	22
Example two: Using visual management to understand procedure room status - Whipps Cross Hospital, Barts Health NHS Trust	23
Example three: Staff allocation/tasks to do - at a glance visual management - Portsmouth Hospitals NHS Trust	24
Example four: Visual management to prevent breaches - Portsmouth Hospitals NHS Trust	25
Example five: Visual management to underpin effective working - Whipps Cross Hospital, Barts Health NHS Trust	26
Example six: Visual management, notes management - Portsmouth Hospitals NHS Trust	27
Example seven: Visual management, notes trolley - Portsmouth Hospitals NHS Trust	28
Example eight: Improving operational performance with visual management - Gateshead Health NHS Foundation Trust	29
Example nine: Multiple uses of visual display - University Hospitals Birmingham NHS Foundation Trust	32
4. Do	35
Developing a prototype	36
Implement in stages	37
Reviews and 'huddles'	37
Clarify escalation procedures	40
5. Study	42
Trialling Operational Status at a Glance	43
Evaluating the trial	44
6. Act	47
How can you make it stick?	48
7. Learning objectives complete?	50



1. What is Operational Status at a Glance?

What is it?

Operational Status at a Glance uses visual management to support individual rooms and the whole endoscopy unit to demonstrate real-time status of staff and lists at a glance. This allows staff to actively manage operational issues and mitigate any quality or safety risks as they arise.

Why do it?

To ensure safe, reliable and efficient running of endoscopy lists on a daily basis so:

- You can identify and solve the exceptions which cause delays, over-runs, cancellation or delayed discharges, bringing the day back on track
- That support can be provided in a timely manner
- Each person's role within the endoscopy unit is clearly defined
- That interruptions can be eliminated by making this information readily available
- That a well controlled environment can improve staff wellbeing.

What it covers

This module will help you to understand the concept of Operational Status at a Glance and determine the best way of visualising and displaying operational status within your endoscopy unit.

You will consider:

- Who requires operational information at a glance?
- What type of information might be displayed and how?
- Why are we going to do this – what type of visual display will help you to understand your operational status?
- When and how often will this need revising in order to keep information live?
- How often will you review it?
- How will you ensure that the information is used effectively?

What it does not cover

This module does not specifically offer recommendations on what information you should display and use. It provides a framework for you to develop your own practical solutions based on the individual requirements of your own department and your staff. It does not cover implementation of technical or IT based solutions, although it acknowledges these may be one answer to some of the challenges.

Learning Objectives

After completing this module it is expected that the team will:

- Understand how the principles of visual management work and why this is an important tool in managing operational workload
- Understand the level and impact of interruptions on individuals, as well as other day to day issues affecting the plan for the day, and how you can reduce them
- Learn how to use the model for improvement to develop Operational Status at a Glance boards and systems based on your own requirements
- Understand the benefits of a structured review system and how to use it to continually improve your information and displays
- Understand how clearly defined roles and responsibilities help to communicate changes in operational status.

What tools will you need?

Tool
Meetings
Interviews
Activity follow (to measure interruptions)

Visualisation – the three second rule

The Productive Endoscopy Unit works on the principle of the three second rule. All storage areas should be laid out and labelled in such a way that any item of equipment is found within three seconds (see the Well Organised Unit module). Similarly, a communications display board should be so clearly laid out to enable staff to find the information they need within three seconds. This will ensure any communication process is clear and simple.

Think of a no entry sign on the road. This is an example of an instantly recognisable instruction. Other driver information requires a little more attention but can be easily understood to guide the driver through their journey.



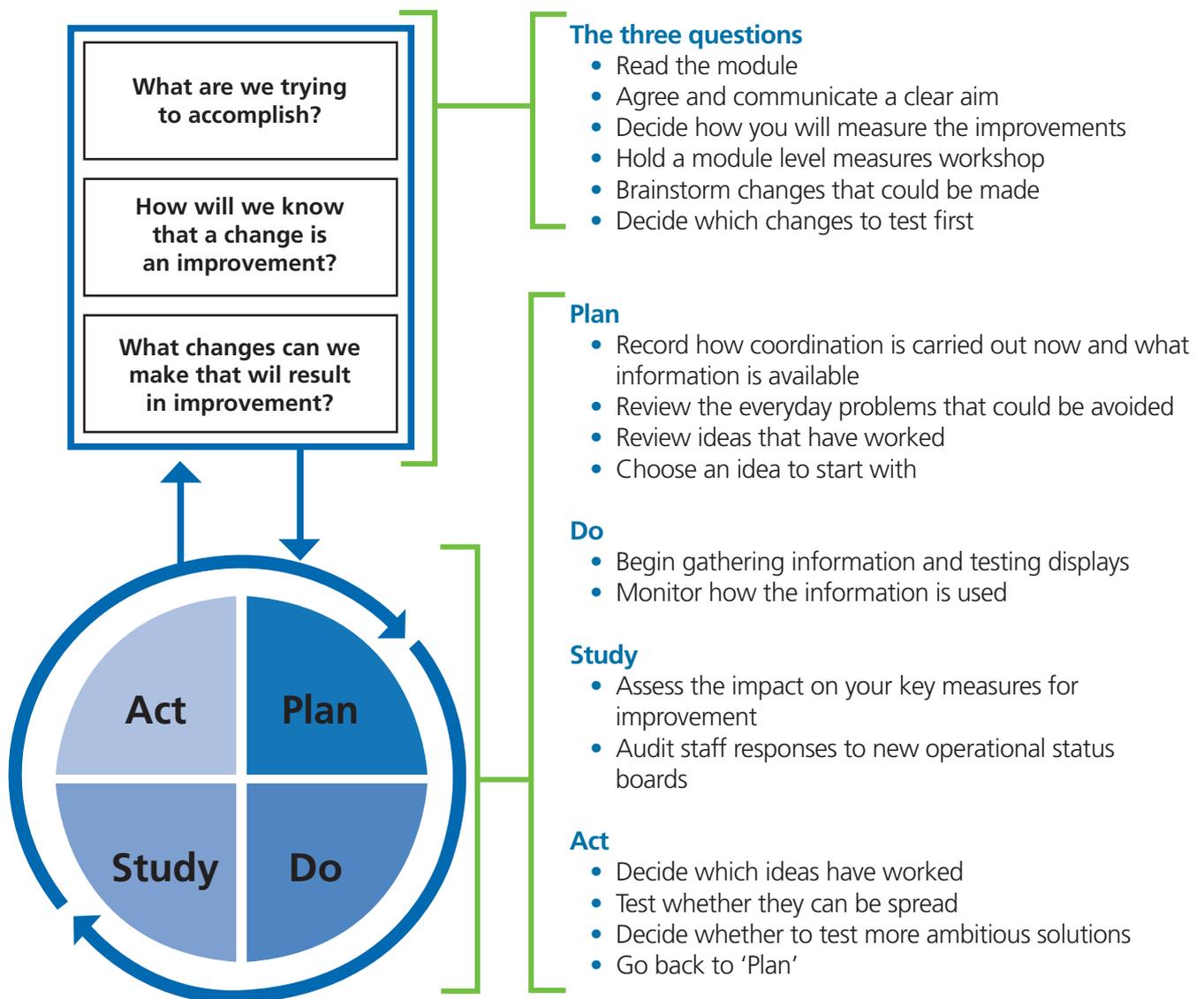
Consider how easy it is to understand how a patient is doing by scanning their observation chart.

The aim of Operational Status at a Glance is to make a range of operational information clear and easy to understand by all relevant staff groups. Working through this module will identify your most frequently used information and make it clearly accessible.



How will you do it in your unit?

