

**IMPROVEMENT. PEOPLE. QUALITY. STAFF. DATA.
STEPS. LEAN. PATIENTS. PRODUCTIVITY. IDEAS.
REDESIGN. MAPPING. SOLUTIONS. EXPERIENCE.
SHARE. PROCESSES. TOOLS. MEASURES.
INVOLVEMENT. STRENGTH. SUPPORT. LEARN.
CHANGE. TEST. IMPLEMENT. PREPARATION.
KNOW-HOW. SCOPE. INNOVATION. FOCUS.
ENGAGEMENT. DELIVERY. DIAGNOSIS. LAUNCH.
RESOURCES. EVALUATION. NHS. PLANNING.
TECHNIQUES. FRAMEWORK. AGREEMENT.
UNDERSTAND. IMPLEMENTATION. SUSTAIN.**



7 STEPS TO

SAFE PERSONAL & EFFECTIVE

CARE

A Quality Improvement Guide

	Contents	Page
	Introduction	3
	Define Project Aim	5
	Discover	7
	Measure	9
	Investigate change options	12
	Test out the change	14
	Implement the change	15
	Celebrate, Spread and Sustain	17
	Toolkit	19
	Useful National Guides	41

Introduction

SAFE
Harm Free

PERSONAL
Patient centred
Respect & dignity

EFFECTIVE
Evidence based
Reliably delivered

WHY FOCUS ON QUALITY IMPROVEMENT (QI)?

Quality improvement (QI) in the NHS focuses on how healthcare can continuously improve to deliver better care to our patients, in a timely manner, with compassion and high standards. Improvements, sparking creativity, testing new ideas and reflecting on the services we provide is everyone's business. QI is evidence based systematic approach to improving processes of care for measurable and better outcomes.

All staff at East Lancashire Hospital Trust (ELHT) are encouraged to apply the ELHT approved QI improvement methodology when implementing changes or testing new ideas.

KEY LEVELS OF A LEARNING JOURNEY

Lead or senior level staff

"Useful National Guides" links on page 40 will provide further detailed guidance about current frameworks that exist to support spread and sustainability. Please note there is also a "quick guide" to 7 steps if you are already familiar with QI techniques

Practitioner level and/or involved in leading a team to improve service delivery

This document is a coaching guide for you. It is particularly relevant if you have operational responsibility over more than one service/setting

Foundation level or staff working in clinical settings with exposure to improvement

This document is a coaching and information guide for you. It will help you understand what underpins successful implementation and spread of QI initiatives

Administrative/support service role

This guide can provide support in testing new ideas and support achievements that are successful, effective and embedded into daily practice.

TOOLKIT SECTION

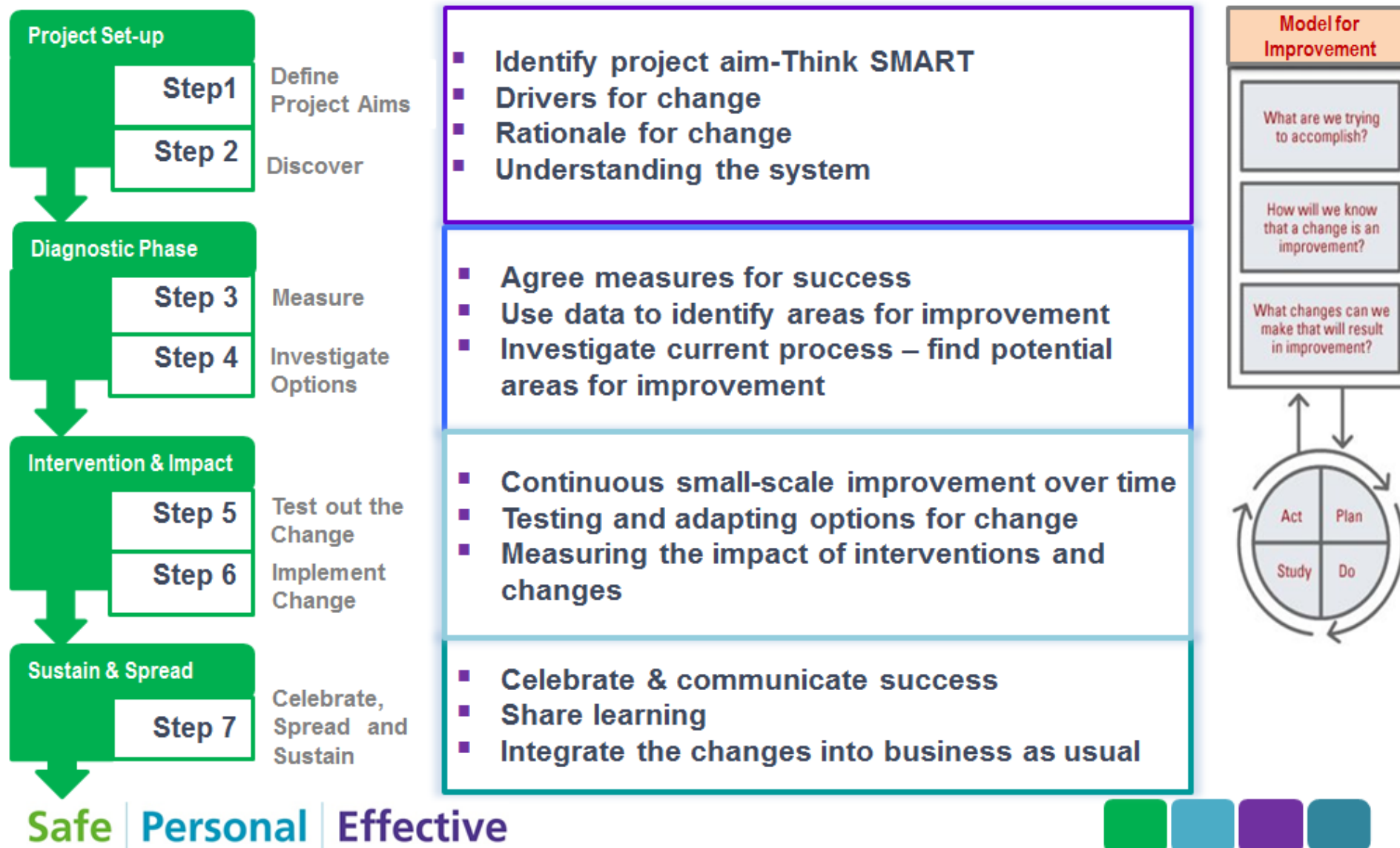
The toolkit section includes readily available templates, forms and tools that form each of the 7 steps. These will help you apply the 7 steps in a practical way, with easy access and simplified versions to support a broad range of projects. There is a "Useful National Guides" section at the end which provides further reading and information about the theory behind some of the tools applied in the 7 steps.

WHAT YOU WILL ACHIEVE BY USING 7 STEPS?

By applying a standardised approach to improvements, considering several fundamental aspects and having the tools to apply changes to daily practice; improvements to your service should be successful, productive and rewarding to both patients and staff. 7 steps will help you tackle the obstacles along the way in a structured format.

GOOD LUCK ON YOUR JOURNEY.

7 Steps to Safe, Personal and Effective Care





STEP 1: DEFINE PROJECT AIM

Aim of this stage: Understand why an improvement is needed, scope out key stakeholders and create a project aim which is SMART

Analyse the problem by talking and listening to those involved. Once you have a clear understanding, support is needed from those involved, as this will increase team engagement and provide a stable platform for developing your project.

IDENTIFY AND UNDERSTAND STAKEHOLDERS

Identify a small number of key individuals, both at a senior and operational level, who could support, advocate or give advice on the project. The stakeholder analysis in the toolkit will help you identify them.

GO TO TOOLKIT: STAKEHOLDER ANALYSIS/MAPPING

Consideration to how key stakeholders and staff are affected by the proposed project or change will determine the level of engagement needed. For larger scale projects a project sponsor and involvement from a senior level (Chief Executive or Executive Team) is necessary to champion your project and provide strategic direction.

Understanding different views and emotions from key stakeholders and knowing how to manage them will contribute to the success of your idea. Consider different methods of communication with them and the level of engagement required throughout the whole project. People are usually quite open about their views - asking their opinions can be the first step in building a successful partnership for the project.

Once you have identified key stakeholders, if appropriate, you may need to form an improvement team who will assist in certain aspects of the 7 steps, driving the project forward and offer different service perspectives.

DEFINING A SMART AIM

An aim statement should be **SMART**: **S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime-bound.

Be clear in outlining: What you are trying to achieve, for whom by when and why. This will ensure everyone is working towards the same aim and expectation. A good aim statement can help to motivate people about your project as being something worthwhile, measurable and achievable.

Be prepared to refocus the aim

Refocusing the aim could be a conscious decision to work on a smaller part of the system to make the initial change manageable. Refocusing an aim usually occurs as you develop and discover more about the change needed.

GOOD AIM: "Achieve a 20% reduction in emergency admissions for heart failure patients by July 2013"

Provides a clear a numerical target to aim for, but what is the 20% measured against? Is it 20% reduction from the previous year? Is it realistic? Could it be achieved?

POOR AIM: "Improve cancer services to deliver timely care"

Doesn't clearly state what the change will be, which service area or who is responsible. Is it for all types of cancers? The project aim must stipulate how much the service is going to be improved, when it is going to be completed and what is the impact of the improvement.

DRIVER DIAGRAM

A driver diagram can be used to plan improvement project activities. It captures an entire change programme in a single diagram and provides a measurement framework for monitoring progress.

GO TO TOOLKIT: DRIVER DIAGRAM TEMPLATE and EXAMPLE

1. **THE AIM:** Input the aim you are trying to achieve. It needs to be measurable and specific.
2. **PRIMARY DRIVERS:** What are the biggest driving forces that will need to be considered to help achieve your aim? The primary drivers need to relate to big broad concepts such as: compliance of risk assessments, staff engagement, training and education, standardised process or clinical process. They are a set of factors or improvement areas that must be addressed to achieve the desired outcome. They should be straightforward statements rather than numerical targets.

3. **SECONDARY DRIVERS:** These drivers are broken down to specific components and should be process changes that will impact the outcome. Each secondary driver will contribute to at least one primary driver. They should be necessary and (collectively) sufficient to achieve the aim.

Driver diagrams help to break down an overall improvement aim into underpinning goals (i.e. 'drivers') to the point where you can easily define the changes that you need to apply. The primary drivers can also indicate where discrete PDSA cycles (**see STEP 5**) can be undertaken to achieve the overall aim.

On completion of your Driver Diagram, there might be some easy actions or changes that need to be undertaken to help address the Drivers. Some driving forces might already be well established and need only small changes. When you reach **STEP 4** consider adding these required changes to your Action Plan.

Do...

- ✓ Create the Driver Diagram with key individuals who have in depth knowledge and understanding of systems & processes
- ✓ Try to match your drivers to realistic areas which you can influence and "drive". Adding drivers which you have little control over will not help to achieve your aim
- ✓ Your secondary drivers need to be grouped logically with clear links to the primary drivers
- ✓ Your Driver Diagram is not static; you might need to revisit/alter it later on when you gain greater insight, clarity and understanding of what is needed to achieve your aim.

LEVEL OF SUPPORT

If you have concluded that your project requires Organisational support, please consider submitting your project to the Quality Improvement Triage Group who can advise further on the level of support that can be given.

