NHS
Institute for Innovation and Improvement

Improvement Leaders' Guide
Sustainability
and its relationship with spread and adoption

General improvement skills

Improvement Leaders' Guides

The ideas and advice in these Improvement Leaders' Guides will provide a foundation for all your improvement work:

- Improvement knowledge and skills
- Managing the human dimensions of change
- Building and nurturing an improvement culture
- Working with groups
- Evaluating improvement
- Leading improvement

These Improvement Leaders' Guides will give you the basic tools and techniques:

- Involving patients and carers
- Process mapping, analysis and redesign
- Measurement for improvement
- Matching capacity and demand

These Improvement Leaders' Guides build on the basic tools and techniques:

- Working in systems
- Redesigning roles
- Improving flow
- ▶ **Sustainability**
- Technology to improve service

You will find all these Improvement Leaders' Guides at
www.institute.nhs.uk/improvementleadersguides

Every single person is enabled, encouraged and capable to work with others to improve their part of the service

Discipline of Improvement in Health and Social Care

Quality Improvement often takes
longer than expected to take hold and
longer still to become widely and
firmly established within an
organisation

Chris Ham: Professor of Health Policy and Management,
Health Services Management Centre, University of Birmingham

Contents

1 What is the guide about and who is it for?

Improvement is for everyone and like the other Improvement Leaders' Guides in the series, this is for anyone involved in health care, at any level, who wishes to improve services and care for patients. Like the other guides it does not give all the answers. As the title suggests, it is a guide to help you and links to relevant other parts of this series as well as references and websites.

Information contained within the guides details good practice. The series is not designed to be a set of text books on improvement, but they introduce the different elements of improvement work which will give you a good start and hopefully stimulate your interest to find out more. Collectively, the Improvement Leaders' Guides form a set of principles for creating the best conditions for improvements in healthcare. What this guide will do is help you think about ways to influence the sustainability of your improvement so that it can give the greatest benefit over its lifetime.

You may have seen an earlier Improvement Leaders' Guide on '*Sustainability and Spread*.' by The NHS Modernisation Agency. Since that was published, our knowledge about sustainability and spread has improved greatly. Several excellent pieces of work have been done on this topic and the NHS Sustainability Model and Guide© (NHS Institute; 2006) has been published. www.institute.nhs.uk/sustainability

So how is this guide different?
In the previous guide, sustainability and spread were both considered in some depth. This guide concentrates mostly on sustainability but we know that spread is also very important, so this is dealt with separately in the section '*How does sustainability link to spread?*' You will see that the underlying thinking for success in both sustainability and spread is similar, so the ultimate aim is to use knowledge of the two in making things ever better.

How to use this guide
Whether you are new to improvement work or have experience, this guide is not designed to be read from end to end. It is a practical tool to help you whether you are just thinking of an improvement or have a project underway. It will give information on further reading and tools that will help you understand the sometimes confusing terminology as well as considering frequently asked questions.

Whilst the information is not a guarantee that your improvement will be sustained, it will help you consider and hopefully maximise the gains from your improvement effort.

Sustaining any profound change process requires a fundamental shift in thinking. We need to understand the nature of growth processes and how to catalyse them. But we also need to understand the forces and challenges that impede progress, and to develop workable strategies for dealing with these challenges.

Senge et al. (1999, p.10)

2. An Introduction to Sustainability

2.1 What is it and why is understanding it important in service improvement?

Have you ever wondered why some changes or innovations seem successful and others barely seem to get passed the planning stage? As an improvement leader, thinking about how your work can both continue after implementation and develop further is therefore a vital element of any improvement initiative.

First think about what you are trying to sustain, is it the change you are implementing or an improved way of thinking?

In its simplest form sustainability can be seen as 'holding the gains' and 'evolving as required'. But sustainability can also be complex and ambiguous leading to a variety of perspectives. The ambiguity is illustrated by the use of differing terminology, often to mean the same thing. Think about what you understand by the following terms, chances are, they will conjure up a picture that can mean the same as sustainability:

Stability?

Stickability?

Organisational change?

Change becomes norm?

Absorptive capacity?

Embedded change?

Continuing improvement?

Irreversibility?

You may be able to think of several more of your own...

There are two major frustrations that are often encountered with sustainability: The first is the **improvement evaporation effect** or **initiative decay**. This is the effect of a lack of sustainability. What happens is that where an improvement has been implemented, often with much effort and resources, for a variety of reasons, things slip back over time to how they were before all your hard work.

Case study
Endoscopy in North West England

A Trust in the North West developed an open access endoscopy service. The process had gone extremely well, GPs and hospital doctors worked together and agreed new referral forms and guidance to facilitate patient booking for this service. They arranged for initial printing of a substantial amount of paper copies of the forms and also provided the GPs with copies of the forms on a computer disc so that when they ran out they could print more as they needed them. All went well until GPs ran out of copies of the forms. Rather than print out new copies using the discs they had been given, they simply reverted back to the old system of referral. The team had to go back and re-think the provision of referral forms for the GPs.

Think what may have caused this…..
This is a good example of where the improvers thought sustainability would happen automatically. Doctors in primary and secondary care had worked together on the new forms and discs were created to make printing of more forms easy. However what seems to have gone wrong is the lack of ownership from the wider team. Lots of copies were given out initially, but no mention is made about who would continue the process once these ran out?

Sustaining an improvement is a collective responsibility and team members need to be clear of their personal contribution.

Secondly, **isolated improvements** or **improvement islands** that may sustain in the area in which they are implemented but do not spread through the organisation so fail to influence improvement elsewhere in that organisation.