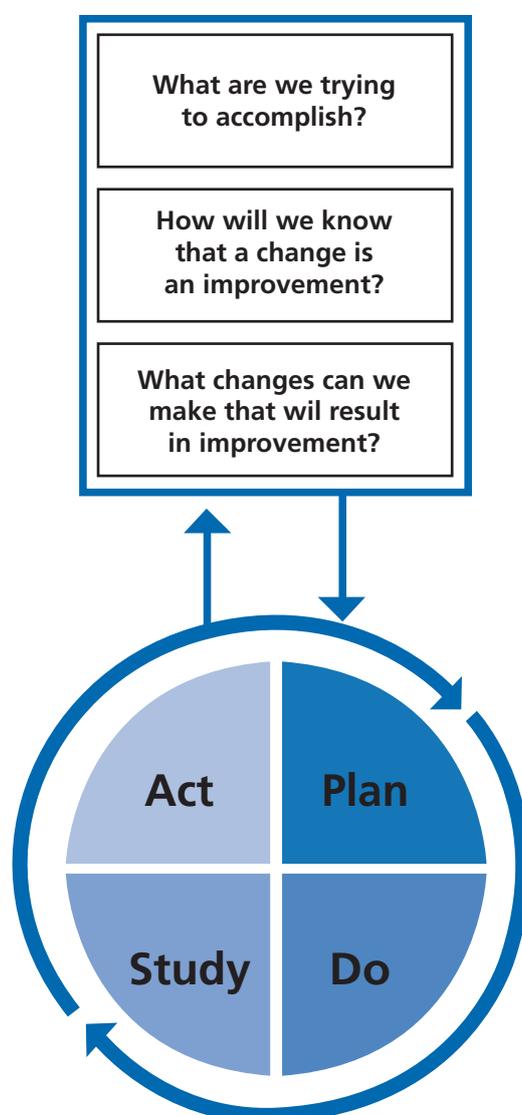
The model for improvement



2. The three questions

Before you start implementing Operational Status at a Glance, make sure you are clear about the approach you are going to take.

Take time to read the module through to understand the full scope of what is involved. Form a small module team and choose a module champion. Then ask the team to work through the following questions.



1. What are we trying to accomplish?

Improvement requires setting aims; you will not improve without a clear and firm intention to do so. Your aim for the Operational Status at a Glance module should be time-specific and measurable, or **SMART**.

Setting a SMART aim

There are three steps to setting your goals:

1. Collect data for each measure to create a baseline
2. Look at the benchmark to see what is best or you may have some locally agreed goals or standards which go beyond these
3. Set an aim for each measure according to **SMART** principles:
 - Simple** – give the aim a clear definition (e.g. reduce turnaround time)
 - Measurable** – ensure that data is available
 - Aspirational** – set the aim high to provide a challenge to the team
 - Realistic** – take into consideration factors beyond your control which may limit your impact
 - Time bound** – set a deadline.

You have already developed a vision for your programme; ask yourself how the Operational Status at a Glance module will contribute to achieving your vision?

Record your thoughts on a flipchart. Once agreed, communicate the module aim on your Productive Endoscopy Unit noticeboards showing how the aims of this module link to your vision.

What does operational status mean?

The operational status of your department includes an awareness of any issues that could negatively impact on your ability to carry out the workload across the unit safely and on schedule.

- This is a dynamic process that relies on maintaining situational awareness and reviewing the position regularly
- It identifies any factors that may affect the running of the day

Examples of typical factors that increase awareness of the situation

Start-up

- Are all staff present – numbers and skills – does everyone know where to go?
- Are endoscopy rooms ready to start on time?
- Are there any equipment issues such as items missing, faulty or undergoing maintenance?
- Are support services ready, available and in place, e.g. imaging/decontamination etc.?

Regular review

- Are you on schedule?
- Did all lists start on time? If not, why?
- Are there any significant delays? Might this affect your ability to finish on time? What is your plan to deal with this?
- What is your emergency workload? Do you have sufficient endoscopy room capacity to manage this or do you need to identify further endoscopy space?
- Will any morning over-runs impact on the afternoon session? If so, how can you reduce this impact?

This is not a definitive list but will help you identify the sort of issues you may want to take into account for your reviews of operational status.

2. How will you know that a change is an improvement?

As part of Knowing How We Are Doing, you will have agreed a balanced set of measures across the programme aims.

How will your improvement from the Operational Status at a Glance module be represented in the balanced set of measures?

If it is not explicit, you will need to include an intervention level measure that will capture the impact of this module. The suggested measures sheet and driver diagrams in Knowing How We Are Doing will give you some ideas of how to do this.

To explore this further run a mini measures workshop with the team that is going to be involved with the module. A suggested set of slides for this session is available as a part of The Productive Endoscopy Unit Toolkit.

The aims of this session are to:

- Refresh the team's understanding of how to use measurement to drive improvement
- Understand how the Operational Status at a Glance module fits into your agreed balanced set of measures
- Identify measures for the module
- Decide how to collect, analyse and review the information
- Complete a measures checklist for the module.

Once agreed, start collecting, analysing and reviewing data for your balanced set of measures.

Here are some ideas of what you might wish to collect. You may already be collecting some of these – your choice may also be influenced by other modules.

- Reduction in on-the-day cancellations due to operational issues
- Reduction in over-runs
- Reduced interruptions
- Reduced late starts
- Increased room utilisation
- Greater staff awareness of operational status

3. What changes can you make that will result in an improvement?

Having read the module and agreed on a clear aim, start to think about the changes you could make within your department that will result in improvement.

You will now have an overall idea of what you want to achieve from the Operational Status at a Glance module. With your team work through a number of Plan Do Study Act (PDSA) cycles, testing a variety of different solutions for capturing and displaying operational information in your endoscopy rooms, and subsequently right across your department.

Lots of examples of changes that have been shown to work are given in the next section – Plan.

- Provide clear information to whoever is coordinating
- Provide real-time information to allow decisions to be made in a timely manner
- Make information available to the whole team without them having to ask for it

“ Once staff get the picture, people start to use different language and the culture starts to change.”

Nicky Taggart, Endoscopy Manager, Royal Liverpool and Broadgreen Hospitals NHS Trust

The three questions – milestone checklist

Move on to **Plan** only if you have completed **all** of the items on this checklist

Checklist	Completed?
Read the module	
Decided and communicated a clear aim for the module	
Held a mini measures session	
Agreed how you will measure your impact	
Thought about what areas you would like to change	

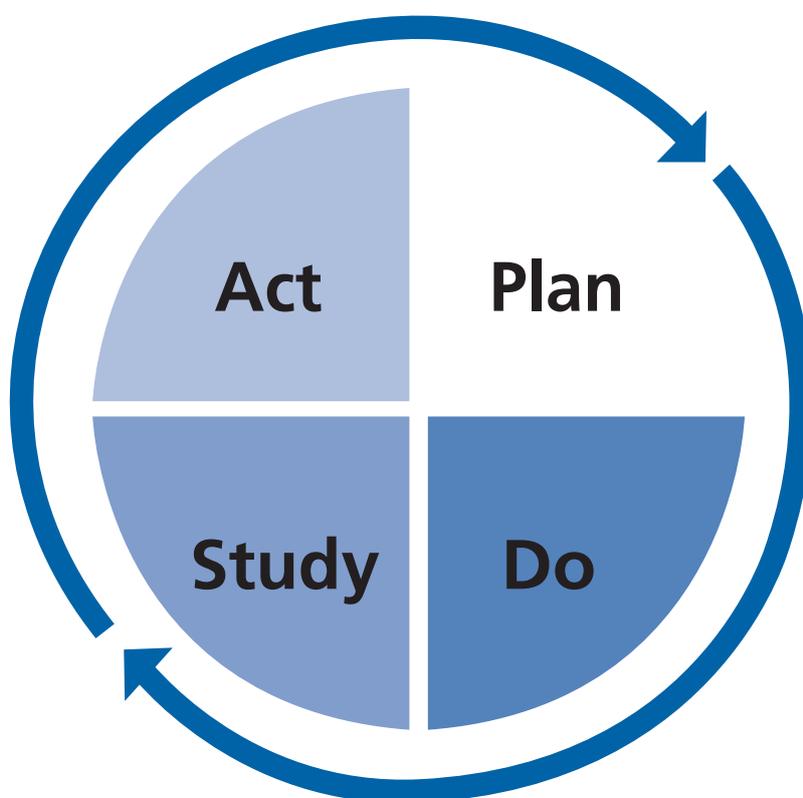
Effective team-work checklist	Tick if yes
Did all of the team participate?	
Was the discussion open?	
Were the hard questions discussed?	
Did the team remain focused on the task?	
Did the team focus on the area/process, not individuals?	