For further advice on how to present your project idea to the Triage Group; please contact the Quality Improvement Team at: Quality.improvement@elht.nhs.uk

PROJECT MANDATE

TOOLKIT: PROJECT MANDATE TEMPLATE

At this stage, you can complete the following sections in the Project Mandate template:

Background

Strategic Background

Aim

Key Stakeholders

A project mandate is an enabler for starting up any project as it gathers sufficient information to understand what is required to make the project successful. It helps create a plan which can be shared with other key stakeholders and helps you consider key elements.

At the end of this step you will:

- Understand why you have chosen to make an improvement
- Scoped out who the key stakeholders/staff are that need to be involved
- Discussed the project idea with key stakeholders and understand the feasibility of your project
- Defined a SMART aim clearly linked to your improvement requirement
- Created a Driver Diagram in conjunction with staff who are experienced and knowledgeable of your aim initiative



STEP TWO: DISCOVER

Aim of this stage: To ensure the project starts in the right areas and to develop a project structure. You will be exploring different ways of understanding why improvements are needed, what are the potential blockers and carrying out deep level probing to discover the causes of “problems”

EXISTING IMPROVEMENTS

You can investigate existing improvement initiatives that have been applied to other Healthcare settings via the internet. Be specific in searching against key elements of your aim and use reputable websites such as:

Institute for Healthcare Improvement (IHI) www.ihl.org

Health Foundation www.health.org.uk

NHS IQ www.nhsiq.nhs.uk

Royal College Websites

Conference abstract reports e.g. BMJ, International Forum for Quality and Safety www.internationalforum.bmj.com

1000 lives plus www.1000livesplus.wales.nhs.uk

NHS Improvement Scotland www.qihubscot.nhs.uk

UNDERSTANDING PROCESSES: BRAINSTORMING

Brainstorming combines a relaxed, informal approach to problem solving and creating ideas. Some of the ideas discovered can be crafted into original, creative solutions. This process helps to get people unstuck by "jolting" them out of their normal way of thinking.

Be prepared:

- Use flip charts and post-it notes so people can stick their ideas on the flip chart
- Post up the rules of brainstorming as a reference for all
- Allow individual time for people to think of contributions before moving into group mode
- Encourage people to move around rather than stay seated (12 people is a good group size)
- Aim for 20-30 ideas in 5-10 minutes, seek 100% participation: don't use a scribe

At the end of the session you need to go through the ideas generated, agree what to do and how this will be done. Approaches might include dot voting where everyone allocates a dot to their favourite ideas; those with the most dots are taken forward.

SIX THINKING HATS

This technique is based on the concept of 'parallel thinking' i.e. encouraging everyone to think in the same direction, from the same perspective, at the same time. This is a useful tool to use during or after the harvesting of ideas.

GO TO TOOLKIT: SIX THINKING HATS

When applying six thinking hats, someone in the group 'puts on' the blue hat as the session leader. The blue hat will then agree with other group members on the most useful order of hats to use, and will coordinate their subsequent use, keeping a check on time. The hats have natural pairings: yellow is positive whilst black is more negative; red is emotion driven whilst white is data driven. In general, if you use one hat, you should also use its partner for balance.

EXPERIENCE BASED DESIGN (EBD)

The EBD approach enables you to understand the experience of healthcare from the patient, carer or staff perspective. This approach draws out the subjective, personal feelings a patient and carer experiences at crucial points in the care pathway. It does this by:

- Encouraging and supporting patients and carers to 'tell their stories'.
- Using these stories to pinpoint those parts of the care pathway where the users' experience is most powerfully shaped
- Working with patients, carers and frontline staff to redesign these experiences rather than just systems and processes

Firstly observe the clinical areas to gain an understanding of what is happening on a daily basis. Consider interviewing staff, patients and families to explore niggles and develop themes. This only needs to be a small number of people to get real insights. The Patient Experience Team at ELHT can give you standard further advice if you require it.

GO TO TOOLKIT: EXPERIENCE BASED DESIGN: INTERVIEWING STEPS

Once completed, hold feedback events to share the learning with patients and staff. This two-way process develops connections across staff teams and between staff and patients. It can boost confidence and motivation levels. You may want to include a patient or carer in your improvement team.







VALUE STREAM AND PROCESS MAPPING

Mapping a whole patient pathway (Value Stream) or a series of processes around one element of care or function will reveal:

- Unnecessary delays, steps or handovers
- Duplication of effort / waste
- Things that don't make sense / not logical
- Likely hotspots, bottlenecks or constraints
- Identify and understand variations in practice
- Develop a shared understanding of the problem/issues relating to quality of care

Mapping the current state: This will help your improvement team develop a shared understanding of the problems/issues

1. Gather the team together. The team should consist of staff who are involved in all aspects of the pathway
2. Agree the scope, start and finish points of the value stream or process e.g. referral received, date of first attendance through to discharge
3. Map out each step of the process, using post-it notes on a large sheet/ flip chart paper
4. Record how long each step of the process takes, including the times between each step (you may decide to measure this).
5. Add roles to the map i.e. who carries out each step.
6. Add the information flow to the map i.e. recording systems etc.
7. Stand back as a team and agree what it is telling you about your current processes of care

Questions to help you analyse: <ul style="list-style-type: none"> • Could some tasks be carried out by one person instead of several people? • Is there any duplication of work? • Are there any bottlenecks? • How much error correction/rework is being carried out? • Are the steps doing the right things in the process? • Is the right / best person doing it? 	Gather together the subject matter experts	
	Brainstorm "to achieve our goal, the things we need to improve are ..."	
	Cluster the ideas to see if groups represent a common driver	
	Expand the groups (or single ideas) to see if new drivers come to mind	
	Logically link together the groups into a driver diagram format	
	(Work backwards from project ideas if that helps!)	

Your map should show how long the process takes, the different steps in the process, the information flows and the staff resources at each step. You can now agree on any immediate actions to take – “Just Do Its” or the first areas to test changes that may result in an improvement

PROJECT MANDATE

At this stage, in your **PROJECT MANDATE in the TOOLKIT** you can complete the relevant sections relating to “Discover”. Also review your Driver Diagram and project aim again to see if they both correlate and reflect all the areas of problems and potential improvements you have uncovered.

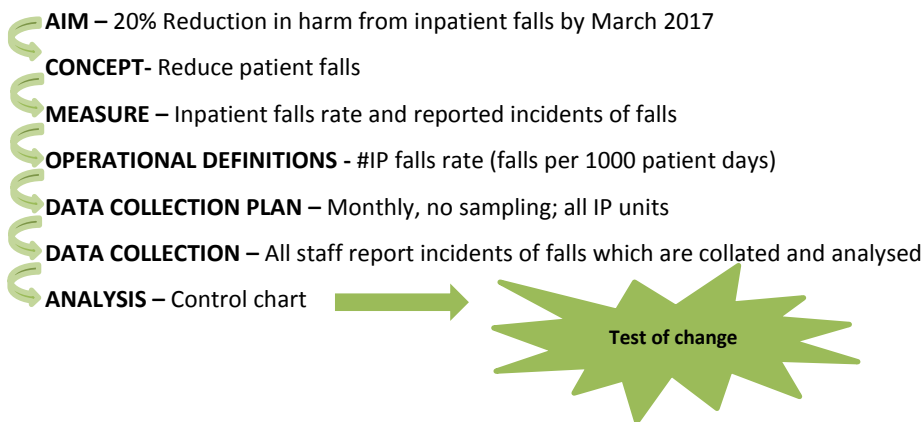
At the end of this step you will have:

- Used different tools & sources to discover what the root cause of problems are and understand where they stem from
- Discussed the processes, pathways and current working practice with the appropriate people
- Generated creativity, ideas and created a “future” state through sharing experiences, brainstorming and scoping best practice
- Balanced the team dynamics, fostered a culture of excitement through engagement and supporting all ideas put forward
- Concluded what areas need improvement and generated possible ideas/ways of working that could support this



STEP 3: MEASURE

Aim of this stage: To measure the current situation and understand the level of measures required to achieve the defined aims & objectives. Measures will help track progress and determine if the changes are actually showing an improvement to the problems

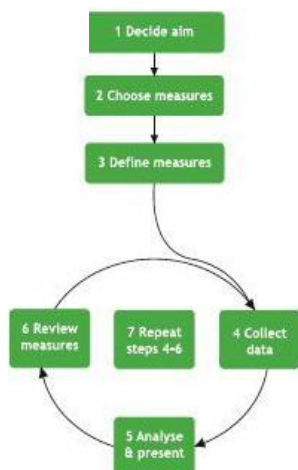


Measurement is often the weak link in improvement work and needs close attention. It answers the questions

- How are we doing? How safe, how personal, how effective?
- Is the change resulting in an improvement?

Using these measures as indicators will help you track whether the project is making progress.

COLLECT-ANALYSE-REVIEW CYCLE



When measuring progress, teams need to follow the cycle shown. The key is to go round the Collect-Analyse-Review cycle (CAR) frequently and use the following advice:

Plot data over time. Tracking a few key measures over time is the single most powerful tool (usually 5-8 measures)

Seek usefulness, not perfection. In order to move forward, you need just enough data to know whether changes are leading to improvement

Integrate measurement into daily routine. Useful data is often easy to obtain without relying on information systems.

Use qualitative and quantitative data. In addition to collecting quantitative data, be sure to collect qualitative data, which is highly informative.

TYPES OF MEASURES

OUTCOME MEASURES

Reflect the impact on a patient and demonstrate the end result of doing things. This measure should directly link to and “prove” if your overall aim has been achieved. Examples are mortality, hospital acquired infection or falls rates.

PROCESS MEASURES

Reflect the things that you do (processes) and how systems are operating. They show how well you are delivering a change that you want to make. Examples are % of hand-washing opportunities taken or % of patients with possible sepsis who received antibiotics within an hour of assessment.

BALANCING MEASURES

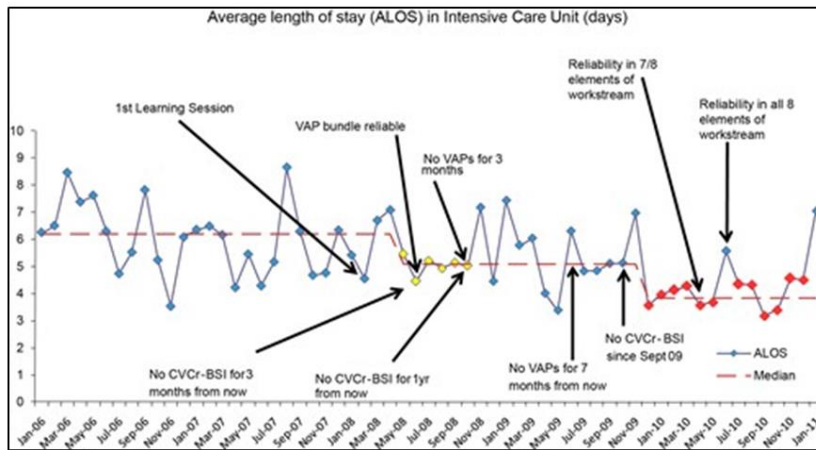
Measure whether unintended consequences have been introduced elsewhere in the system. E.g. A balancing measure is readmission rates when measuring length of stay as an outcome. Knowing potential risks as a consequence of change will help you determine what needs to be measured

RUN CHARTS

Run charts allow you to:

- Display data to make process performance visible
- Determine if a change resulted in improvement
- Assess whether improved performance has been sustained

Run charts are line graphs where a measure is plotted over time, often with a median (the middle value of those plotted so that half are above and half are below). Changes made to a process are also often marked on the graph so that they can be connected with the impact on the process.