Example

Staff on a medical ward developed a communications board to highlight all issues related to infection control. This worked excellently and was greatly appreciated by agency staff and new students. The ward staff however, saw this as a minor thing and not a piece of improvement worth sharing. The result was that the new system was not adopted by other wards and they did not benefit from the improvement

Think why this may have happened
There is a saying, '*small things make a big difference.*' All staff have a role to play in improvement- the ideas do not have to come from those in charge. This was the result of team effort including all ward staff, and had real benefits. If you have an idea, share it with others.

So straightaway you can see that starting an improvement is no guarantee that it will continue...

2.2 What does sustainability actually mean?

The term sustainability is used in different contexts to mean different things, for example Shediac-Rizkallah M. and Bone, L (1998), see it as:
• maintaining the health benefits of the programme over a long period
• continuation of the service or programme activities within an organisational structure
• building the capacity of a recipient community.

The dictionary definition of sustain is '*to keep something going over time or continuously*' (Oxford English dictionary on-line www.askoxford.com/dictionaries)

To help clarify what is meant by sustainability here, below are two practical working definitions taken from work of the NHS Modernisation Agency and from the NHS Sustainability Model and Guide©

Sustainability: *new ways of working and improved outcomes become the norm. Not only have the process and outcome changed, but also the thinking and attitudes behind them are fundamentally altered and the systems surrounding them are transformed in support. As a result when one looks at the process or outcome one year from now or longer, one concludes at minimum that it has not reverted to the old way or old level of performance. Further, it has been able to withstand challenge and variation; it has co-evolved with other changes in the context, and perhaps has actually continued to improve over time.*

Sustainability *of change for improvement exists when a newly implemented process continues to improve over time, becomes 'the way things are done around here,' and certainly does not return to the 'old' processes that existed before the improvement project begins.*

In both cases the key concepts are focusing on the continuation and evolution of something considered to be of positive benefit, leading to an improved service that becomes the normal service, not a special addition. By including a variety of definitions you can see that sustainability has many dimensions.

Why is understanding sustainability important to service improvement?:

Lets take a step back...
We know that sustaining a change is a desirable outcome
IF...   the change is one that will give continued benefits, improve services and
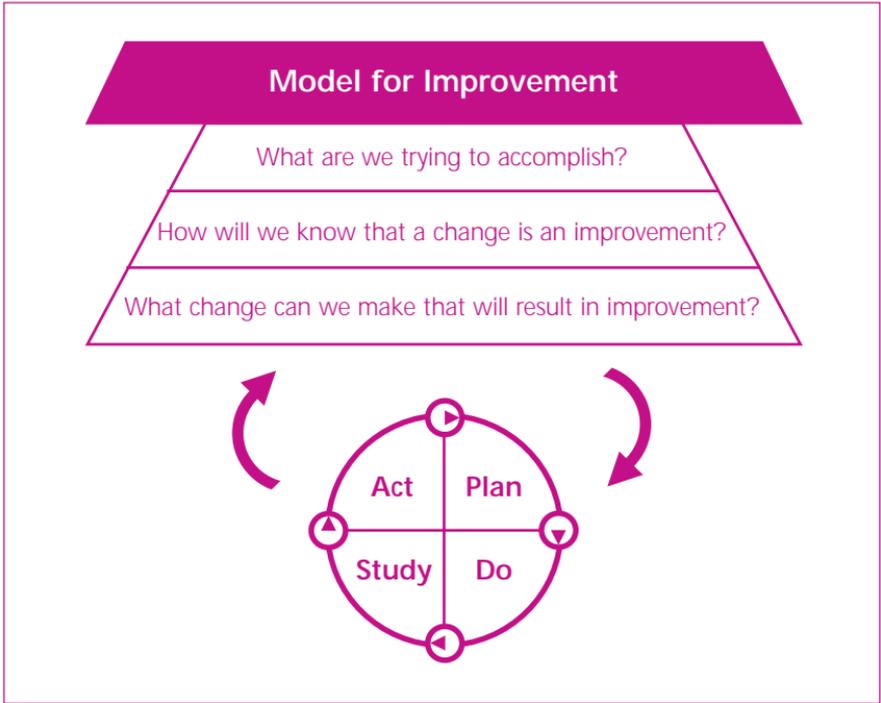   have the ability to evolve into even better things.
BUT... an issue that you may not have thought of before is that sustainability
         may not always be viewed positively!

In some instances, sustaining a change can be seen as negative:
• people may have not agreed with the change and liked old ways of working
• some may view sustainability as stagnation – this should never the case. We
  rarely sustain static things; rather the emphasis is on ongoing and continual
  improvement
• sustaining new things may be viewed as increasing workloads and may result
  in non compliance with the change. What should be emphasised is not more
  work, just a different status quo
• sustainability may become so embedded that it is difficult to make further
  changes as services develop and evolve.

As a first step, think about the **Model for Improvement**. This is used
extensively across the Improvement Leaders' Guides and is relevant in most
settings. Designed to provide a framework for developing, testing and
implementing changes that lead to improvement, the model aims to reduce the
urge to take immediate action, and highlights the benefits that careful study
and planning can bring to any idea.

The model uses three key questions and the now well-established 'Plan, Do,
Study, Act' (PDSA) cycles. This will ensure that when you have reached the
change that is most appropriate for your project area and ensure that any
change is an improvement before it is implemented and sustained!