3. Plan

There are a number of steps to work through to help you plan tests of change (PDSA cycles) for implementing this module.

The module team has to understand the importance of involving all groups of staff to make sure the solutions tested in PDSA cycles will meet everyone's needs.



Plan

The programme team need to identify a team for this module. This should include champions identified in your visioning workshop, but they will need support from the programme leader and service improvement expert.

Step 1: Decide who will be involved

- Endoscopy manager/matron
- Endoscopy reception staff
- Improvement leader
- Any other team members who will need access to operational information, e.g. recovery staff, decontamination teams and junior doctors
- Could you involve any champions identified from your visioning or measures workshop?

The participants may change depending on whether you are concentrating on staff allocation or real-time operational status of endoscopy lists.

Step 2: Talk to staff

- Understand the general feeling from staff about the use of information boards in endoscopy
- Explain the potential benefits
- Consider what real-time information staff need to understand

Step 3: Identify current sources of information

- What information systems are currently used (think about both paper systems and electronic systems)?
- What information do they give you?
- Are they up to date?
- What do you do with that information?
- How accessible and usable is the information?

Step 4: Take photographs

- Try to capture all the places where operational status information is kept, even if not on display, e.g. IT systems, allocation rotas and off-duty

Step 5: Understand your Trust's confidentiality policies

- Make sure you are aware of what you can and cannot display and where. This varies and will depend on your local policies

Step 6: Understand interruptions

- Keep a simple tally chart to identify and categorise what the coordinator is being interrupted for
- Consider carrying out an activity follow (Process Sequence Chart) of the person coordinating rooms to collect this information (see The Productive Endoscopy Unit Toolkit).

Review your current state

Review and analyse the information you have gathered so far with the team. Use the following questions to guide your discussion.

	Examples
How is operational status currently monitored in your department?	<ul style="list-style-type: none"> • Is there one person responsible for the coordination of your endoscopy rooms? • How regularly is operational status reviewed throughout the day? • Do you have display boards in the unit or in rooms? • Is there a main white board – staff allocation? List progression? • Do you use IT systems? If so, how accessible is it?
What operational status information is available?	<ul style="list-style-type: none"> • Endoscopy lists displayed • Staff allocation list • Recovery bed status
Where does the information come from?	<ul style="list-style-type: none"> • Verbal information • Other departments • Endoscopy teams • Intranet and computer systems
Who is responsible for the information?	<ul style="list-style-type: none"> • Endoscopy coordinators • Team leaders • Endoscopy clerk • Do they face frequent interruptions?
What do you do with the information?	<ul style="list-style-type: none"> • Are people responsible for acting on this information? • Is this information used as the basis for any formal discussion or review? • How is the information shared?
How do you currently manage problems?	<ul style="list-style-type: none"> • Looking ahead to anticipate and avoid problems • Wait for the problem to arise and then manage it • Could you improve performance if you had better operational status information available at a glance?

“ You can tell a department that has continuous improvement principles at its heart – the staff display and update their data boards, room status and information in real time and have measures linked to personal objectives – all at a glance as you walk down the corridor.”

Review with the team what operational status information would be most useful for your department. Use the following questions to guide your discussion.

Endoscopy rooms	Endoscopy manager/ coordinator area	Recovery
<p>Do staff know where they are allocated today?</p> <p>Can you identify what is happening in each endoscopy room?</p> <p>How many cases are there today?</p> <p>Are there any issues, e.g. cancellations, changes to list?</p> <p>How would you like to use the board for briefing meetings?</p>	<p>What is your workload today?</p> <p>How many emergencies are waiting?</p> <p>What are our staffing issues?</p> <p>Did all endoscopy sessions start on time?</p> <p>What glitches have occurred?</p> <p>Are there any potential problems that might come up later today?</p>	<p>How can the team track the status of patients?</p> <p>How do we identify and escalate delayed discharges?</p> <p>Can we develop better links with reception?</p>

▶ **TIP:** If a senior manager visited your department, could you provide them with a real-time overview of the operational status of the department and have detailed information at hand? Even better, could they access this information without even having to disturb you?

Consider what has worked well elsewhere

Operational Status at a Glance is all about the recording and displaying of real-time information in locations that are easily accessible to those who need to enter it, and to those who will review it. There are many ways of making this information available. These range from a paper-based system and simple white boards through to interactive white boards and plasma screens linked to your IT system.

The solution you develop will depend on your local circumstances but it is usually better to experiment with simple low-technology solutions – even if you want to end up with a technology-based solution at the end. This will allow you to experiment with lots of ideas quickly. It will also steadily increase confidence that your solution is suitable and effective and increase agreement between all parties that helped you develop it. A simple, cost effective and versatile way to start experimenting with collecting and displaying operational status is to use a white board. If it is magnetic, this is more beneficial.

Before deciding what you want your system to look like, think about what you are hoping to achieve. Go through the following examples with your team. They demonstrate examples of solutions that have been developed in a variety of endoscopy units. You can use them to trigger ideas and discussions within your team. You may find that you already have some of these in place, but there may be other ideas that you will recognise as being helpful.

Ideas that have worked

Example one: Using visual management to co-ordinate six endoscopy rooms - Royal Liverpool and Broadgreen University Hospital NHS Trust

Communication and coordination is the key to a successful day with lists running to time, with staff having appropriate breaks and are able to go home on time. Co-ordinating the endoscopy unit can be a difficult task, with up to six endoscopy rooms running over three sessions per day. Information about how the lists are running, staffing issues, patient and carer queries, discharges etc. are all given to the coordinator to sort out and deal with.

Members of staff would constantly ask the same questions and the coordinator would be interrupted frequently during the shift and asked to sort out issues.

What we did

A short questionnaire was given to all staff who worked in the coordinator role.

The questions were:

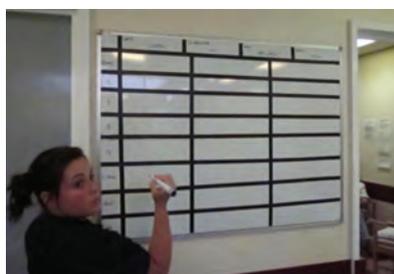
- What information are you asked for by staff every shift?
- What interruptions do you get and why?
- What would make your job easier?
- Which part of the role do you find the most difficult?
- What information could you share to help others in the team?



Once the responses were analysed, an information board was created containing most of the information that the coordinator was repeatedly asked for by staff. This board was then refined as staff became more engaged with the process and understood the reason for the board. Staff made suggestions for additional information to be displayed that would also be useful.

Impact

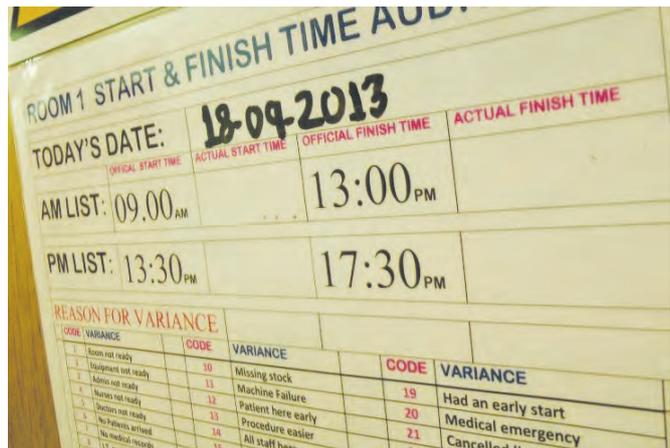
- Each room is given a RAG score – red, amber or green. This tells the staff whether the room is running to time (green) slightly behind time (amber) or significantly behind time (red)
 - This allows the coordinator to move patients and/ or staff to bring the room back on track so that all rooms finish on time, patient waiting times are minimised and staff are able to go home on time
- Information about who is working in what rooms is clearly displayed allowing staff to see at a glance where people are working without having to ask the coordinator.
- This board has freed up time for the coordinators allowing them to concentrate on managing the flow through the department safely and in a timely fashion



Example two: Using visual management to understand procedure room status - Whipps Cross Hospital, Barts Health NHS Trust

Although monthly list overruns were acknowledged and understood, no one really knew the status of how a team was performing in a room at each session, with some teams missing breaks or late for lunch/going home, whilst other procedure rooms had finished, replenished stocks and the staff were enjoying their own time.