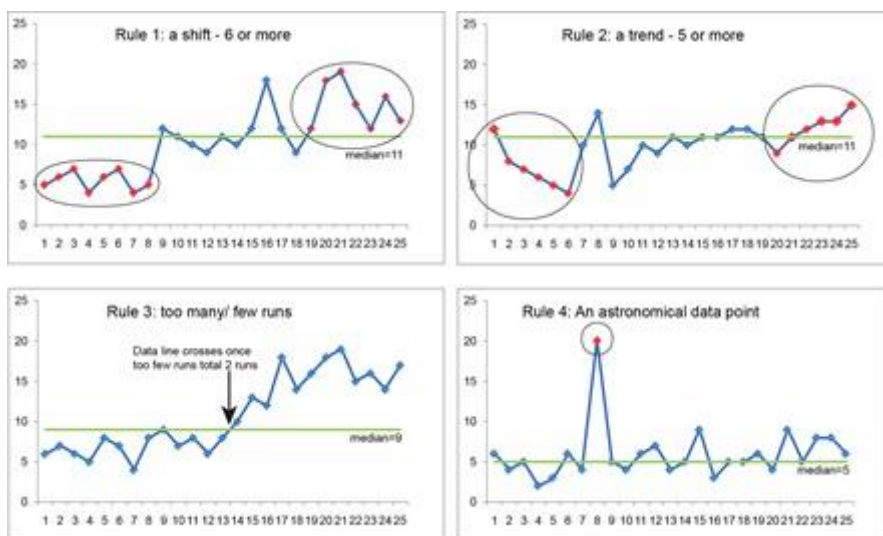
This is an example of a run chart. The average length of stay in intensive care unit is plotted for each month. During the months, comments and arrows are added when certain interventions or tests of change (Covered in **STEP 4**) are introduced. Visually, this will show you if a reduction/increase is occurring due to the change put in place. However, there are some rules you need to follow when determining if a change is actually the cause of improvement. These rules are listed under SPC charts below.

Identifying non-random variation

If we have at least 10-12 data points on our graph, run charts can also be used to distinguish between random and non-random variation using four simple rules.

Non-random variation can be recognised by looking for:

1. **A shift:** Six or more consecutive data points either all above or below the median. Points on the median do not count towards or break a shift.
2. **A trend:** Five or more consecutive data points that are either all increasing or decreasing in value. If two points are the same value ignore one when counting.
3. **Too many or too few runs:** A run is a consecutive series of data points above or below the median. If there are too many or too few runs (i.e. the median is crossed too many or too few times) that's a sign of non-random variation. You need to look up a statistical table (see Perla et al, 2011) to see what an appropriate number of runs to expect would be. An easy way to count the number of runs is to count the number of times the line connecting all the data points crosses the median and add one.
4. **An astronomical data point:** A data point that is clearly different from all others. This relies on judgement. Every data set has a highest and lowest. They won't necessarily be an astronomical data point. Different people looking at the same graph would be expected to recognise the same data point as astronomical.



Since using these rules requires you to have 10-12 data points at least on your run chart it is important to collect data as frequently as possible. If you collect data only once a month that would be 10 months, if weekly, 10 weeks (2½ months). However this needs to be balanced with keeping denominators (the number of values contributing to each data point) for percentages (or rates) above ten or so to minimise random variation due to small sample size.

STATISTICAL, PROCESS AND CONTROL (SPC) CHARTS

SPC charts are a more detailed version of run charts. They help you understand the variations shown across a period of time. When interpreting SPC charts, there are 4 rules that help you identify what the system is doing. If one of the rules have been broken, this means that a 'special cause' variation is present in the system. It is also normal for a process to show no signs of special cause. This means a 'common cause' variation is present.

Rule 1: Any point outside one of the control limits: Upper and lower control limits (UCL and LCL) computed from available data and placed equidistant from the central line of the run chart.

Rule 2: A run of 7 points all above or all below the centre line, or 5 increasing or decreasing, suggests a significant change in the measure that may have been caused by changes you made

Rule 3: Any unusual pattern or trends within the control limits may warrant investigation

Rule 4: The number of points within the middle third of the region between the control limits differs markedly from two-thirds of the total number of points.

Common-cause variation is the natural or expected variation in a process; it indicates stability and predictability

Special-cause variation is unexpected variation that results from unusual occurrences and should be eliminated.

When using SPC charts to improve a process:

- You should not react to special cause variation by changing processes, it may not be a system fault, it could be outside factors
- You should not compare more than one process in the SPC chart E.g. Data covering 2 procedures that are very different

GO TO TOOLKIT: DATA COLLECTION LIST AND MEASUREMENT PLAN.

PROJECT MANDATE

In **PROJECT MANDATE** you can now update the measurement section and measurement template. Look back at your aim and Driver Diagram; do your chosen measures reflect both your overall aim and process driving measures?

At the end of this step you will:

- Understand how measurement is a vital stage in tracking and evidencing changes made are causing improvements
- Considered different sources where data could be collected and who will do this – recorded in your measurement plan
- Understand how to do a Run/SPC measurement chart and how to analyse the data points plotted on it



STEP 4: INVESTIGATE CHANGE OPTIONS

Aim of this stage: To explore all the potential ideas and opportunities for improvement and agree which ones are most suitable to test out in the natural environment.

FISHBONE DIAGRAM

A fishbone diagram is a visual way to look at cause and effect. It will help you sort your ideas.

GO TO TOOLKIT: FISHBONE DIAGRAM

Gather key stakeholders and team members who have personal knowledge of the processes and systems.

The problem or effect is displayed at the head or mouth of the fishbone diagram and is linked to your aim. Possible contributing causes are listed on the smaller “bones” under various cause categories.

Carry out the following:

- Agree on the problem statement (also referred to as the effect) and document it in the mouth of the “fish.”
- Agree on the major categories of causes for the problems (written as branches from the main arrow). Major categories often include: equipment or supply factors, environmental factors, rules/policy/procedure factors, and people/staff factors.
- For each cause, ask “Why does this happen?” and write each causal factor as a branch from the appropriate category.
- Continue to ask “Why does this happen?” about each cause. Write sub-causes branching off the cause branches.
- Continues to ask “Why?” and generate deeper levels of root causes and identify potential change options.

This will leave you with all the potential change options/areas that need exploring linked to your overall aim.

Do...

- ✓ Use the fishbone diagram tool to keep the team focused on the causes of the problem, rather than the symptoms.
- ✓ Leave enough space between the major categories on the fishbone diagram to add minor detailed causes later.
- ✓ Consider having team members write each cause on sticky notes and go round the group asking each person for one cause. Continue going through the rounds, getting more causes, until all ideas are exhausted.
- ✓ Note that the “five-whys” technique is often used in conjunction with the fishbone diagram – keep asking why until you get to the root cause.

RESOURCE/IMPACT MATRIX

A Resource/Impact Matrix will help you to decide:

- What options/actions are achievable and can be easily influenced
- Potential timescales for the different options
- If larger tasks need to be broken down
- Prioritising options

GO TO TOOLKIT: RESOURCE/IMPACT MATRIX

To use the Resource/Impact Matrix:

- List all the actions or change options on post-it notes
- All participants need to decide and agree how long each change option will take to be implemented successfully.

Then on the matrix stick the post it notes under each relevant section:

Quick Wins	Challenging Tasks	Hold-offs	Soft Targets
short term, low resource implications but high impact	longer term, higher resource implications but high impact	longer term, high resource implications and low impacts	short term, low resource implications but lower impact

This will help you understand which change options you can influence or test quickly, and which might need to be considered later in the future once the “quick wins” have been addressed.

ACTION PLAN AND MILESTONES

An action plan is needed to help monitor the progress and summarise how each action will be achieved, when by and who is responsible. You will already have created a number of actions through each step which need adding to the action plan. The action plan will have 2 key functions:

1. To ensure all areas of required actions have been taken into account
2. It breaks the achievement process down into manageable chunks.

GO TO TOOLKIT: ACTION PLAN TEMPLATE

Each action should be SMART: **S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime-related.

Each action must have a target date and specified leader assigned against them. The action plan should be shared with all individuals involved on a regular basis to make sure the project stays on track. You could aid this by pinning the action plan up somewhere so that the relevant people involved could continually view what actions are outstanding.

RAG rating can be used to help make each action status clear and to easily view what is on/not on track. RAG rating involves coding each action in RED, AMBER or GREEN

Rag rating colour	Definition	Action
Red	There is a significant issue with the action. The project requires corrective action to meet objectives. The issue cannot be handled solely by the project manager or project team. One or more aspects of project viability — time, cost, scope — exceed tolerances set by the project board.	The matter should be escalated to the project sponsor and project board immediately.
Amber	A problem has a negative effect on project performance but can be dealt with by the project manager or project delivery team. Action is taken to resolve the problem or a decision made to watch the situation.	A progress report by those taking the action forward is needed
Green	The project is performing to plan. All aspects of project viability are within tolerance.	No action needed

Review your Driver Diagram again to ensure all the correct drivers are listed as it is possible that you might have identified some more driving forces that need to be added.

PROJECT MANDATE

Complete all the remaining sections in your **PROJECT MANDATE**. At this stage, your mandate should be complete in anticipation for carrying out the tests of change. Your mandate should reflect all the preparation, investigation and engagement carried out in the previous steps.

At the end of this step you will have:

- Scoped out all the improvement ideas and how they link to your overall aim
- Agreed on which improvement initiatives to trial
- Considered and agreed the format of the project
- Formed an action plan of who will lead on the tests of changes and agreed timescales



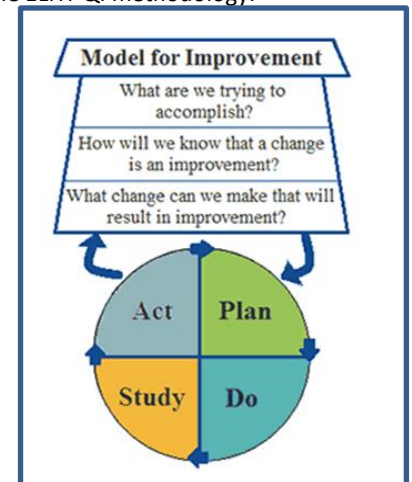
STEP 5 TESTING CHANGE

Aim of this stage: Carrying out tests of change in the working environment. You may not get the results you expect when making changes to your processes, so it is safer, and more effective to test out improvements on a small scale before implementing changes on a wide scale

PLAN-DO-STUDY-ACT (PDSA) CYCLE

The **Plan-Do-Study-Act (PDSA) cycle** is shorthand for testing a change — by planning it, trying it, observing the results, and acting on what is learned. It forms part of the **MODEL FOR IMPROVEMENT** which is a core component of the ELHT QI methodology.

What are we trying to accomplish?
You will have established this in Step 1 . You will have set a clear and focused aim.
How do we know if the change is an improvement?
If you make a change, this should affect the measures you defined in Step 3 and demonstrate over time whether the change has led to sustainable improvement.
What changes can we make that will result in improvement?
You have established what changes might result in an improvement by understanding your system in Step 2, and investigating options in Step 4.



PDSA cycles will help decide whether the proposed change will work in the actual environment.