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act | Plan

Study | Do

Learn more:

- the Process mapping, analysis and redesign title in the General improvement skills series of the NHS Institute's Improvement Leaders' Guides has more detail on this model and how to use it
- the second guide that will help you is Managing the human dimensions of change. One of the reasons improvements fail to sustain is that those involved are not fully committed to the change. This can happen for a wide variety of reasons and this guide will help you understand the 'Saboteurs of Success' and some of the issues that arise when people are uncomfortable with change. Both are available at www.institute.nhs.uk/improvementleadersguides

Studies of innovation and improvement often note the phenomenon of resistance. Stated in another way, the current system seems determined to sustain itself and works against the new idea. What we call 'resistance to change' is actually a maddening example of a system with high 'sustainability'! The moral is this:

We do not actually want completely sustainable change because today's sustained change becomes tomorrow's resistance to change. Instead, we want change that sustains itself until a better idea comes along.

The Improvement Leaders' Guide to Managing the human dimensions of change discusses helping people through the change process and managing conflict. 'Saboteurs of Success' do not necessarily operate intentionally; they are often born out of frustration, indifference, poor engagement, not seeing 'what's in it for me' and sometimes just fear of something different that feels uncomfortable.

Systems theory provides another important set of concepts to guide us in thinking about sustainability. Complex systems can be described in terms of structures, processes and patterns. Structures are things like buildings and organisational charts; processes are sequences of events such as the journeys through health care, the patient experience or the way medicines are ordered by a doctor and delivered to a patient on the ward; and patterns include patterns in relationships and patterns in statistics. Sustaining change in the complex systems of health and social care requires attention to structures, processes and patterns and the interactions and feedback loops among them. We must consider the whole system in the change.

Learn more about systems theory in the Improvement Leaders' Guide 'Working in systems,' www.institute.nhs.uk/improvementleadersguides. By being aware of these issues and understanding and predicting different approaches to change, the chances of successful sustainability are increased. You can read more on this later in this guide in section 4.1.

2.3 The New Improvement Wheel

A lot of what we know about sustainability linked to service Improvement comes from the Research into Practice work at the former NHS Modernisation Agency and continues to have relevance. From 2001 - 2005, Research into Practice worked to promote the spread and sustainability of service improvement and helped to build a body of knowledge that has practical application for staff working directly on improvement activities:
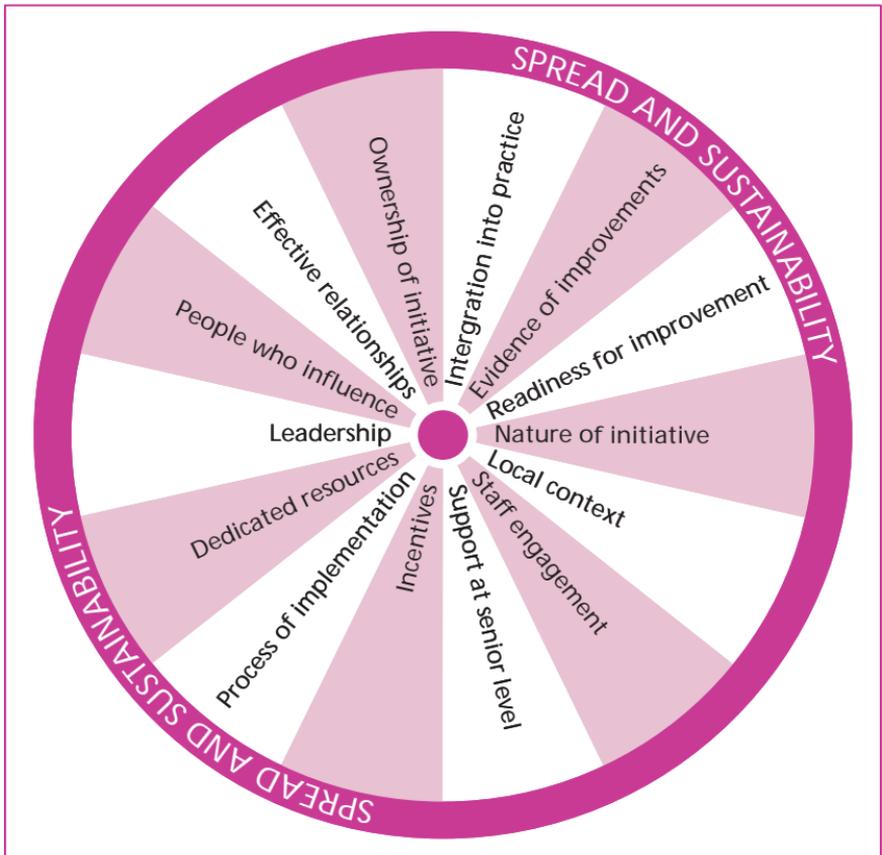
• researching NHS practice in order to identify factors that influence how improvement is spread and sustained
• working in partnership with sponsors so that the research findings are used to change NHS practice.

They found that the factors of sustainability are also the factors for effective spread. The information comes from work on a series of programmes and the compete set of documents relating to this work can be found at www.wise.nhs.uk/sites/crosscutting/sustain/default.aspx. You will also find more information and examples of Research into Practice work in the resources section at the end of this guide.

The Improvement wheel can be used to help explore and consider the main influences not only on sustainability but also the spread of service improvement. It is a tool that can help you plan and implement. However, whilst it provides an overview of the differing factors, it does not give the contextual information. So when you use the wheel you will need to consider how each of the factors relates to your particular working environment.