It was difficult to know if some rooms were running behind and needed a helping hand from those who had already finished.



What we did

Small white boards were put onto each of the procedure room doors detailing:

- The official start time
- Actual start time
- Official finish time
- Actual finish time
- Reasons for the variance.

These allowed staff to see 'at a glance' which rooms were running on time and which were late.



Impact

- Team members try to minimise potential delays e.g. cannulation, blood results, etc.
- Collective team effort to ensure teams go for lunch and are ready to start the afternoon sessions
- Decontamination staff liaising with the recovery staff to calculate the number of scopes required to turn the sessions around



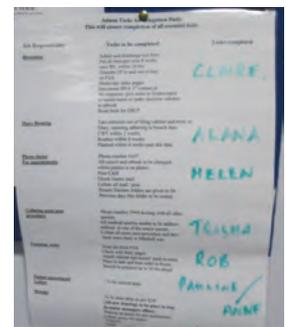
Example three: Staff allocation/tasks to do - at a glance visual management Portsmouth Hospitals NHS Trust

After a merger of hospital sites, the use of paper lists of names against procedure room allocations/tasks to do, it was becoming increasingly difficult to know who was working where, due to the increase in department size. Implementing a daily huddle meant that there were lots of bits of paper to go through and although who was working where was verbally read out, there was often lots of confusion.



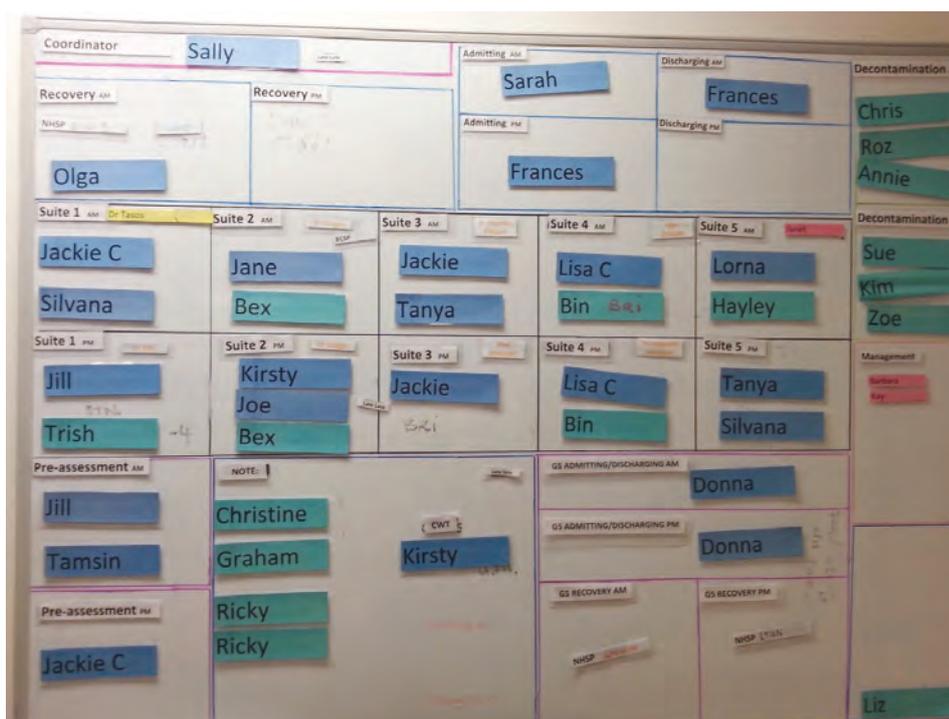
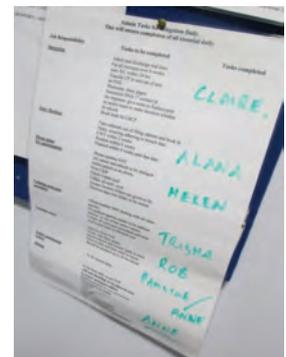
What we did

- Implementing a large white board made it easy to see at a glance who was working in what areas and what jobs were covered
- Several iterations of PDSA cycles eventually resulted in designing magnetic strips that could be reused
- This made the board look a lot more professional – which is important as it is situated on the corridor in full view of patients



Impact

- It is now obvious whether there is the right skill mix in each room and staff can identify at a glance who is working with who
- Training needs can be readily identified – and put the right people in the right place so that they get the right training they need each day
- It is now easier for the doctors to see who is working where and with who
- The board saves time chasing around trying to find the right piece of paper



Example four: Visual management to prevent breaches - Portsmouth Hospitals NHS Trust

Primary Targeted Lists (PLT) meetings showed a list of patients to review who were potentially to breach the diagnostic waiting times target. Managing surveillance patients needed a system for flagging up those patients requiring follow up investigations.

What we did

- An administration team member decided to 'work backwards' from the potential breach date – based on when the referral was made
- A filing cabinet was used to put the referrals in 'breach date order' so that no patient would be missed
- This is a way of trying to 'mistake proof' the process by making it impossible to miss a patients diagnostic investigation in a timely manner and follow up investigations within timescales
- Several iterations of PDSA cycles were used to prevent administrative staff filing the surveillance forms 'on' their breach date. Now, surveillance forms are filed on the date they need 'to be booked by' (i.e. one month before due date)

Impact

- This is an ongoing process of trial and error in a bid to ensure that no patient can potentially 'fall through the net' of their six week window
- There is now plenty of time for patients to negotiate appointments if required - but still be within six weeks



“ Our new system makes it more obvious and it is a lot more sense when you open the drawer.”

Alana Rose, Endoscopy Administration Team, Portsmouth Hospitals NHS Trust

Example five: Visual management to underpin effective working - Whipps Cross Hospital, Barts Health NHS Trust

There was no way of measuring numbers of sessions not starting on time, and despite staff working extremely hard there was no way of knowing if all of the effort was actually making a difference to patients, or if minimal waiting times were being maintained.

What we did

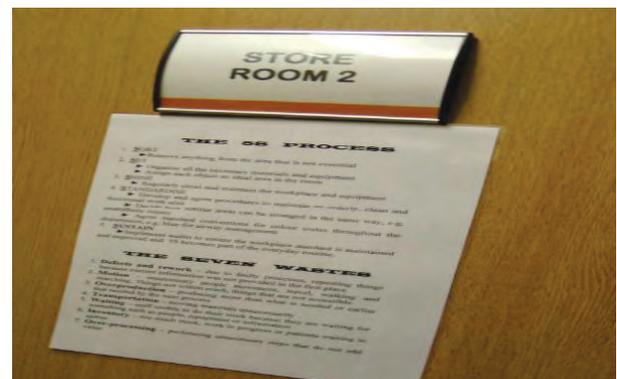
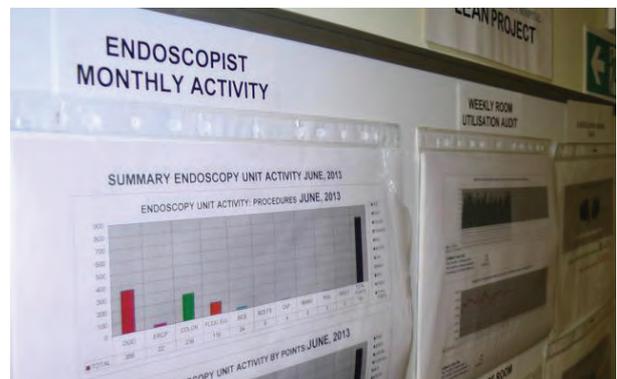
- Monthly data sheets were displayed on white boards – staff were encouraged but not obligated to have a look at them
- PDSA cycles with the team identified that data sheets were confusing and simple graphs/single figure measures were required to be informative
- A ‘red’ and ‘green’ indicator system was implemented to reinforce the ‘good’ versus ‘bad’ figures
- The figures and charts were updated with ‘single glance’ metrics to make it obvious within three seconds
- These charts are discussed at the daily huddle

Impact

- Eye catching data display
- Minimal contact time on the board to read through data results
- Collective effort to try and start the list on time
- Underpinning the regular occurrences as to why sessions are late starting/finishing
- Team effort to ensure sessions start on time

“ When we first put the board up I had angry emails from consultant colleagues - and I thought the board looked boring!”