You will need to:

- Agree with others which changes to test on a small scale
- Create multiple PDSAs of interventions/changes in the workplace to achieve your aim – these need to be in your action plan
- You will adapt your changes through each PDSA cycle until you have an intervention that is successful.
- You will measure the impact of your changes as part of your measurement plan

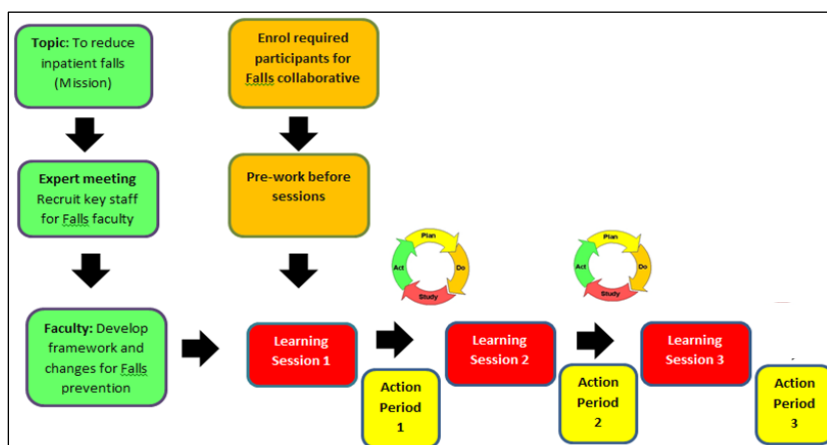
Review your measurement plan in **STEP 3** to ensure you have got the correct process measures which will monitor the success rate of the tests of change you have chosen. You can extend or shorten the time period for testing each PDSA cycle; depending on the level of improvement demonstrated in the relating measures.

GO TO TOOLKIT: PDSA WORKSHEET AND CYCLE



THE BREAKTHROUGH SERIES COLLABORATIVE (BSC) PROCESS

The BSC process involves multiple professionals, teams or services coming together to seek improvements in a specific topic area. Several small-scale rapid tests of change are used over a defined time period (usually 12 months). Work is split between face-to-face learning sessions and action periods between each learning session. Through collaborative learning and applying the model for improvement; changes are made in a cyclical fashion by repeating a process of implementation, measurement, and modification. If you would like to know more about the BSC process please contact: Quality.improvement@elht.nhs.uk for further advice and support.



At the end of this step you will have:

- Started to carry out tests of change based on your findings in **STEP 4** applying several PDSA cycles
- Updated your measurement plan to incorporate temporary measures to track the success of your PDSA cycles
- Started to actively track improvements relating to your overall aim



STEP 6- IMPLEMENTING CHANGE- INTRODUCE

Aim of this stage: Plan to implement the successful small scale changes into broad successful change which is consistent, safe and recognized to work.

UPDATE ACITON PLAN

Revisit your on-going Action Plan started in **STEP 4** and add the actions that need to be in place for wider implementation; think about:

Shared vision	How are you going to “sell” this change to the rest of your team?
Effective Leadership	How are you going to ensure this is in place consistently throughout implementation?
Time	How much time do you think it will take for team members to carry out the successful intervention?
Communication	What forum/meeting could you use to widely share updates and progress?
Data	Where could you visually place your measurements so everyone can track progress? Who will keep it updated?
Implementation	Include actions that need addressing as part of the implementation phase

As part of implementation; your stakeholders might change, therefore, re-evaluate who needs to be involved in supporting and leading the implementation phase. Update your action plan to incorporate the required input expected from them.

FORCE FIELD ANALYSIS

Force Field Analysis helps you make decisions as it helps you:

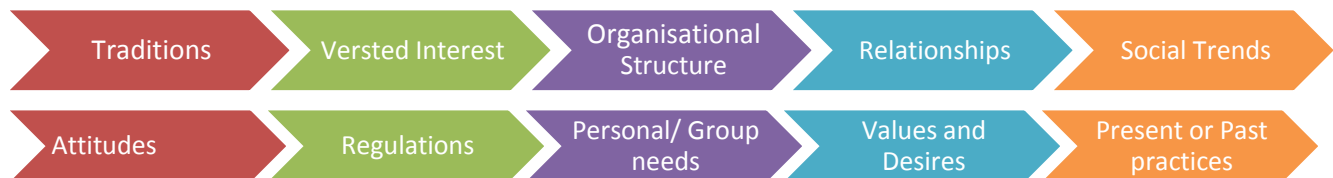
- Understand the forces for and against a change
- Communicate the reasoning behind your decision
- Decide whether to go ahead with the change
- Increase your chances of successful change

GO TO TOOLKIT FORCE FIELD ANALYSIS

When using the Force Field template, involve team members, experts and key stakeholders. In the template:

- Write the proposed idea/change you what to implement In the centre top column
- Identify what will happen if there is no action taken In the centre bottom column
- Add the forces AGAINST the change on the left side (e.g. costs, time elements, risks, duplication, extra duties...etc.)
- Add the forces FOR the change on the right side (e.g. improvement purpose, cutting out waste, easier to follow, cost savings)

Some other forces to consider are:



Once completed, allocate a score to each opposition from **1 – 5** (1 = weak force to stop/create change; 5 = very strong force to stop/create change). Adjust the width for each arrow depending on how high the score is; so the higher the score, the wider the arrow.

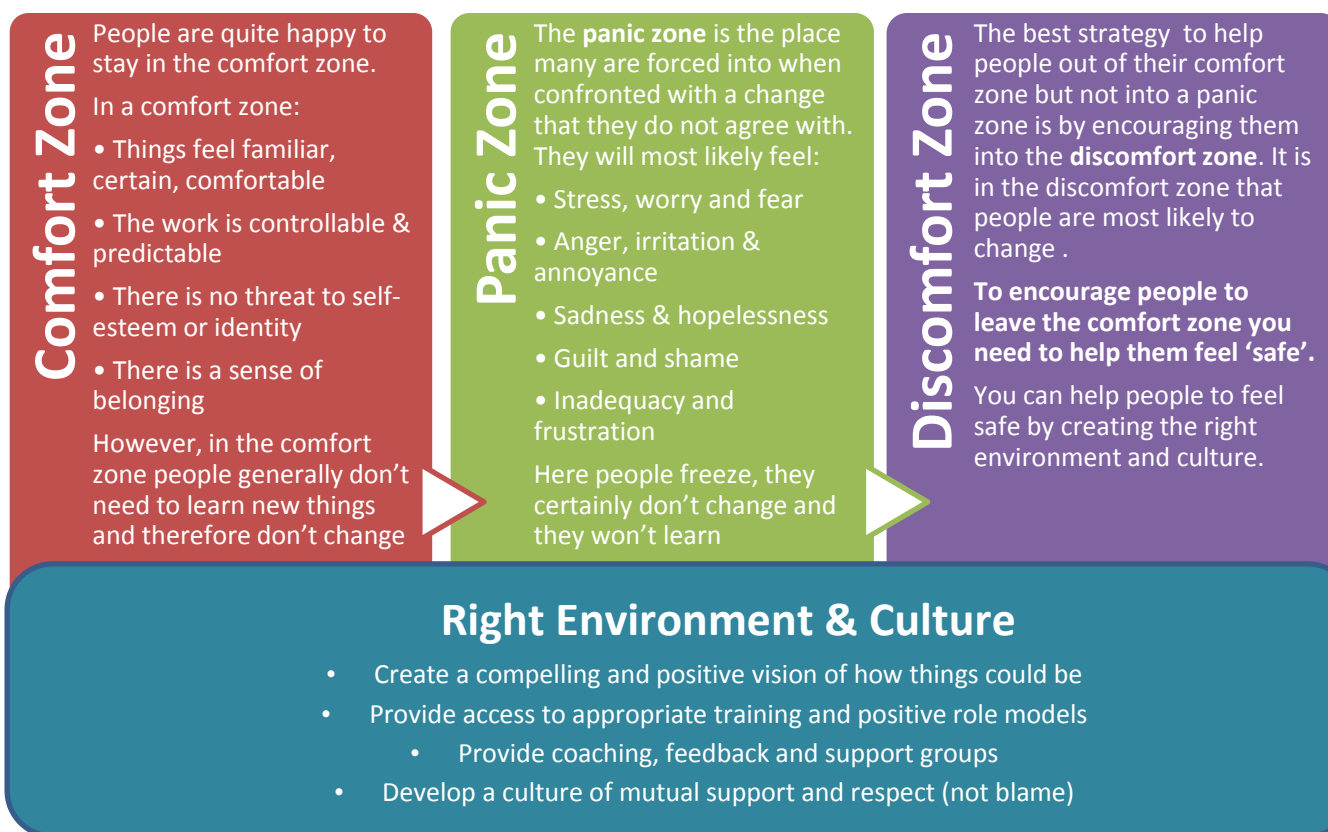
This will help you visualise the scale of the challenge to making your change idea happen. With key members of staff, explore the opposing forces that need addressing and supporting forces that need advancing to support the change required.

Do....

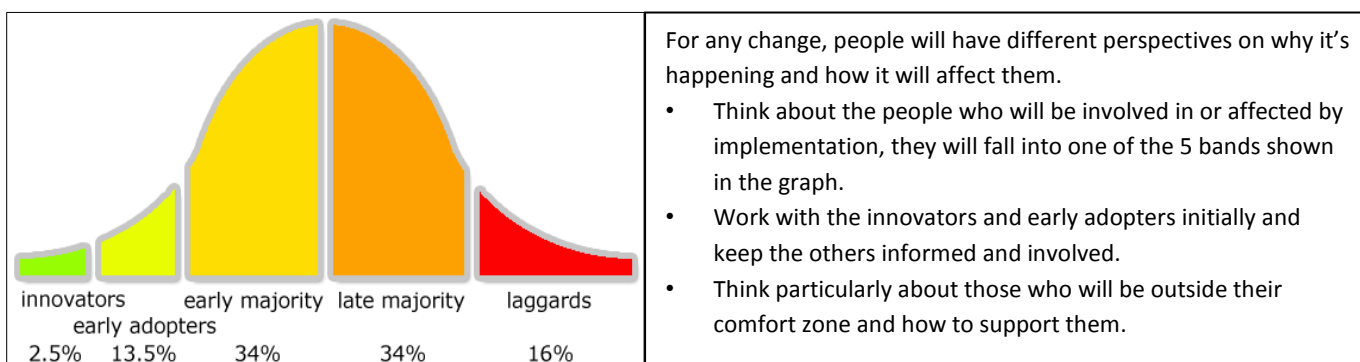
- ✓ Ask other key members for their input for the opposing/supporting forces (use more than 1 template if needed)
- ✓ Keep each force simple and precise as they are there to explore what needs to be influenced/considered
- ✓ There will be forces that you can't influence (e.g. external forces); recognition of some limitations will help with implementation because you are recognising and incorporating them.

HUMAN FACTORS

When introducing change it is vital to consider Human Factors that might influence the success of your change.



GO TO TOOLKIT HUMAN FACTORS LIST



You might want to consider setting up feedback forms to allow staff to give their thoughts, ideas and experiences relating to the changes and track how the spread has been managed in their area. The types of questions and feedback asked will depend on the scale of your spread and the type of change required.

At the end of this stage you will:

- Have planned the actions needed to launch implementation
- Reconsidered stakeholders who might influence implementation on a wider scale and gained their input
- Identified leaders/managers in each service area that need to incorporate the changes
- You will have considered Human Factors



STEP 7: CELEBRATE, SPREAD AND SUSTAIN

Aim of this stage: You will have implemented your change idea to your area of work, the greatest challenge is being able to sustain and spread the changes you have made.

EVALUATION

Evaluation is needed at the end stages of any project as it is a systematic assessment of the implementation and the impact of a project. The value of the initiatives are judged and reflected upon to understand end points and assess if you have achieved everything expected.

There are 3 types of evaluation:

Project Monitoring: Looking at the routine functioning of your improvement. Is it doing what you wanted it to do?

Process Evaluation: Looking at the way in which your improvement is implemented and runs. What can you learn from the process?