One of the problems we sometimes have as Doctors, is that in being so evidence based, our practice can become sustained to the point of being entrenched when the evidence is sound. It can sometimes be hard then to change a practice, even if something better comes along.
GP, London

The wheel diagram shows the following segments (reading around):

- SPREAD AND SUSTAINABILITY
- Ownership of initiative
- Intergration into practice
- Effective relationships
- Evidence of improvements
- People who influence
- Readiness for improvement
- Leadership
- Nature of initiative
- Dedicated resources
- Local context
- Process of implementation
- Staff engagement
- Incentives
- Support at senior level
- SPREAD AND SUSTAINABILITY

Integration into practice
- sufficient time and resources for integration with existing practices
- fit and coherence of initiative with other modernisation programmes
- incorporation of new practices into organisation's 'core' business and priorities

Evidence improvements
- collection and sharing of evidence of benefits/effectiveness of initiative
- proof of effectiveness through ongoing monitoring of process and outcomes

Readiness for improvement
- staff recognition of need to improve
- awareness and use of diagnostic tools and techniques
- use of current performance data to identify need

Nature of initiative
- compatibility with organisational needs, priorities and culture
- awareness that the source of initiative (e.g. top-down, target driven or locally created) is influential
- less complex change

Local context
- positive organisational characteristics (participative management style, history of successful change, commitment to find better ways of working and clear corporate vision)
- recognition, reward and inclusion of all staff

Staff engagement
- early engagement of all staff affected by the change
- positive management of scepticism and resistance

Support at senior level
- endorsement and support from key senior individuals
- support and involvement of consultant medical staff

Incentives
- staff incentives e.g. personal gains; additional resources; benefits to patients; quality and safety issues
- awareness and avoidance of disincentives

Process of implementation
- pace of implementation*
- phased implementation of large scale change**
- effective promotion and marketing

Dedicated resources
- sufficient and appropriate staff to initiate, deliver and support new initiative
- availability of ongoing appropriate levels of funding
- dedicated time for all staff involved to meet, plan, develop and undertake improvement activities
- adequate infrastructure (e.g. IT systems) to support new processes

Leadership
- credible leadership (at an appropriate level for initiative) to provide a steer, focus and maintain momentum

People who influence
- existence of influencers at all levels and in all staff groups
- effective use of combined resources/expertise (e.g. modernisation teams)

Effective relationships
- multi-professional teams that develop relationships to work across conventional boundaries and towards common goals
- effective team working based on values of trust, respect, support and inclusion
- clarity of roles and responsibilities, especially team leader or co-ordinator

Ownership of initiative
- clear sense of ownership facilitated by widespread staff involvement at all stage (particularly when moving beyond wave or project phase)
- initiatives created locally or adapted to fit specific organisational needs

* Fast pace of implementation may increase spread but limit sustainability

** Phased implementation of large scale change can aid spread; time-limited implementation of initiatives (e.g. perceived as a project) can hamper sustainability

3. Key factors in sustainability

As you will now realise, implementing a service improvement is not enough to guarantee its success. Holding or increasing the gains from that success are now the most important factor, and the key to that success lies in the future!

Look at the graph below, the red vertical line represents 'now'. Once you have made an improvement it can go one of two ways. It can sustain, grow and evolve, or decay with things returning to old working practices and the gains being lost.

NOTE: Although indicated positively here, an upward graph is not always positive and a downward graph is not always negative. Think about waiting times…. An upward trend may be indicative of increased waiting times and a downward trend showing an improvement and positive reduction in patient waits.

All the information in this guide will help you understand the key factors in successful sustainability, including practical models, hints and tips for success, so that you continue in a positive trajectory rather than the negative one!

Sustainability: what does the future hold?

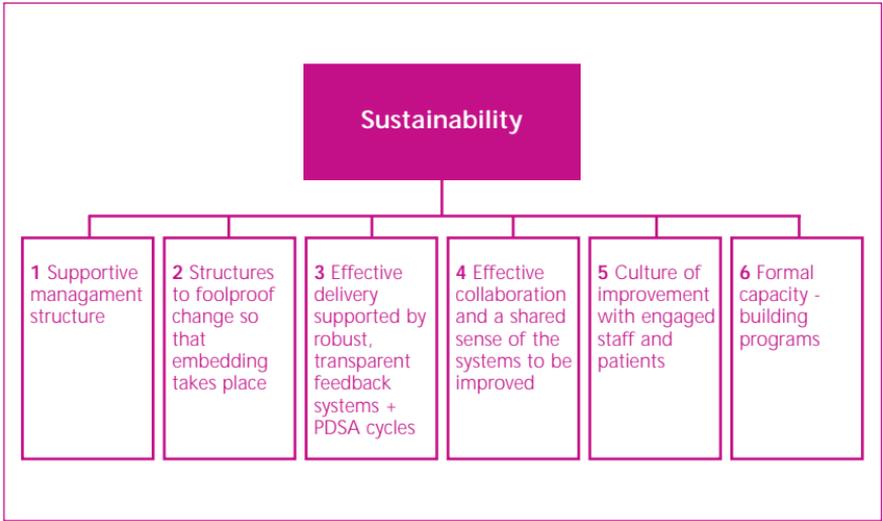Firstly, let's look at avoiding some of the negative pitfalls; Kotter (1995) sums these up well below...

The urgency level is not intense enough, the guiding coalition is not powerful enough, and the vision is not clear enough.

In other words, there is no vision, leadership or sense of urgency.