Dr Ed Seward, Whipps Cross Hospital, Barts Health NHS Trust



Example six: Visual management - notes management Portsmouth Hospitals NHS Trust

Old racking systems to store medical records on for patients awaiting procedure were becoming unsafe from a manual moving and handling/ergonomic perspective. Old, decrepit filing cabinets were being made use of to store To Come In (TCI) patients. Most of the drawers of the filing cabinets were broken and were a real health and safety risk to the admin and clerical team.

What we did

- Redesigned the office areas and moved the notes storage completely
- Allocated an adjacent office as the 'notes preparation' room and moved all sets of clinical records into it
- To make the calendar dates more obvious, numbers of various shapes and sizes were made to 'draw the eye' to the relevant date more quickly
- One person now preps notes in the note prep room



Impact

- The shelves are more orderly and it is easier to find a set of notes
- Prepping is done correctly
- The team are now prepping two days ahead which allows time to check all notes and paperwork are in place
- This system releases 'breathing space' to get it right!

Example seven: Visual management - notes trolley - Portsmouth Hospitals NHS Trust

There was often confusion whether a patient had arrived and been admitted ready for their procedure and the process for indicating that a patient had arrived, been clerked and admitted for procedure was not very clear. A system of plastic storage boxes did not work well from an infection control perspective and did not look professional. Staff did not know whether to put notes at the front or back of the plastic box so patients often got out of order.

What we did

- Purchased two cabinets on wheels with separate slots for each of the procedure rooms. These were custom made based on a design for primary schools
- At reception, one cabinet was used to put the patients' notes in upon their arrival. This indicated to the admitting nurse that the patient had arrived and was waiting to be admitted, changed and consented prior to procedure
- At recovery, a second cabinet was used to put the patient notes in once the patient was ready for their procedure. This indicated to the procedure room staff that their next patient was ready



Impact

- The process now feels more orderly
- Staff know exactly where notes will be
- The environment looks much smarter

“ A nurse on a sabbatical came back to work for a couple of shifts and commented how much easier the system was. It is much better set out and we’re far more organised!”

Koralie Bird, Unit Sister, Portsmouth Hospitals NHS Trust

Example eight: Improving operational performance with visual management - Gateshead Health NHS Foundation Trust

Ineffective communication of daily issues was affecting operational performance causing waste and delays.

What we did

A review of communication methods on the unit was held which included interviews with staff and a call for open feedback at the weekly team meeting.

The results suggested that information flows about patients on the list were a key concern for recovery, nursing and decontamination staff.

The unit decided to look at their main dissemination methods of daily communication which were; the staff allocation board (which is checked by nursing staff every morning and was located outside the staff room at the end of the unit) and the list print-outs outside each procedure room.

Staff allocation board

- A survey of nursing staff prompted the staff allocation board to be moved to a more central location in recovery
- Two different contents for the staff allocation board were proposed and staff voted (dot voting) on which they preferred - the preferred option was adopted

General communication about the lists

- One week trial of 'status at a glance' boards (removable pieces of card) outside each procedure room which displayed information on:
 - Staff in the room
 - Procedure
 - Special measures in place
 - As well as the usual list printout on a trolley outside the room.
- All boards were standardised and it was the responsibility of the nurse who admitted the patient to update the board
- The content of the boards went through several iterations before permanent 'white board' versions were fixed to the walls
- Trial of 'huddles' each morning at 8am for ten minutes around the staff allocation board to brief the team with a different staff member leading each day
- One week flow exercise - measuring the length of time it took for information about patients to filter down to each part of the unit
 - Results showed overall decontamination staff were last to know of any additions, amendments or changes, especially DNAs



- As a result of the poor communication over DNAs the decontamination staff had prepared and brought out 14 unused scopes, overall wasting more than nine hours of time at a cost of around £75.88 that week – which would equate a waste of 485 hours and nearly £4000¹ over a year
- An additional list for each room is now permanently on the decontamination scopes trolley which is updated by the first member of staff to be notified of the DNA (usually booking/reception) immediately after they become aware

Impact

- Moving the allocation board to a more central location and changing the board to include information they had asked for made staff feel more informed and improved safety
- Daily 'huddles' (brief and de-brief) were embedded into practice following a trial which showed that safety had improved as a result of the trial
- When the flow exercise was repeated for the week following implementation of the new process only five scopes were wasted from decontamination (as opposed to 14) - representing a reduction in waste of 312 hours of staff time and £2536 if sustained over the course of a year

“I think that white boards outside of the rooms are a good idea. We can easily identify what we are doing and it helps us to plan our list and utilise unused slots”.

Dr Reddy, Consultant Gastroenterologist, Queen Elizabeth Hospital, Gateshead

¹ An approximate cost is given based on a scope which had been prepped, unused, and then needed preparing again (as if dirty). The time the average technician would take for this process would be 40 minutes (take scope to procedure room then back to decon for cleaning). The overall cost is calculated on a mid-point band 2 technician (£8.13 per hour).

Example nine: Multiple uses of visual display - University Hospitals Birmingham NHS Foundation Trust