Impact Evaluation: Looking at whether or not your improvement is delivering the objectives set. Are you getting the outcomes you planned for?

SHARE AND CELEBRATE

There are many ways in which you can share and celebrate your findings such as:

- A slot on the Trust meeting agenda e.g. Trust Board Meeting, Executive Management Team
- Articles in staff newsletters or on the Trust intranet
- Hold an event within your team/department to celebrate the achievements
- Write a story board about your project, that can be displayed prominently within your area
- Consider a quarterly communications feedback method e.g. Newsletter to sustain the awareness
- Consider submitting a poster to a conference or submitting for an award

This builds momentum, rewards the team and encourages further improvements.

SPREAD: ENGAGEMENT

Methods of communication are crucial to ensuring spread is wide scale. Analysing and displaying your measurement data in parallel with your staff and patient stories will demonstrate the impact of your improvement. Engagement is needed to plan how you are going to embed continuous measurement for improvement. Spread places the focus on accountability, responsibilities and assurance for creating spread that is consistent and accepted by all relevant services. Consider spread through key stakeholders, senior leaders, hierarchies and networks. **TOOLKIT: ENGAGING THE RIGHT PEOPLE**

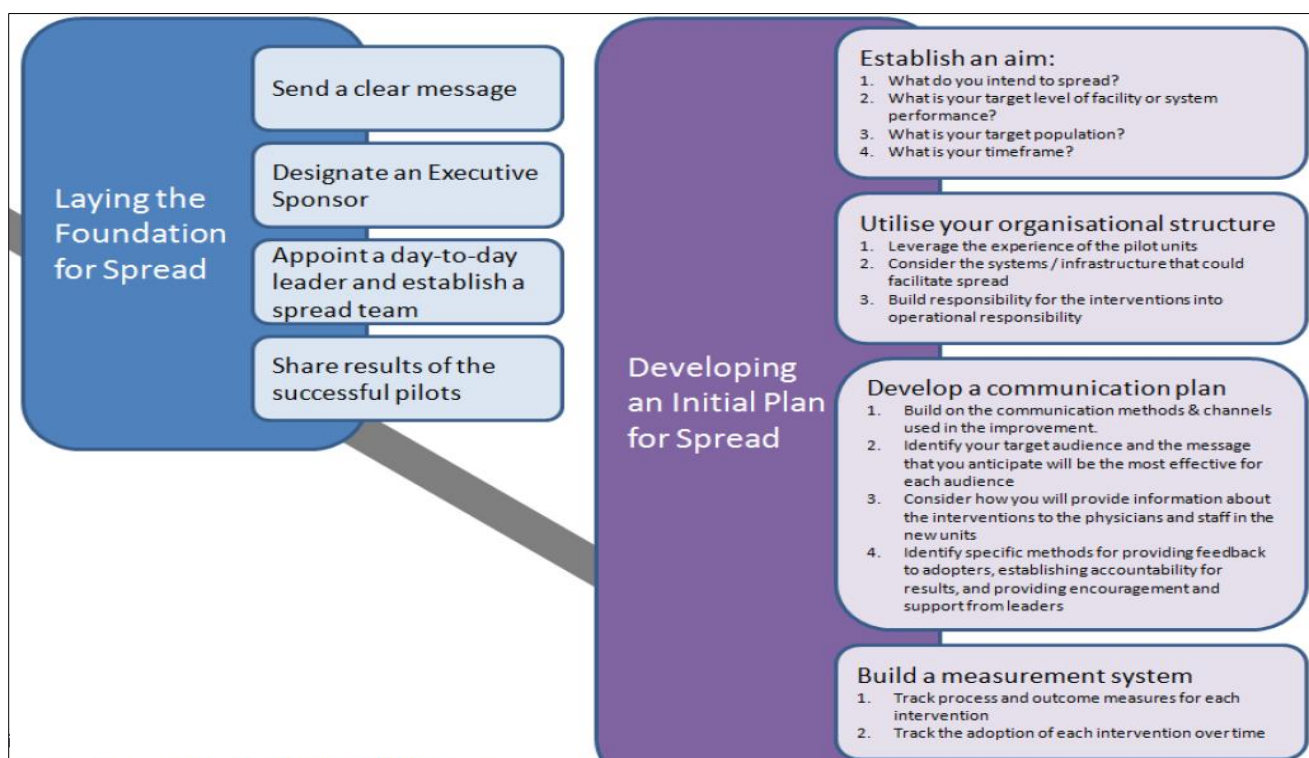
SPREAD PLAN

Spread can be an extension of your action plan or you can create a separate spread plan. Within the plan you need to consider:

- How your project aim can be revised/extended to the total area where it needs to spread to
- What systems are needed to facilitate spread
- Utilise the pilot areas as exemplars
- Agree responsibilities with operational managers
- Revise your measurement, reporting and communication plan
- Values, motivations and attitudes from each audience type will be different and should be considered in the spread plan
- Continuously monitor the effectiveness of the spread initiatives and refine the spread plan accordingly
- Innovating to fit the local context– adapting an idea to reflect local circumstances and attitudes.

Factors that are likely to help spread occur are:

- Clear advantage compared to the current ways
- Compatibility with current systems and values
- Simplicity of change and its implementation



SUSTAINABILITY MODEL

The Sustainability model is a diagnostic tool that will identify strengths and weaknesses in your implementation plan and predict the likelihood of sustainability for your improvement initiative.



At this stage you will have:

- Evaluated and closed off your project and celebrated the achievements made
- Transferred your improvement ideas/project from a small scale to wide scale spread
- Considered a variety of factors that can hinder sustainability and tackled the ones applicable to your improvement
- Embedded the changes through continuous regular sharing of measurement data and discussions at service and Divisional level meetings
- Planned how and who will manage sustainability factors in service areas

TOOLKIT

Project Charter/Mandate Template

Document Control:

Role	Name	Date	Signature
(Author)			

Amendment History:

Issue Status	Version	Date	Actioned by	Discussed / Reviewed

Approvals:

This document must be approved by {insert}

Date	Version

Project Charter

Aim:		Team (Key Stakeholders) Executive/Divisional Sponsor: Senior Leader: Project Leader: Team Members:
Measures:		
Milestones	Goals	Other Resources needed: Potential Constraints:
30 days		
60 days		
90 days		

Introduction

The purpose of a Project Mandate is to describe the overall assessment and achievability of the proposed project. It will form the baseline for outlining the criteria required to achieve the aim. Describe this in relation to your aim, objectives and purpose

[Insert]

Background (Why)

Provide a brief summary of why you are undertaking this project/change.

What has instigated this? Try to relate it to any National Initiatives or the current local working situation

[Insert]

Strategic Objective

Outline how this project is linked to a strategic objective, policy, guidance or strategy.

[Insert]

Aim: (What)

An aim of an improvement project should be **SMART** and clear in describing the system to be improved, include a measureable numerical aim (e.g. percentage) and when you want to achieve it by (Target date).

[Insert]

Project Approach (How) Examples:

PDSA Cycles

- PDSA cycles of interventions to process failures; develop, test and assess whether the changes made are leading to improvements

Education and Training

- Raise awareness and education to staff. E.g. on-line training will be created for a wider range of staff to access

Driver Diagram

- A driver diagram will be created to determine and understand the drivers that influence this project

SPC Charts

- To track the progress of the tests of change being carried out via the collaborative working

Change Package

- A change package will include the end interventions that have been successful via PDSA cycles.

Process Mapping

- Current processes and procedures to assess where improvements can be made

Key Stakeholders (Who)

The **Executive Lead** for this project is:

The **Senior Project Lead or Clinical Lead** for this project is:

The **Project Lead** for this project is:

Who do you need to engage with on a wider scale from the start of your project?

- Provide leadership on an operational day to day basis
- Have expert knowledge in relation to your project
- Extended service members that might influence the success of the project
- Safety/Risk or governance role
- Performance/information representative

[Insert]

Create terms of reference for agreement in roles, responsibilities and how people can work together to accomplish a shared aim. What is expected from each member? Be specific and create accountability for roles. Some examples you can add are:

- Strategic oversight of the project and a clear focus on the outcome which needs to be achieved
- Create the learning sessions and action plans as well as tracking progress
- Address obstacles/blockers preventing PDSA cycles taking place
- Gather/collate best practice methods
- Ensure all appropriate services are in place and accountable for their role in the project

[Insert]

Scope (Where)

Where is the change going to take place? E.g. Department, wards...etc. If you want to create change in several areas/wards; start of small scale with a mixture of high and low performing areas.

[Insert]

Communication Plan

Draft a communication plan will help you sustain engagement throughout the project:

Communication Activity/ Audience	Description	Person Responsible	Frequency	Timescales
E.g. Newsletter – wards impacted by project	Newsletter detailing project progress to raise awareness and achievements to date	Project Lead with Communications Team	Monthly News Letter to be created	Continuous

Current Evidence of Interventions

Have you considered checking the Internet for interventions that are evidence based and successful in supporting your aim? Do you have contacts at other Trusts who will be willing to share good practice? The interventions must directly relate to your aim

[Insert]

Outcomes to Achieve (Outcome Measures)

Please refer to the 7 steps to Safe Personal & Effective care for guidance on outcome, process and balancing measures.

Briefly describe each outcome measures and how this measurement will be gathered:

[Insert]

Measurement Plan

The measurement plan provides specific details of how each measurement will be achieved. See blank Measurement Template in the Appendix of the 7 steps guide. Include: When each measurement will be collated, what it will show, how it relates to your aim and who will be responsible for tracking/collating the measurements.

[Insert]

For most projects, it is recognised the timescales are influenced by input from a wide range of staff, services and the project implementation stages. Outline below the key milestones you want to achieve and when by:

Milestones	Target Date

Resources

Are there any resource implications that might need to be considered in the future? Do any of the proposed best practice interventions have cost implications?

[Insert]

Department Approval

Is there a Committee or Divisional meeting that has to approve the project?