There are many other reasons why the graph leading back to a poor level of performance is often the result:
- the change is seen as an isolated project with a start and end date, resources such as protected time, project managers and funding stops
- sustainability is seen as something that one does after the project is completed - it is an afterthought - rather than something that must be taken into account from the very earliest stages of the improvement effort
- not all of the stakeholders (secretaries, clinicians, managers, patients etc) understand and own the benefits of the change
- change has been 'done to' a team or a service so resentment may be present
- infrastructures for ongoing sustainability have not been put into place, for example continued measurement structures, inclusion in business planning process etc
- the change has not been implemented with a whole system view of 'knock-on' effects to supporting areas such as radiology or pathology
- when introducing the change, the state of the 'local receptive context' has not been considered. For example hospital mergers and service transfers can impact on the sustainability of a new change
- there has been insufficient training and development of new skills for staff
- there has been insufficient alignment with the core values and objectives of the organisation.

In order to achieve the graph that indicates sustainability, we know from research that there are some key properties that exist in organisations that sustain improvement. These are shown in the diagram on the next page, and connect to each other to promote sustainability. However, they are not isolated and need the underpinning of **engagement** and **clinical leadership** to make them most effective.

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                        │   Sustainability    │
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| **1** Supportive managament structure | **2** Structures to foolproof change so that embedding takes place | **3** Effective delivery supported by robust, transparent feedback systems + PDSA cycles | **4** Effective collaboration and a shared sense of the systems to be improved | **5** Culture of improvement with engaged staff and patients | **6** Formal capacity - building programs |

1. Supportive Management Structure

In order to support sustainability, health care leaders and managers need to treat quality of care as a high priority. This means giving the issue regular attention, as well as creating accountability systems for improvement, and recognising the organisation's successes.

Good practice

The Board and Executive team can make a significant difference by:
- encouraging and supporting senior leaders to champion improvement work
- creating accountability systems for tracking performance, assigning senior-level responsibility for holding gains on the service improvement, and reviewing performance monthly in a structured reporting format (e.g., an organisational scorecard)
- effectively communicating measurable improvement aims and the importance of sustaining the improvement to emphasise their importance.
- recognising and celebrating service improvement!

Improvement programmes should put as much effort into sustainability as their launch.
Ham et al 2002

2. Structures to 'foolproof' change so that embedding takes place

In each of the intervention areas, the organisation builds structures (e.g., IT systems and packaged materials that support a given intervention) that make it difficult – if not impossible – for providers of care to revert to old ways of doing things. For sustainability, to become institutionally embedded the improvement needs to be formally recognised as core business within the organisations involved and activities centred around making this change the normal practice. This often involves changes to the organisational policies and practices. Indications of embedding include changes of policy, visible senior management support, service transformation or re-orientation of services, visible resource and funding allocation. To ensure that embedding is actually possible, systems have to be in place to ensure any improvement program can be planned, tested, refined and delivered effectively (by using PDSA cycles).

Good practice

Achieving this can be helped by using the checklist below:
- is there a workforce development plan in place within the organisation?
- is there funding available to support improvements?
- is clinical leadership present?
- are there adequate resources, both in terms of people and equipment?
- if administration support is needed to support the change, is this available and has it been agreed?
- are communication structures in place?
- is there support from service provider management where necessary?
- do any of those leading the change need additional training to support the change? Do they need to develop any additional skills in the tools and techniques needed to implement the change?
- is there high level support of leaders?
- has the plan to market the change been developed?
- is there provision for an evaluation of the improvement? This can be done internally, many changes do not require an external evaluation. See the Improvement Leaders' Guide Evaluating improvement www.institute.nhs.uk/improvementleadersguides

3. Effective delivery supported by robust, transparent feedback systems + PDSA cycles

As much of the organisation as possible should be aware of performance on key indicators, reviewing information generated by a measurement system that provides data to stakeholders at every level in the organisation, comparing it to clear standards and taking part in improvements when necessary. Everyone needs to be ready for the programme, understand why it is necessary and to value its benefits. The planning and implementation of all healthcare improvement projects will need to closely involve a wide range of stakeholders. Capacity to deliver the programme needs to be nurtured by making access to knowledge, skills and resources easy and support from key leaders is critical

Good practice

The organisation has in place a measurement system that regularly generates data on performance, and makes it relevant in different levels of detail for different audiences (e.g., organisation-wide measures for senior managers, unit-specific data for departments). Improvement data is publically displayed on all improvement interventions, noting performance as measured against aims.

4. Effective collaboration and a shared sense of the systems to be improved

All stakeholders in the improvement (executives, managers, frontline providers of care) share an understanding of the processes and systems that they are seeking to improve, and are clear on their contribution. Effective collaboration operates at many levels, not just between managers and front line staff but also for example, between staff and volunteers, between organisations and communities. It involves a shared vision and a willingness to share roles and responsibilities.

Good practice

Use tools to map the process that has been improved (e.g., flow charts), allowing for shared analysis of systems as sustainability work proceeds.

This can be summarised in the following checklist for effective collaboration:
- is there a shared vision, goals, and strategies?
- does the organisation promote strong partnerships both internal and with external stakeholders?
- are there supportive structures in place to ensure clinicians are involved and to help them become fully engaged
- are there well defined roles and responsibilities?
- are there processes in place for ensuring formal and informal contact at different management levels?
- is there a culture of openness and information sharing?

In previous roles I had introduced change using a 'big bang' approach where a huge amount of time and effort had gone into the planning stage and then a date was set for its introduction. This was often on a Monday morning. While this caused much excitement at the time, we never quite got things right and there were usually some people who had been fine about the idea but hated the new process once it had been introduced because they found it did not work for them as well as expected.