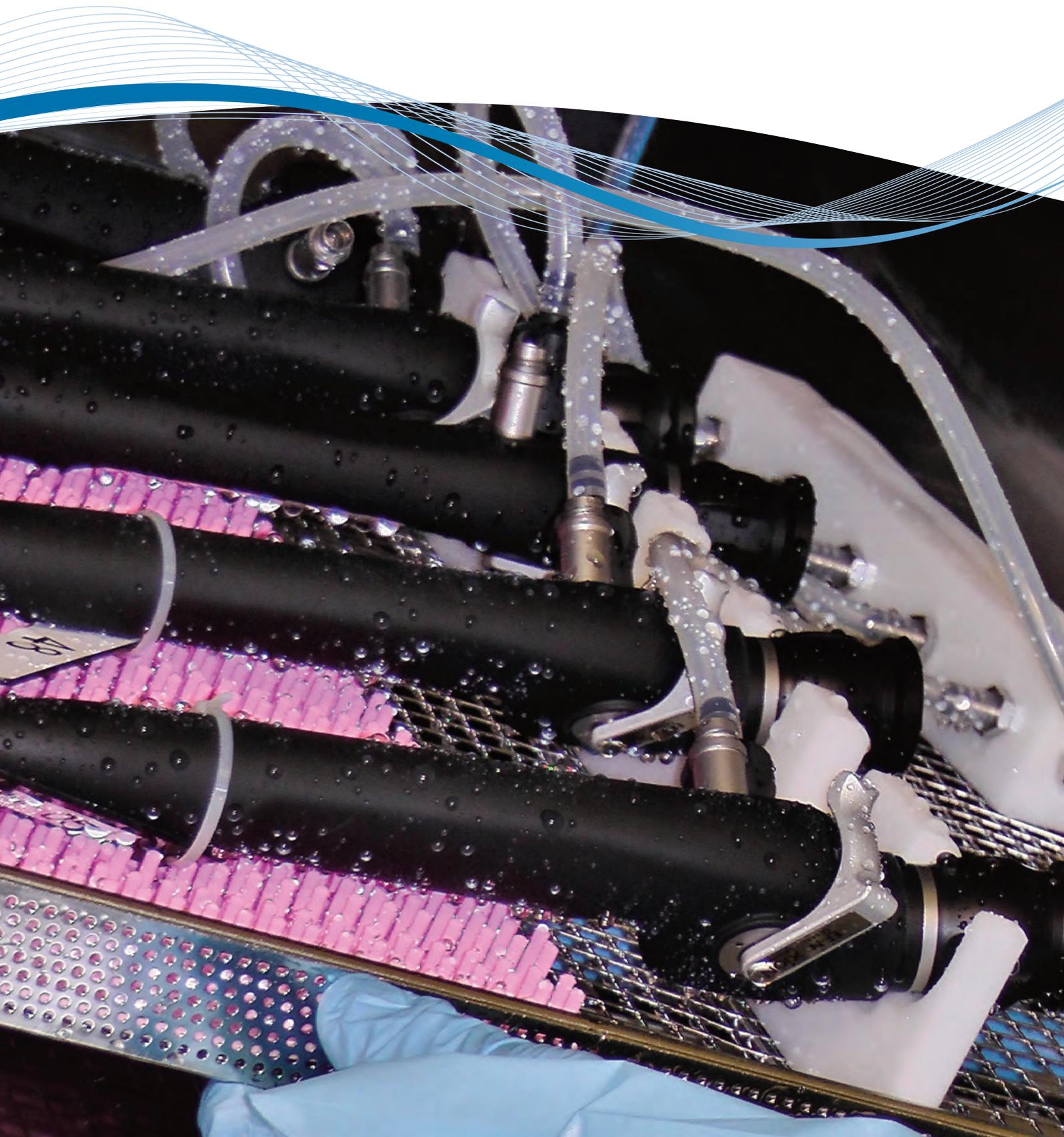


The three questions – milestone checklist

Move on to **Do** only if you have completed **all** of the items on this checklist

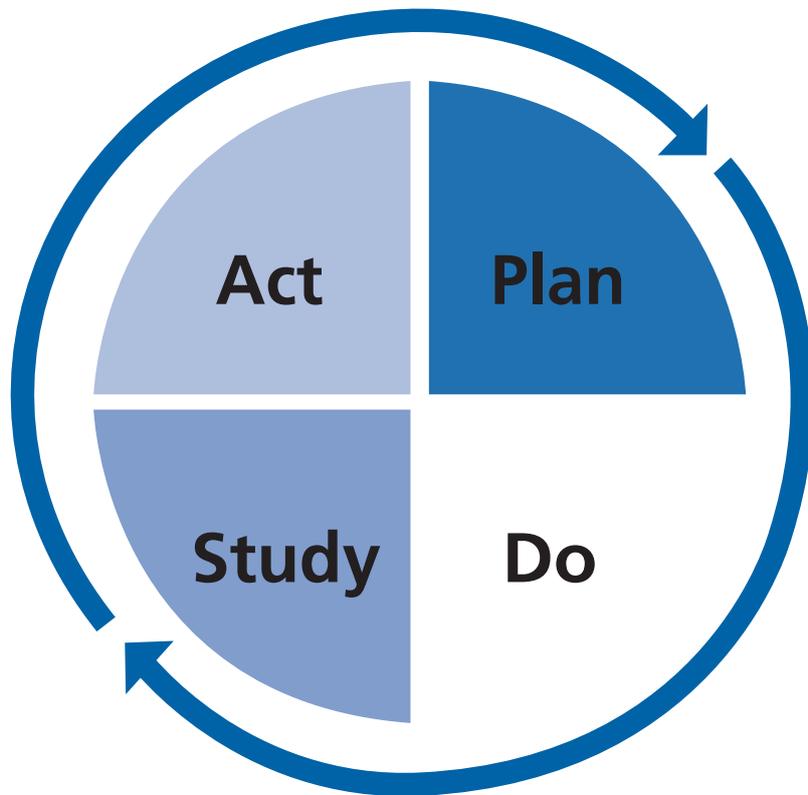
Checklist	Completed?
Identified core team of users	
Explained and discussed principles of Operational Status at a Glance with the team	
Identified your current systems for monitoring operational status	
Measured interruptions of key staff e.g. coordinator, team leader	
Obtained your Trust's confidentiality policy	
Interviews completed, photographs viewed, comments recorded	
Key questions asked and answers recorded	
Reviewed which areas would benefit from an Operational Status at a Glance board	
Suggested information identified and collected	

Effective team-work checklist	Tick if yes
Did all of the team participate?	
Was the discussion open?	
Were the hard questions discussed?	
Did the team remain focused on the task?	
Did the team focus on the area/process, not individuals?	



4. Do

Once you have understood your current state and come up with ideas of what you want to try out, move on to implementation. Do not expect staff to take to new ideas immediately, experience has shown this module works best if changes are made incrementally so that staff can influence them. This module involves many iterations of the PDSA cycle.



Developing a prototype

Before making any investment in buying and installing new boards or systems create a prototype board to test your ideas.

- Identify an area where the team is keen to try out the concept
- Discuss with the team how they would like to lay the information out
- Be flexible – the information will be changed and moved several times in the early stages

By using a prototype it is very easy to make amendments and alterations – as more people use the board more ideas will be generated which will require items to be added.

Board

The aim of any information board is to enable the transfer of information quickly. The size of the board has an impact on this.

- Too small and the board is very hard to read and information is cluttered
- Too big and the board becomes overwhelming and it is tempting to overpopulate with information

Your decision on the size of board will involve factors such as the availability of space, the information you need to show and the availability of materials.

A good way of starting is with the standard 4ft x 3ft magnetic office whiteboard. This is because:

- It allows plenty of space to record information
- Magnetic boards are very versatile
- The format can easily be changed in response to feedback
- They are inexpensive and widely available
- You can often find an unused one somewhere in the Trust.

Location

The location of your operational status information is vital to its success. Consider the following:

- Where do people enter and exit the unit and congregate for briefing?
- Which staff based outside the department need access to it, e.g. senior managers, endoscopists/consultants?
- What information do you wish to display and what level of access do the endoscopy team need to record information and use it?
- Will there be sensitive information on display?
- Where do you have the space required?

Materials

The creation of your board need not be an expensive exercise.

- If you have a metal backed whiteboard then magnets are ideal as markers – magnets are available in all colours and sizes from stationery suppliers.
- Large stationery suppliers also stock magnetic tape which is great to help divide up areas of the board, and modify divisions.
- Coloured tape is also ideal for dividing sections of your board – a good way of getting hold of coloured tape is by talking to your facilities department and asking for electrical insulation tape.

Implement in stages

- The early stages of this module can be used very effectively to provide information quickly and clearly
- If your endoscopy unit does not use operational status boards already, teams may feel that this is extra work.
At first it can seem a little intrusive. It is essential to allow time for teams to accept the concept and to take on new ways of working
- Try starting slowly and gradually develop more items. This allows people to familiarise themselves with operational status information and be comfortable with what and why it is required before introducing additional items
- It will take time for all teams to remember to fill in their information – check daily and encourage everyone.
- Involve as many staff as you can in offering suggestions as to how the boards could improve their working lives
- Once staff see the benefits of having information freely available they will be encouraged and will want to be involved

Various forms of prototype boards can be used:

- Magnetic boards and magnets
- Laminated sheets and dry wipe pens
- Whiteboards – economical and easy to use.

Reviews and 'huddles'

Once you have decided what information to collect and how to present it you need to start using it. There is little point in collecting and displaying information if you are not going to use it regularly.

Progress reviews play an important part in the operational management of endoscopy units. Encourage endoscopy teams to use the operational status boards at their review meetings and at debriefing sessions and huddles' (see The Productive Endoscopy Unit Team-working module).

Review meetings can take different forms. These can be tested (PDSA) and adjusted for your particular circumstances. For example, the first iteration may be a team meeting every week/month, the second iteration could be more regular brief/debrief sessions and the third iteration could be the power of short, sharp, focussed huddles. Each iteration relies on increasingly 'visual' data in order to keep the discussions focussed and shorter.