[Insert]

Risk/Constraints

Possible risks or constraints will arise during the implementation of the project and will need to be addressed at that stage. However, it's important to outline any early potential risks/constraints in achieving the project and how they will be addressed:

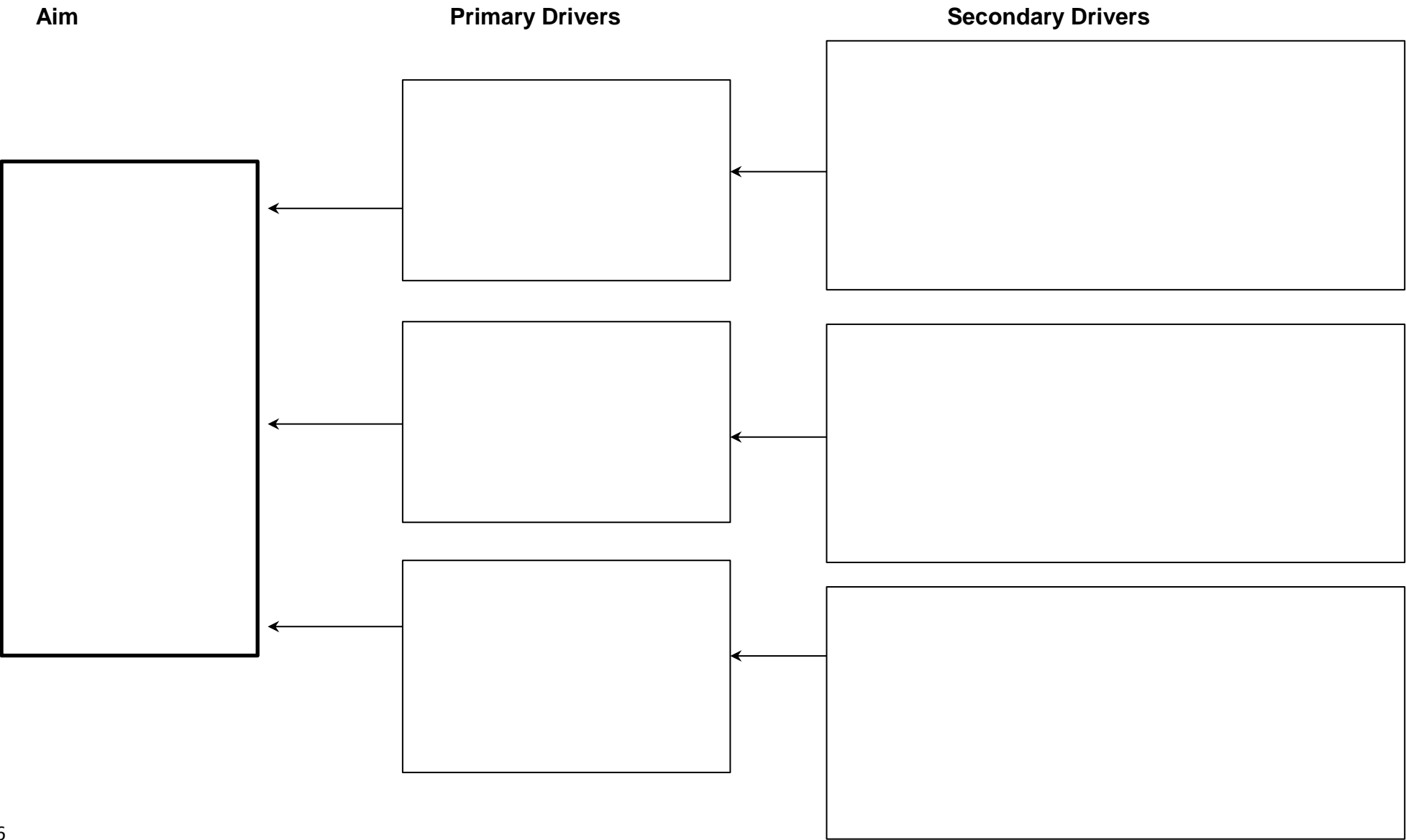
Potential Risk	Description	Level of Risk	Action required to minimize
Time constraints/commitment (EXAMPLE)	The time commitment needed from a wide range of staff to participate and lead on the Learning sessions and changes required	High	Plan of Stakeholder involvement to be designed prior to starting this project. Senior Leadership to be secured at the very early stages.
		Intermediate	

As part of the 7 steps, you will be completing other supporting documents such as a Measurement Plan and Driver Diagram. Add them to the end of this document as an appendix.

Once you have completed your Project Mandate, remove all the guidance so that you are left with just your Project Mandate

Also, go back to the start and complete the Project Charter template on the first page

STEP 1: DRIVER DIAGRAM TEMPLATE



Driver Diagram

Overview

A driver diagram is an immensely powerful tool that helps you to translate a high level improvement goal into a logical set of underpinning goals ('drivers') and projects. It captures an entire change programme in a single diagram and also provides a measurement framework for monitoring progress.

The layout of a driver diagram is easily explained via a simple example

Imagine your personal goal was to reduce the amount you spend a petrol (i.e. 'decrease fuel costs'). The diagram below shows a typical driver diagram constructed around this goal.

1. The goal

The driver diagram starts with a clearly defined and measurable goal. This is the focal point for your change efforts and generally links to your overall aim

Decrease fuel costs

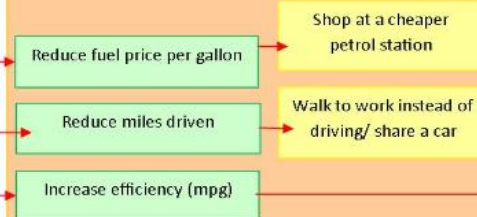
2. Primary drivers

The overall goal is linked here to three factors that are believed to have a direct impact on it (i.e. fuel costs will go down if you find cheaper fuel, reduce the number of miles you've done)

This first set of underpinning goals are referred to as primary drivers because they drive achievement of your main goal

These drivers may act independently or in concert to achieve the overall goal

Primary Drivers



To create a driver diagram

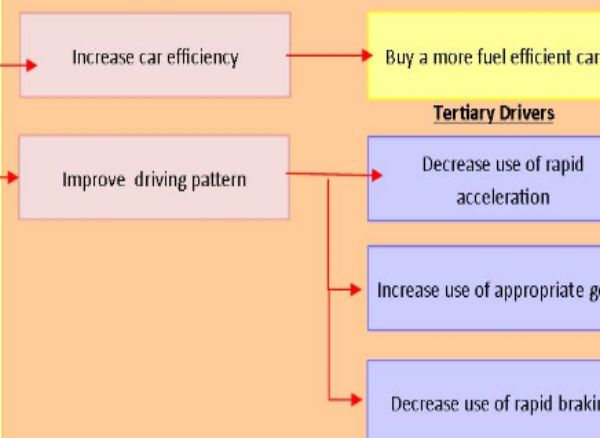
- Start with a clearly defined measurable goal. It should describe what you intend to achieve and by when.
- Get a group of people together who understand the different aspects of the improvement topic (i.e. subject matter experts). Ask them to brainstorm potential drivers (i.e. the areas where improvement is needed).
- Cluster the ideas to create an agreed set of 'drivers'. Make sure you use language like 'improve' or 'decrease' and that each driver is clearly defined and measurable
- Discuss the need for new driver or whether some of the drivers should be eliminated (if they are wrong or immaterial)
- Identify the links between the drivers to create primary, secondary and tertiary drivers.
- Get the group to identify any balancing goals or balancing measures
- Select improvement projects that you believe will impact upon your drivers

3. Lower level drivers

The process of breaking down a goal can continue to lower levels to create secondary or tertiary drivers (and even further if required)

Here it is done for one of the primary drivers. Increased efficiency can be achieved through technical improvements (i.e. the car's efficiency) or improvements in the way you drive it.

Secondary Drivers



Tertiary Drivers

4. Projects or actions

The ultimate aim of a driver diagram is to define the range of projects (i.e. actual change initiatives) that you may want to undertake. The can appear anywhere in the hierarchy of the driver diagram- wherever makes more sense

Driver diagrams therefore help to break down an overall improvement goal into underpinning goals (i.e. 'drivers') to the point where you can easily define the changed that you need to undertake

Improve driving habits, avoid unnecessarily accelerating and decelerating

5. Balancing goals or measures








No increase in lateness for work

The goal you have chosen for your driver diagram will not exist in isolation. Often you will have identified related goals which (which may have their own driver diagrams).

These goals represent a 'balancing' element to your change efforts. Here, decreasing your fuel costs should not occur at the expense of being routinely late for work (as you wait for the cheap petrol station to open) This helps to shape the projects that you chose to undertake

Frequently we chose just to measure performance against these balancing goals (rather than actively do something about them)- so we describe them as 'balancing measures'

STEP 2: SIX THINKING HATS

	Managerial: The Blue Hat is used to manage the thinking process. It's the control mechanism that ensures the Six Thinking Hats guidelines are observed and keep people in the same 'hat' until it's time to move onto the next 'hat'.	<ul style="list-style-type: none"> • What problem are we facing? • How can we best define this problem? • What is the goal, aim and outcome? • What do we seek to achieve by solving this problem?
	Neutral: The White Hat calls for information known or needed. "The facts, just the facts."	<ul style="list-style-type: none"> • What are the facts? • What do we know about this problem? • What don't we know about this problem & need to find out?
	Optimistic: The Yellow Hat symbolizes brightness and optimism. Under this hat you explore the positives and probe for value and benefit	<ul style="list-style-type: none"> • How can I best approach this problem? • How can I logically and realistically make this work? • What positive outcomes could result from this action? • What are the long-term benefits of this action?
	Judgement: The Black Hat is the devil's advocate - why something may not work. Spot the difficulties and dangers; where things might go wrong. Probably the most powerful and useful of the Hats but a problem if overused.	<ul style="list-style-type: none"> • What can go wrong? • What is the fatal flaw within this idea? • How many ways is this likely to fail? • What are the potential risks/consequences associated with this?
	Intuitive: The Red Hat signifies feelings, hunches and intuition. When using this hat you can express emotions and feelings and share fears, likes, dislikes, loves, and hates.	<ul style="list-style-type: none"> • What do you feel about this? • What is my gut feeling telling me about this solution? • Based on my feelings, is there a better way to go about this? • Intuitively, is this the right solution to this problem?
	Creative: The Green Hat focuses on creativity; the possibilities, alternatives, and new ideas. It's an opportunity to express new concepts and new perceptions.	<ul style="list-style-type: none"> • How else could we look at this? • What alternative possibilities could exist here? • Could this be done in another way? • How can I look at this problem from a unique perspective?
	Managerial: After all hats have had their say, the blue hat continues to circulate between the hats in a logical way. It may for instance focus its attention on the red hat for further intuitive insights based on the green hat's creative ideas. Or it may ask the white hat to gather more facts and information about the dangers that the black hat brought to mind. After which it may ask the yellow hat to bring forth some logical positive solutions based on this new found knowledge and information	<ul style="list-style-type: none"> • How would we summarise our findings so far?

STEP 2: EXPERIENCE BASE DESIGN: INTERVIEWING STEPS AND TIPS

Steps and Tips
Give the patient or carer face-to-face contact offering an invitation. The invitation should be by a member of staff who is known to the patient and involved with the project so they can answer any questions that may arise.
A follow-up letter should be sent to the patient or carer soon after this invitation enclosing a detailed information sheet describing the purpose of the interview as well as the project.
Interviewing can take place anywhere at the patient or carer requests – the workplace, the home, the place where the experience has taken place: Make sure you offer them this option.
Ideally the Interview should be tape-recorded; consideration will need to be given to the environment (for example, likely noise, interruptions, lighting) in which the interview will take place.
It should be made clear that partners or carers of patients are welcome to be present at – or participate in – the interview, if the patient would like them to do so.
Before starting, the purpose of the interview should be reiterated to the interviewee (based on the written information previously provided).
Confirm consent: Explain to the interviewee they can withdraw, either before, or during the interview, if they wish. They also need to know there is no compunction to answer any questions they feel uncomfortable with. Make sure that you have obtained a signed consent form before the interview begins.
Interviewers should introduce themselves and make it clear that they are not part of the clinical team that directly provides or provided the patient's care. The way the interviewer introduces themselves sets the context for the interview and will influence what the patient or carer feels comfortable saying.
Ask as few questions as possible and make sure questions that are asked are open-ended and designed to encourage the patient or carer to keep telling their story.
Develop a real interest in your interviewee; make them feel important and show interest in their ideas & opinions. Listen well and respectfully, remain neutral and avoid implying value judgments about what you are hearing.
Use open-ended prompts that keep the flow going; think of your task as being there to help the patient/carers reconstruct the story of their personal experience. Examples: What do you remember about what happened? Can you tell us your story from the beginning? Tell me what you know about ...
The interviewer must be able to provide appropriate contact names and telephone numbers so that the patient or carer can seek further support if they wish.
Thank them for their time and sharing their experience. Allow them the opportunity to ask any final questions.
It is important that the interviewee is clear about what will happen following the interview and how their story will be used to improve services. As well as informing the patient of these plans at the end of the interview it is good practice to also send a letter detailing how the material will be used and giving them the opportunity to add to – or correct – the transcript of the interview