Using the Plan, Do, Study, Act cycles have been like a breath of fresh air. I have found that it is much easier to convince staff to try out the change in a small way and then reflect on it and refine it as needed. They felt much more involved and therefore feel some ownership of the new process and I have found that this improves sustainability because the staff have themselves invested in and agreed the change.

Project Manager South of England

Case study

The pathology services at an NHS Trust were experiencing delays in turning around specimen results. This was partly due to the fact that many samples from GP practices arrived at the same time in the afternoon, representing 60% of the days work all converging at once. By using a collaborative approach between the pathology service and transport service it has been possible to improve this so that samples arrivals are staggered. This means they get dealt with quicker in the laboratories and results are available sooner for GPs. Additionally the amount of samples that need to be repeated is reduced as less spoil by spending excess time in transit.

This is a very practical example of where collaboration in one area has the knock on effect of additional improvements. Changing the timing not only evened out the work load across the day, but patients got results quicker and less samples were wasted.

One change: Three impacts.

This case study demonstrates that you may also need to work effectively across organisations, not just within them. If what you are trying to sustain effects more than just your team or organisation, they need to be fully engaged to achieve success.

5. Culture of improvement and a deeply engaged staff
There can be a misunderstanding that collaboration and engagement are the same thing. They are however quite different and as this is such an important aspect, it is dealt with in more detail in the next section. Here we briefly talk about why engagement is important. Later there are some hints and tips for helping engagement to promote sustainability.

If a culture of improvement and engagement is present, the organisation shares a sense of pride around performance. Staff are well aware of quality initiatives and enjoy their improvement work.

Staff actively encourage others to provide or support the programme, act as advocates and encourage others to be involved, including making sure all groups are represented. They may also become local champions and take action or to promote the programme as well as being involved in other ways.

Good practice is when:
- everyone in the organisation is clear on major performance improvement activity and can explain their role in it
- staff view maintaining quality work as part of their job and they believe that they have a stake in continually enhancing their performance in any given intervention area
- managers of improvement activity write job descriptions to reflect involvement in introducing a particular intervention and supporting ongoing improvement work
- managers of improvement activity create opportunities for all stakeholders to express concerns about the improvement process, and to share ideas for improvement.

Case study

The improvements at the NHS Trust oppsite would not have occurred without the staff being engaged in the improvement. To make this happen, the service improvement team within the hospital worked with over 40 staff from pathology (biochemistry, haematology, microbiology and cytology) who took part in a short training programme on improvement. By engaging will all staff it was possible to have an approach that that actively involved them in identifying and solving their problems.

6. Formal capability-building programmes
The organisation pays attention to the Knowledge and Skills Framework and makes training of staff at all levels a high priority. Building not only skill in clinical and non clinical disciplines, but also building organisation-wide skill in application of modern quality improvement methods and creating a culture where improvement work is seamlessly integrated into day-to-day activity.

Good practice can be seen when:
- managers of improvement activity closely consider the composition and skill base of participating teams, working to enhance confidence and core competence
- everyone is provided with ongoing training in quality improvement methods (e.g. The Model for Improvement, Plan-Do-Study-Act cycles. See Process mapping, analysis and redesign title in the General improvement skills series www.institute.nhs.uk/improvementleadersguides)

Case study
Improvement as a strategy for the whole Trust

A mental health trust in London, as part of their Trust development programme held a training day on Lean Thinking for 90 managers including the chief executive, executives and non executive board members. The day consisted of the principles of Lean but also action planning to identify projects within the trust that could use lean principles. The result is that 5 improvement projects are being taken forward in the Trust.

The success of this was ensured by having a capacity to take time and a capability building programme that included the most senior managers. Leadership and sign up to improvement was demonstrated at the highest level.

Learn more:
- a summary of the information on these areas, incorporating work of The Institute for Healthcare Improvement 'Getting Started Kit: Sustainability and Spread' can be found at www.ihi.org/ihi
- Look at the Improvement Leaders' Guide to Building and nurturing a culture of improvement on www.institute.nhs.uk/improvementleadersguides

4. Identifying things that can help support sustainability

4.1 The NHS Sustainability Model and Guide[©]
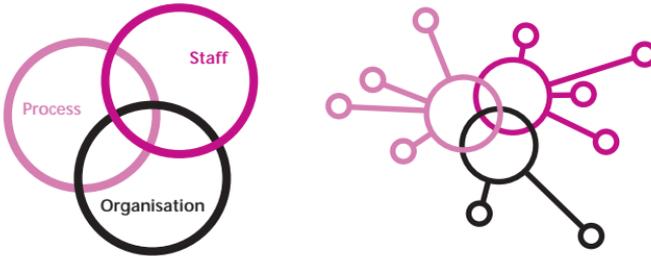
It is known that up to 70% of implemented organisational changes fail.
Daft and Noe 2002, Beer and Nohria 2001

Whilst this is a statistic from industry, health changes also fail, but we know this to be at a lower level of about 33%. Even so, this means that one in every three impovement initiatives fails to achieve the objectives they set out to. The cost implication of this is not just financial but can result in less than best care and service for patients, staff frustrations and failure to engage with subsequent initiatives.

In an attempt to substantially increase the sustainability of improvements for healthcare services and patients, a NHS Sustainability Model and Guide[©] has been developed for use by individuals and teams who are involved in local improvement initiatives. The Sustainability Model can be used to predict the likelihood of sustainability and guide teams to things they could do to increase the chances that the change for improvement will be sustained. The Guide provides practical advice on how you might identify opportunities to increase the likelihood of sustainability for your improvement initiative.