Start-up review

Timing: 30 minutes after the planned endoscopy start time

Review items

- Did the sessions start on time? If not, what will be the likely impact on finish time or afternoon lists?
- Is the list achievable for the session?
- Are all equipment and consumables available for each list? If not, what is the plan?
- Have there been any changes to the list?
- Have any patients been cancelled?
- What spare capacity (endoscopy list space and staffing) do you have that could be used to relieve pressure?

Periodic reviews - Timing: as required to meet local circumstances

Review items

- Are all endoscopy rooms working to schedule?
- If not, what can you do to recover the situation?
- Reasons for late starts – what can you do to support the teams?

Midday review - Timing: towards the end of morning sessions

Who: endoscopy coordinator leading the review with the endoscopy matron/manager

Review items

- Endoscopy room status
- Emergency workload status – is this manageable or do you need to review capacity?
- Recovery status – are there any delayed discharges from recovery?
- Are there any potential problems anticipated for the rest of the day?
- Are there any potential problems identified for tomorrow? If so, what is the plan for dealing with them?

What is a 'huddle'?

- Daily/each shift short and snappy gathering of a team led face to face by the team's manager or team member
- Conducted around the main data board so that 'visual' cues are used to discuss performance against aspiration
- Duration 10 -15 mins max conducted in a high involvement style
- Contains three elements:
 - **Focus** on key goals - provide a daily focus on a few key goals
 - **Clarity** and relevance of communications - provide clear, relevant and timely information to help staff perform their daily roles
 - **Commitment** to listen and act - commitment to listen to and act on staff (and customer) views, ideas, concerns and to feedback progress.

What can be achieved by introducing daily briefings/huddles?

- Teams come together with a common goal
- Managers become leaders
- Gives staff a voice
- Encourages healthy competition
- Improves morale, performance, attitudes and behaviours

But to achieve this takes time:

- It may be hard going in the first few weeks
- Some days will feel better than others
- Not all issues are resolved 'just like that' - any problems should be assigned to someone to liaise with others outside of the huddle
- Team managers needing to find their feet.

This module also links to *Knowing How We Are Doing* and *Session Start Up* and *Patient Change-over*. More information on huddles and a daily huddle preparation template can be found in The Productive Endoscopy Toolkit.

Clarify escalation procedures

The purpose of this module is to help you to identify issues early and deal with them to avoid or minimise their effect. Each member of the team needs to understand their role and responsibilities in the operational running of the whole department.

For example

Endoscopy sister/team leader and team have the responsibility for managing their areas and any potential issues:

- Starting on time (also see The Productive Endoscopy Unit Session Start Up and Patient Change-over module)
- Managing endoscopy turnaround time (see also Session Start Up and Patient Change-over module)
- Managing the endoscopy rooms finishing times
- Identifying any problems within their area and finding solutions
- Escalating promptly to coordinator or senior team where solutions cannot be found within the team.

The recovery team has the responsibility for managing the recovery room:

- Taking handover of patients from endoscopy rooms and managing their recovery
- Managing the handover and return of these patients (see Handover, Recovery and Discharge module)
- Planning ahead to identify problems such as lack of capacity or delayed discharge of patients
- Prompt escalation to the senior team where solutions are not identified.

Coordinators are responsible for maintaining high situational awareness and for monitoring the performance of each area. This will be by a combination of:

- Updating and using the operational status information available – monitoring and anticipating issues
- Management by exception – knowing that certain agreed aspects are on track unless clinical areas have alerted or escalated issues
- High visibility – maintaining contact with clinical areas periodically
- Regular review
- Escalation of serious issues, such as the need to cancel a patient when every attempt to avoid this has failed.

Do – milestone checklist

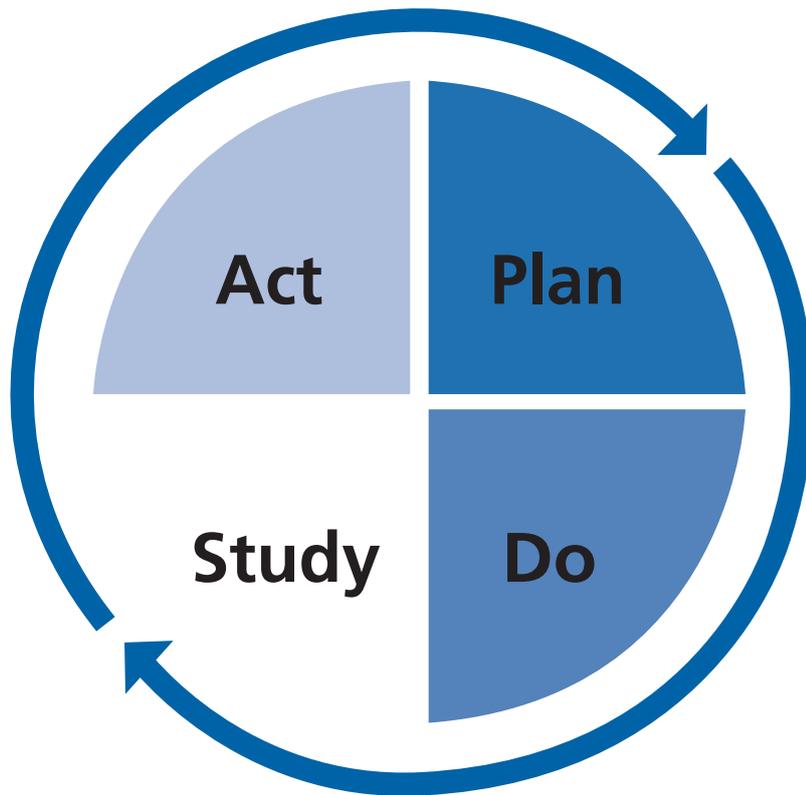
Move on to **Study** only if you have completed **all** of the items on this checklist

Checklist	Completed?
Created a prototype visual display board	
Implemented a prototype visual display board	
Established regular reviews	
Clarified escalation procedures	

Effective team-work checklist	Tick if yes
Did all of the team participate?	
Was the discussion open?	
Were the hard questions discussed?	
Did the team remain focused on the task?	
Did the team focus on the area/process, not individuals?	

5. Study

In this module you will test a number of ideas. It is important to keep track of your measures of success so that you can assess the impact of changes soon after you make them.



Trialling Operational Status at a Glance

Why are we testing?

- To see if the information displayed is making a difference
- Is the system being used – if so, by who and what for?
- Does it provide useful information on how the day is managed?
- Are there any new problems arising from using the new ways? Look out for signs of unexpected problems

Before the test starts

- Determine how long the trial will run for
- Remember it needs to be long enough to show errors and opportunities, and short enough to change and try again
- Inform all staff that the trials will be starting, some staff will be on shifts so may not be aware, use posters to ensure you communicate with everyone
- Make sure you have specified the staff responsible for completing the information on the board
- Set clear ground rules. Do not allow the board to be used for other purposes or an opportunity for casual comments that may be detrimental to a professional patient environment

“Testing the new visual boards may take longer than you think- staff need time to adjust to filling in the boards. You may need to monitor the boards daily to begin with and remind staff why they are important.”

Susie Peachey, National Improvement Lead, NHS Improving Quality

During the test

- Gather feedback from the team to identify what works well and what does not work so well
- Take time observing Operational Status at a Glance being used
- Encourage suggestions – use a flipchart to collect ideas
- Capture the before and after state with photos and videos
- Invite visitors from the management team to view the system and participate in a review meeting
- Create an audit sheet for your operational status boards (see example in Study Section of this module) and audit regularly while trialling different options

Evaluating the trial

It is important to evaluate and audit the impact of the Operational Status at a Glance information.

- What feedback have you had from the teams and others?
 - What are the good points?
 - What negative points were raised?
- Has information been more accessible?
- Who has been using it and for what purpose?
- Has the use of Operational Status at a Glance facilitated the coordination of the day or decision-making?
- Have there been any suggestions to amend or improve the display?
- Have any pieces of information evolved over the trial period?

Example audit checklist

Decide:

- Who will complete it
- How often will they complete it
- How often will you discuss the results?