**If you are not confident or experienced in facilitating patient interviews, seek advice from
the Patient Experience Team – PatientExperience@elht.nhs.uk**

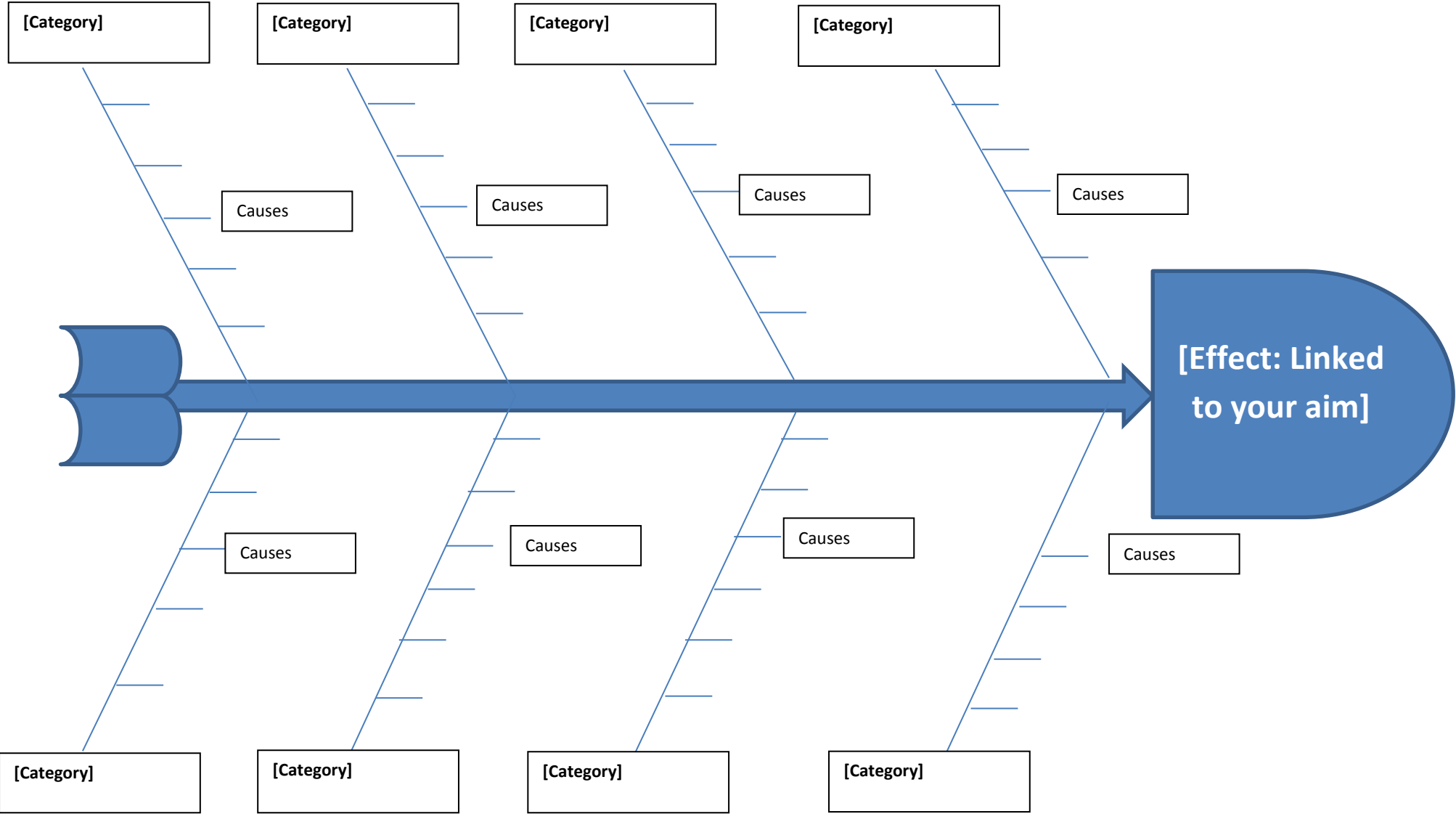
STEP 3: DATA COLLECTION LIST

Questions	What to consider	Action
<i>Who will collect data?</i>	Are they competent in carrying out this task and have they allocated time for this?	
<i>What data will they collect?</i> <i>Are these data <u>attributes</u> (yes/no, categories) or <u>variables</u>? (measured numerical data)</i>	Clarity on what is needed and why it needs to be collected. (Operational definitions need to be available and understood)	
<i>Where will they collect the data?</i>	Need to know where in the process data will be gathered and in which locations.	
<i>When will they collect the data?</i>	Need to agree frequency of data collection. This depends on process throughput and cycle time.	
<i>How will the data be recorded?</i> <i>Is there an existing source?</i>	Sometimes existing information systems can be adapted, seek advice from data and information experts	
<i>Will we count every event or take a sample? If sampling how will we choose the sample?</i>	For improvements you need limited (just-enough) data so frequent sampling is often useful	
<i>Are there obvious stratifiers?</i>	Stratifiers are subdivisions of data that reflect known differences in the process (for example by diagnostic group, day vs. night shift, week-day care and weekend care) Use subject matter expertise to identify known differences in processes of care.	
<i>What analytical tools do we plan to use?</i>	How will the data be analysed and presented so you can see if changes are improvements? What statistics (e.g. median, mean, range and standard deviation) will be used?	
<i>How will data be presented?</i> <i>– type of chart or table</i>	Ideally this should be a SPC chart (Covered in STEP 3)	
<i>Who will create the charts?</i>	The person responsible should be competent in data manipulation and analysis	
<i>Who (or which group) will receive and review the results? How often?</i>	Create a process for continuously reviewing the results	

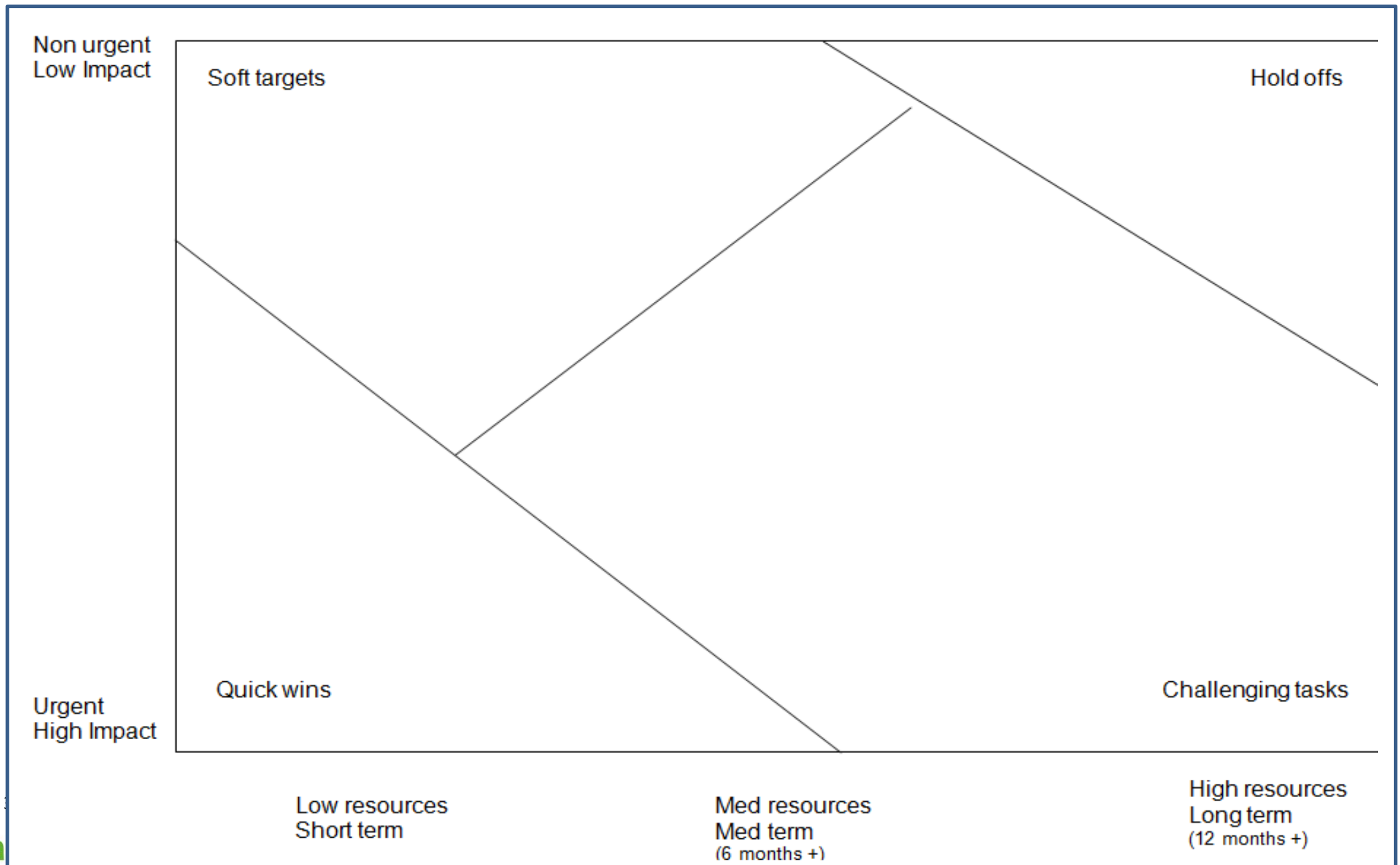
STEP 3: MEASUREMENT PLAN

Measure <i>What is it that you want to measure?</i>	Type Outcome Process Balancing <i>Which one is it?</i>	Definition What is included?	Concept Why Measure it?	Sample Are you collecting on all occurrences?	Numerator How many times does it occur?	Denominator Out of how many chances?	Data Collection <i>How will the data be collected?</i>	Person Responsible
% of patients who have a fall (with avoidable harm) EXAMPLE	Outcome measure	The % of all patients who have a fall (with avoidable harm) on the wards	To assess if there has been an overall reduction in falls	All occurrences to be collated	% of patients who have a fall (with avoidable harm)	% of patients on the ward	Via Datix reporting system	Informatics team

STEP 4: FISHBONE DIAGRAM



STEP 4: RESOURCE/IMPACT MATRIX (Judge Ideas against agreed criteria such as: cost, practicality, realism, fit with desired objectives)



STEP 4: ACTION PLAN TEMPLATE

Title of Project:			
Lead for Implementation plan:			
Date updated:		Version:	

What is the action/task that is needed before the implementation?	When does this action need to be completed by?	Who will lead on completing this action?	What is the progress so far?

STEP 5: PDSA WORKSHEET

PDSA Worksheet for Planning Tests of Change

Aim: (Big = what is the overall aim you are trying to achieve? Small= what is the first step?)

Big aim:			
Small aim:			
Describe what your first test of change will be <i>(Every aim will require multiple tests of change)</i>	Person responsible	When will the test take place?	Where will the test take place?