It can be used at any time in the improvement process, but the best times are:
• during the design or selection of the improvement initiative, so that you can identify areas that need strengthening
• around the time of initial pilot testing so that you can go into the full implementation phase with confidence
• a few weeks after the improvement has been implemented to ensure an optimal position for sustainability and continual improvement.

Using an approach that includes front line staff, improvement, clinical and subject experts in its development, the model consists of 10 factors that play a very important role is sustaining change in health care. These are:
- Training and involvement
- Attitudes
- Senior leaders
- Clinical leaders
- Fit with goals and culture
- Infrastructure
- Benefits
- Credibility of evidence
- Adaptability
- Monitoring progress

The Model is based on the premise that the changes that individuals and teams wish to make fulfil the fundamental principle of improving the patient experiences and health services. Another important impact that can be gained by using the model is the effective achievement of change which creates a platform for continual improvement. The benefits of holding the gains means that all resources, including money and most importantly staff time and effort are used effectively rather than being wasted because the processes that were improved have gone back to the old way, or old level of performance.

The structure of the NHS Sustainability Model and Guide© mirrors the 10 factors listed above. In doing so it creates a comprehensive package consisting of a diagnostic model and guidance for sustainability.

Attaching a numerical score to each factor means that it is possible to define the overall score that equates to a likelihood of sustainability. This allows for an objective assessment in a visible and tangible way, additionally offering the ability to see where gains have been made in subsequent scoring.

Learn more:
- We strongly advise you to look at the NHS Sustainability Model and Guide© and gain additional information at www.institute.nhs.uk/sustainability

Within the NHS Institute for Innovation and Improvement, the Priority Programme team for 'Delivering Care Outside Hospital' have used this tool in all 14 of their projects.

This tool has been invaluable in helping us and our colleagues in practice to reframe our work in order to achieve sustainability and success

Gary Lucking, Priority Programme Head, NHS Institute for Innovation and Improvement.

4.2 Engaging patients and staff to promote sustainability

If organisation change is to be effective and sustainable, this will also require the active engagement of, and learning by, employees rather than grudging compliance with management diktat.

Jones,M and Womack, J (1996) 'Re-engineering', International Encyclopaedia of Business and Management. London: Routledge.

Why do some people engage in the vision of an enterprise and perform at their best, some do only what is necessary and worst of all why do some actively 'disengage' and work against the goals?

People have a right to be actively involved in decisions that affect their lives and well being.

If trusts are engaging with, and listening to, the public, it can provide a more responsive service, which is able to respect and understand the needs of their population. There will be increased opportunity to identify and share good practice, and for the development and monitoring of the quality of services. The whole process will support and encourage improved accountability and openness.

Listening, learning and improving becomes an everyday part of the organisation's culture.

Since so many health and social services processes depend on the actions of people, sustainability comes down ultimately to winning hearts and minds. The rationale for 'engaging' staff in the change process is that if they do not know the reasons for the change, and consequently what changes are expected of them, they cannot change in a rational way. Uninformed staff and patients can merely react - and this can take a negative form.

People are not machines. You cannot make others simply do as they are told. Nor can you be everywhere at once in order to watch others to ensure compliance. Command and control cannot work in human-intensive systems like the NHS because there can never be enough commanders and controllers to go around and none of us is willing to put up with the approach that would be required.

Learn more:
- the NHS Centre for Involvement www.nhscentreforinvolvement.nhs.uk/ website has information on all aspects of involving patients and carers in health services. You can also read more about engagement and experience based design - including case studies - on the NHS Institute website at: www.institute.nhs.uk/ExperiencedBasedDesign
- section 4 in the Improvement Leaders' Guide Managing the human dimensions of change offers some ideas information on winning hearts and minds which can be key to successful engagement.
- section 8 in the Improvement Leaders' Guide Leading improvement. This gives information on engaging clinical colleagues and introduces the 'continuum of engagement'. See also the Improvement Leaders' Guide to Involving patients and carers. All available at www.institute.nhs.uk/improvementleadersguides

Sustainable changes are those that are not imposed and are those that are done with the involvement of staff and patients. Engaging patients and staff in developing, designing and implementing changes, results in them having some ownership of the change and thus ensuring that the change will be sustainable.
Jatinder Singh, NHS Centre for Involvement

4.3 Practical top tips for improving sustainability

What can an Improvement Leader do to maximise the chances of sustainability?
In the 'Top Tips' section, we have compiled some of the best advice from experts in the field of improvement and your colleagues practising in the NHS. Of course, you will need to adapt this advice to fit your work and organisation and not all of it will apply to every situation.

Before going any further… It is useful to ask yourself what exactly it is that you are trying to sustain. Do you wish to sustain…
• the specific change
• the change principle (if you are unsure of what this is see the 'jargon buster'
• the measured outcome of the change
• the underlying culture
• the set of relationships that enabled you to make the change
• some combination of these

Being clear about this is important, as it will influence how you read the advice in this guide and which pieces of advice you decide to take. For example, if it is the measured outcome that is most important to you, you may want to emphasise on-going measurement and be quite happy if someone replaces your original change with an even better way to achieve the same performance results.

Top Tip 1 - Be clear about the benefit to stakeholders
Does the change produce clear, identifiable, proven and measurable benefits that meet needs for all stakeholders including patients, policy makers and all involved staff? If yes, it is more likely to be sustained. When each stakeholder can answer the "what's in it for me?" question for themselves, the change has won hearts and minds. For more information see Improvement Leaders' Guide to Involving patients and carers and also Managing the human dimensions of change www.institute.nhs.uk/improvementleadersguides

How to strengthen this factor: Identify key stakeholders early in the improvement effort and use observation, dialogue, focus groups or surveys to identify their needs and perceptions of the problem. Build something into the change that each stakeholder group can point to as the main reason why they like the change. Emphasise these unique characteristics in targeted communications to each stakeholder group. Be comfortable with the fact that there are multiple good points about the change; don't insist that everyone see the benefit that you personally see.