Operational Status at a Glance audit checklist	YES = 1 NO = 0
Date	
Was the information up to date?	
Were any reason for delays listed?	
Were all status indicators updated?	
Add additional checks relevant to your area	

Analyse

- Decide whether your operational status displays can be further improved
- Is additional training required to make the changes work?
- Testing and analysing the results is very important when developing an operational status display
- It is highly unlikely your boards will be correct first time. Creating a system that really works for your endoscopy unit will require trial and error. You will need to evolve the solution over time. Be open to testing a variety of different approaches
- Evaluating and re-evaluating is essential. Even when the whole team agree on a decision in principle, when you put it into practice it may not work as you expect and you will reveal unanticipated problems
- Use the model for improvement and the PDSA continuous improvement cycle or A3 thinking (see The Productive Endoscopy Unit Toolkit) to ensure you reach a successful outcome

<u>OSAG Board Audit</u>									
Please Tick as appropriate									
<u>AM</u>	Monday		Tuesday		Wednesday		Thursday		Fr
	YES	NO	YES	NO	YES	NO	YES	NO	YES
Are you confident the information on the board is correct, reliable and up to date at the time of audit?									
Was the information on the board beneficial?									
Is the board easy to use/understand?									
Is anything missing off the board?									
When was the board last updated?									
PLEASE INITIAL									

“ If it doesn't work then that's ok, you just know there's a better way of doing it.”

Lorraine Walling, Endoscopy Sister, Portsmouth Hospitals NHS Trust

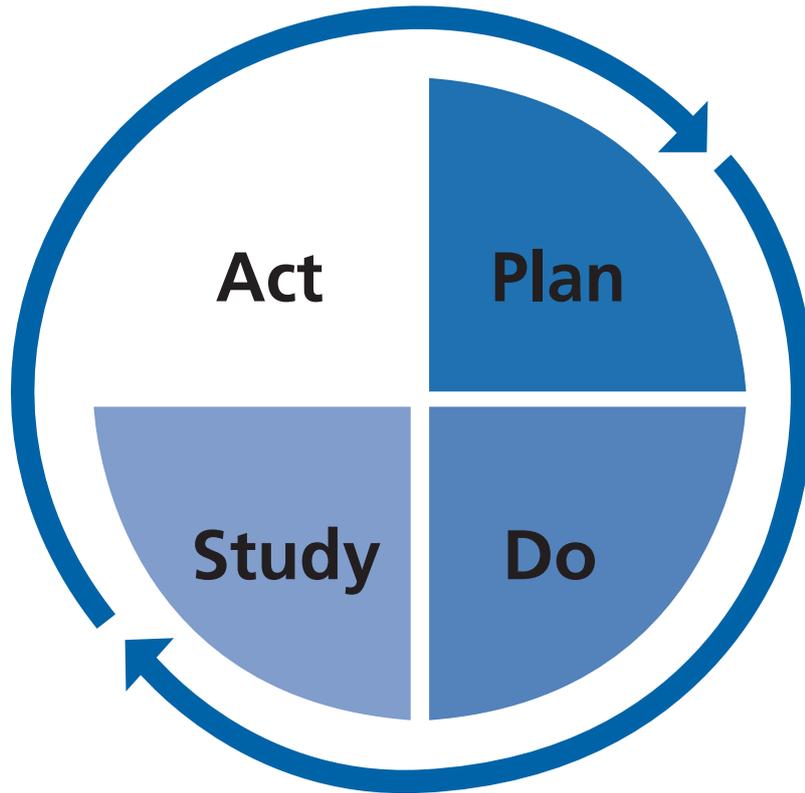
Study – milestone checklist

Move on to **Act** only if you have completed **all** of the items on this checklist

Checklist	Completed?
Talked to staff about the new boards and recorded their comments	
Implemented an audit checklist	
Decided whether additional improvements should be made	

Effective team-work checklist	Tick if yes
Did all of the team participate?	
Was the discussion open?	
Were the hard questions discussed?	
Did the team remain focused on the task?	
Did the team focus on the area/process, not individuals?	

6. Act



Act

By the end of each trial the following decisions should have been made:

- What information has proved useful and what has not?
 - There is no point recording things that have no benefit to any of the team
- Was information more accessible?
- Did the information help with decision-making?
- Did it save time and reduce interruptions?

By answering these questions you can then agree with the team what the layout of the next test board will look like. Transform your board from a prototype into a working version in stages. Remember you should continuously improve your system by reviewing on an ongoing basis.

“ Don't be frightened to say 'it's not working!' ”

Barbara Crean, Unit Matron, Portsmouth Hospitals NHS Trust

How can you make it stick?

Monitor and audit continually

- Continue to monitor the Operational Status at a Glance on a daily basis – and audit it on a regular basis (weekly to start with).

Ensure leadership attention

- Operational Status at a Glance is key to the effective coordination of the department. Strong interest and support from senior leadership will help the teams to understand the importance of developing this module, as well as ensuring sustainability (see the Programme Leader's Guide for more information on sustainability)

Do not stop trying to improve

- Encourage endoscopy staff to continue to find newer and better ways of working. Your information requirements will evolve and your Operational Status at a Glance will require continual adjustments

Keep returning to the PDSA approach to testing ideas

- The intention of The Productive Endoscopy Unit is to instil a new culture in which all staff are empowered and enabled to improve the things they do on a continuous basis

Act – milestone checklist

Checklist	Completed?
Analysed feedback and audit checklists	
Agreed and implemented the optimum board layouts and locations	
Developed a plan to continually monitor and audit the use of the board	
Decided how you will review each board and continue to improve it	
Agreed next version to test	

Effective team-work checklist	Tick if yes
Did all of the team participate?	
Was the discussion open?	
Were the hard questions discussed?	
Did the team remain focused on the task?	
Did the team focus on the area/process, not individuals?	

7. Learning objectives complete?

Five objectives were set at the beginning of this module. Test how successfully these objectives have been met by asking endoscopy team members the questions in the grid below.

The results of this assessment are for use in improving the facilitation of this module and are not a reflection of staff aptitude or performance. If all the responses broadly fit with the answer guidelines then the learning objectives of the module have been met.

Note the objectives where the learning has only been partly met and think about how you can change the way you approach the module next time around so that the responses are fully met. It sometimes helps to re-read the module and reflect on your experience in implementing the module first time round.

Question (ask the team member)	Answers for outcome achieved
What is the principle of visualisation?	<ul style="list-style-type: none">• Making information easy to get• Simplify things 'a picture paints a thousand words', use symbols and colours instead of words
What issues impact on a typical day and how is it communicated?	<ul style="list-style-type: none">• Information not communicated• Decisions not made early enough• No understanding of the situation
How would you develop Operational Status at a Glance around your own team's needs?	<ul style="list-style-type: none">• Talk to staff about what information would help them• Develop a prototype board and get feedback on its use• Allows you to capture feedback in a structured way
What are the benefits of a structured review system and how would you continually improve your board?	<ul style="list-style-type: none">• Provides a mechanism where all staff know how they can get their thoughts and ideas heard• Through monitoring and continually auditing the use of the board, making improvements as necessary
How do clearly defined roles and responsibilities help to communicate changes in operational status?	<ul style="list-style-type: none">• By everybody knowing who is responsible for updating the board means that the whole team will have confidence that the information is up to date

Acknowledgments

Gateshead Health NHS Foundation Trust
Portsmouth Hospitals NHS Trust
Royal Liverpool and Broadgreen University Hospital NHS Trust
University Hospitals Birmingham NHS Foundation Trust
Whipps Cross Hospital, Barts Health NHS Trust



To find out more about NHS Improving Quality:

www.nhsiq.nhs.uk | enquiries@nhsiq.nhs.uk |  [@NHSIQ](https://twitter.com/NHSIQ)

**Improving health outcomes across England by
providing improvement and change expertise**

Published by: NHS Improving Quality - Publication date: March 2015 - Review date: March 2017

© NHS Improving Quality (2014). All rights reserved. Please note that this product or material must not be used for the purposes of financial or commercial gain, including, without limitation, sale of the products or materials to any person.