Plan:

List the tasks needed to set up this test of change <i>(include getting ready to measure)</i>	Person responsible	When to be done?	Where?
Predict what will happen when you carry out your test	How will you know whether the change is an improvement? <i>(What will you measure and how?)</i>		

Do:

Describe what actually happened when you ran your test <i>(note any unexpected events or problems)</i>

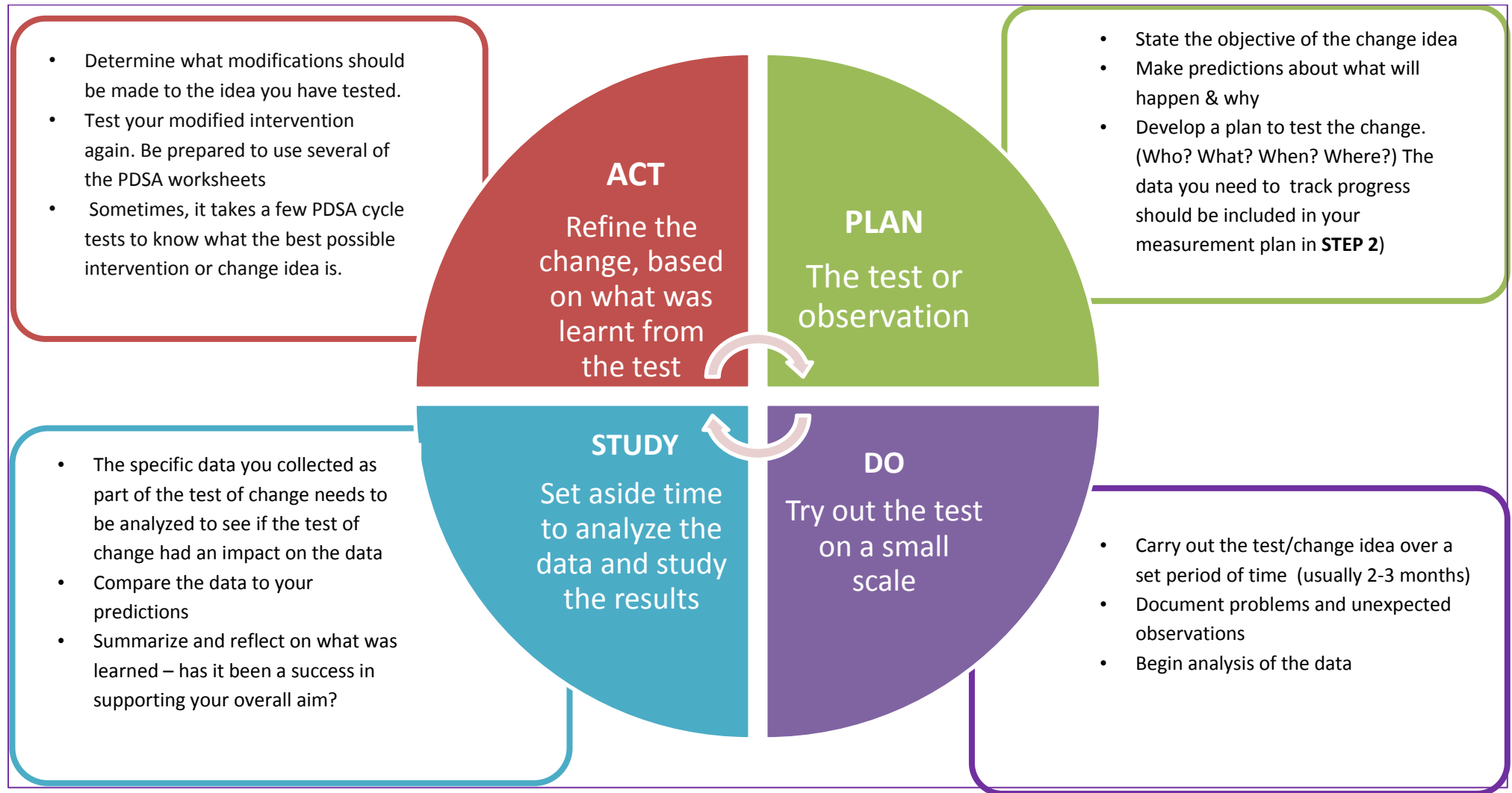
Study:

Describe your results and how they compared to your prediction

Act:

From your learning above, what modifications you will make to your plan for the next cycle of tests?

STEP 5: PDSA CYCLE



STEP 5: FORCE FIELD ANALYSIS

Forces against change (opposing)		Force Field analysis template	Forces for change (supporting)	
SCORE (1-5)				SCORE (1-5)
<input type="checkbox"/>	[INSERT opposing change]	[INSERT: what is the change/vision/idea you want to implement?]	[INSERT supporting reason]	<input type="checkbox"/>
<input type="checkbox"/>	[INSERT opposing change]	[INSERT: What is the result of maintaining status quo?]	[INSERT supporting reason]	<input type="checkbox"/>
		Include:		
<input type="checkbox"/>	[INSERT opposing change]	The current reasons why you want to change	[INSERT supporting reason]	<input type="checkbox"/>
		Any current delays/poor performance concerns		
<input type="checkbox"/>	[INSERT opposing change]	Any current "chaotic" working culture	[INSERT supporting reason]	<input type="checkbox"/>

STEP 6: HUMAN FACTORS

Here is a checklist for you as an Improvement Leader to manage the **human dimension of change** by working with individuals more effectively. Do you:

Human factor	How have you done this?
Put your main effort into trying to understand the other person? Every person is unique – respect the other person's view of the world	
Develop a range of styles for working with others? Don't just rely on one or two ways Different people have different personal styles that affect how they respond to information and how they communicate thoughts and ideas.	
Ask open questions, listen carefully to the answers and show you are listening by using active listening skills?	
Create a real rapport with the other person with the appropriate non-verbal communication?	
Ask for feedback? Are you aware of yourself and how you appear to others? Are you willing to be flexible, to learn and keep changing what you are doing until you achieve the results you want?	
Understand that all behaviour is useful in some way? Behaviour is the most important information about a person, but people are not their behaviours	

STEP 7: SUSTAINABILITY

Factor	Importance to sustainability
Monitoring progress	<ul style="list-style-type: none"> Does the change require special monitoring systems to measure improvement? Is there a feedback system to reinforce benefits and progress and initiate further actions? Are mechanisms in place to continue to monitor progress beyond the formal life of the project?
	Sustainability process example <p>If your aim was to reduce the cancer waiting times for first appointments, have an on-going data measurement to show how many patients are seen after x number of days on a weekly basis. This will help you identify areas where sustainability is declining.</p> <p>Also, set up a formal reporting structure (e.g. the measurement is reported at team meetings or divisional meetings) to help keep the awareness raised and help embed the change.</p>
Training and involvement	Importance to sustainability <ul style="list-style-type: none"> Do staff play a part in innovation, design and implementation of the change? Have they used their ideas to inform the change process from the beginning? Is there a training and development infrastructure to identify gaps in skills?
	Sustainability process example <p>For example, if your improvement idea involves nurses assessing patient's risks, try to ask ward areas to keep a log of staff training levels.</p> <p>Keep in touch with as many people as possible so you can track where new challenges arise. These challenges need addressing early on to sustain the improvement changes made.</p>
Behaviours	Importance to sustainability <ul style="list-style-type: none"> Are staff encouraged & able to express their ideas regularly throughout the change process and is their input taken on board? Do staff agree that the change is a better way of doing things?
	Sustainability process example <p>It's important to recognise external factors that might hinder the sustainability of your improvement. Through engagement, feedback and on-going involvement try to track any potential new challenges or changes that might need further small scale PDSA cycles (done by staff) to refine areas that might need adapting.</p>
Senior Leaders	Importance to sustainability <ul style="list-style-type: none"> Are the senior leaders trusted & influential? Are they involved in the initiative, do they understand it and do they promote it? Are they taking personal responsibility to help break down barriers?
	Sustainability process example <p>It's important to ensure that leadership is an ever remaining presence. They might not have to get involved as much once the changes have spread; but keep them engaged and use senior leadership to influence sustainably.</p>
Clinical Leaders	Importance to sustainability <ul style="list-style-type: none"> Are the senior leaders trusted & influential? Are they involved in the initiative, do they understand it and do they promote it? Are they taking personal responsibility to help break down barriers?
	Sustainability process example <p>If your improvement idea requires clinical staff to change ways of working or incorporate a new process; it's important to ensure certain clinical leaders will reinforce the required change long-term. They are influential in promoting the change with clinical staff so keep them engaged and updated.</p>

Fit with Aim and culture	Importance to sustainability
	<ul style="list-style-type: none"> • Is the aim of the change clear and shared? • Are they clearly contributing to the overall Organisational strategic aims?
	Sustainability process example This depends on the scale and nature of your improvement idea. Consider sustainability through promoting it alongside the Organisational aims.
Infrastructure	Importance to sustainability
	<ul style="list-style-type: none"> • Are staff fully trained and competent in the new way of working? • Are there enough facilities and equipment to support the new process? • Are new requirements built into job descriptions? • Are there policies and procedures supporting the new way of working? • Is there a communication system in place?
	Sustainability process example Embedding the change idea into the infrastructure helps to achieve sustainability. Consider different ways this could be done such as job descriptions, Personal Development Reviews, part of/new procedures. A communication system is needed to ensure new staff or other services are fully aware of what is expected and how to incorporate the change into day to day working. You could consider creating an operating guide that could be shared widely.
Benefits beyond helping patients	Importance to sustainability
	<ul style="list-style-type: none"> • In addition to helping patients, are there other benefits? For example, does the change reduce waste or avoid duplication? • Will it make things run more smoothly? • Will staff notice a difference in their daily working lives?
	Sustainability Process Example Being able to demonstrate all the benefits will help sustain the changes. Think of all the positive impacts the changes have for: Patients, staff, certain services, costing, time...etc. Make a list of them all and promote them at every opportunity.
Credibility of benefits	Importance to sustainability
	Are benefits to patients, staff and the organisation visible? <ul style="list-style-type: none"> • Do staff believe in the benefits? • Can all staff clearly describe the full range of benefits?
	Sustainability Process Example If your change is on a wider scale, ask managers in other areas or senior leaders to promote the benefits you have found. Make sure the benefits are “visible” and understood by staff.
Adaptability	Importance to sustainability
	Can the new process overcome internal pressures, or will this disrupt the change? <ul style="list-style-type: none"> • Does the change rely on a specific individual or group of people, technology...etc., to keep it going? • Can it keep going when these are removed?
	Sustainability Process Example Over time, changes happen which might disrupt your change. Plan ahead and think about trying to make your change SYSTEM dependant rather than PERSON dependant. Even though staff might have to carry out the change, try to incorporate it into a systematic way of working.

USEFUL NATIONAL GUIDES:

NHS institute for Innovation and Improvement:

Measurement for improvement

http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/methodology_for_measuring_benefits.html

Managing Capacity and Demand

http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/demand_and_capacity_-_basic_concepts.html

Process Mapping

http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/process_mapping_-_an_overview.html

Going Lean

http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/lean.html

Managing the Human Dimensions of change

http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/human_dimensions_-_human_barriers_to_change.html

Sustainability

http://www.institute.nhs.uk/sustainability_model/general/welcome_to_sustainability.html

Working with groups

http://www.institute.nhs.uk/building_capability/building_improvement_capability/improvement_leaders'_guides%3A_general_improvement_skills.html

NHS England: Improving Quality

NHS Improving Quality

<http://www.england.nhs.uk/ourwork/qual-clin-lead/>

Health Foundation

Quality improvement made simple

<http://www.health.org.uk/sites/default/files/QualityImprovementMadeSimple.pdf>

Skilled for improvement

<http://www.health.org.uk/publication/skilled-improvement>

Spreading improvement ideas

<http://www.health.org.uk/sites/default/files/UsingCommunicationsApproachesToSpreadImprovement.pdf>

Involving patients and carers

<http://www.health.org.uk/sites/default/files/InvolvingPatientsInImprovingSafety.pdf>

Evaluating improvement

<http://www.health.org.uk/sites/default/files/EvaluatingHealthcareQualityImprovement.pdf>