Winning hearts and minds needs to be part of the process of change rather than a separate element. The use of the Model for Improvement and PDSA cycles as an incremental approach to testing and introducing change has been extremely helpful in demonstrating how the improvement can benefit both staff and patients at a comfortable pace. It also has the benefit of being perceived as less threatening than a more direct approach to change and allows the stakeholders to fine-tune the new process until all are content with it. For more information see the Improvement Leaders' Guide to Process mapping analysis and redesign www.institute.nhs.uk/improvementleadersguides

How to know this factor is present: Stakeholders can themselves describe why they like the change; different stakeholders may point to different factors.

It's got to be an advantage for everyone. Its got to be a win-win type thing… it's no good it just being absolutely brilliant for the patients, it's got to have advantages for virtually everybody involved, because it will probably have disadvantages for everybody involved as well. So the advantages have got to be transparent and obvious and apply to staff as well as patients –
Regional lead, National Booking Programme

Top Tip 2 - Pay attention to ongoing training and education needs
Training and coaching are often available during the 'live' period of change programmes but often this is seen as a 'once and done' exercise rather than an ongoing iterative process. Continual effective support based on the needs of those working within the change process is needed to ensure skills and understanding are maintained. Many project teams have said that they underestimated the amount of training required and if they were to advise others would say, "Take whatever you estimate in training requirements throughout the project and then double it!"

How to strengthen this factor: Let the team involved help to identify future skills and training needs. Identify a small number of staff who can be trained as 'trainers', these should be staff with different roles; for example the team secretary, specialist nurse, or physiotherapist. This will help support the ongoing training needs of the team. All new and rotating staff need to understand how to work within a changed process and expectations should be set straight away during an induction period. Reinforcement of the message can be provided by using wall charts or posters and handy cards or bookmarks for staff to carry around with them. The training needs to be evaluated regularly to make sure that it is useful and relevant. Training in the improvement, tools and techniques is great but not the whole picture. Any training programme associated with change needs to include behavioural and cultural changes as well. This will help with any resistance or fear of change. Remember also that this training may need to include patients and carers as well! More information on how to do this can be found the guides to Involving Patients and carers and also Human dimensions of change www.institute.nhs.uk/improvementleadersguides

How to know this factor is present: Staff will be confident working with the new processes, they will be able to assist in the training and explanation to others. They will be able to evolve, maintain or re-establish the changed process even if there are factors or crises that threaten to disrupt it. New staff will experience an appropriate and supportive induction training that includes the new ways of working.

Top Tip 3 - See how you can contribute to building the improvement into the structure of the organisation and make it the new standard
Ask yourself has the improvement really been incorporated into the basic fabric of daily work and systems and can it be seen reflected within the policies and procedures of a department or an organisation?

How to strengthen this factor: When planning the change, think of how the new improved processes impact upon the existing roles, standards, policies and procedures. It is important to modify these where necessary as the change moves out of the testing phase and into full implementation. You should ensure that they reflect a new way of working, but be careful that the policies and procedures should not be so rigid that they stifle the ongoing opportunity for improvement. It also helps to completely remove the old way of doing things if you can; for example by destroying old forms or erasing old software.

How to know this factor is present: Teams are able to describe the new process when asked 'how do you do things around here?' Individual's job descriptions accurately reflect their roles within the process.

Top Tip 4 - Build in on-going measurement

Establishment of a baseline position for measuring and communicating the improvements can be an exciting and motivating factor for teams. Measurement communicates that something is a priority and the phrase 'we manage what we measure' often rings true. If teams do not have a mechanism to identify ongoing improvement or slippage they will be unable to celebrate or take action to resolve the slippage. On-going measurement of important improvement or performance outcomes will maintain a focus and provide teams with not only information about their progress but the impetus to maintain or extend the improvement. For more information refer to Improvement Leaders' Guide to Measurement for improvement www.institute.nhs.uk/improvementleadersguides

How to strengthen this factor: Work with the team to select one or two key measures that the team feels really captures the essence of what they did and what they would like to see sustained. Build these measures into an existing system within the organisation to ensure regular and automatic reporting. Make sure that the measurements are something the staff want and need so they aren't seen as something that they have to do 'for the management'. Think about involving organisational clinical governance or clinical audit staff to help you. Make sure there is a feedback loop through staff meetings and formal reports. Some teams continue to display their 'improvement graph' in the office or coffee room as a means of communication. Slippage should be uncomfortable and should trigger an escalation process to bring things back in to line. Further improvement is to be encouraged and celebrated.

The impact of being able to see how well the teams are doing with the improved process often provides incentive for further improvement.

How to know this factor is present: There is a recognised measurement system and the team know how they continue to progress. Any reduction in performance is quickly recognised and actions are taken to address this. The measurements are part of the organisation's monitoring system and not just for the team alone.

Top Tip 5 - Work towards making sustainability mainstream
Ask the questions: Is the new process aligned with the values, vision and goals of the organisation? Is it someone's responsibility to ensure that the improvement maintains or even progresses? Has resource been allocated to support the continuation of the new way of working? Is the new way now the usual way of doing things? Are things 'set up' to support the change?

How to strengthen this factor: Make sure the changed system is built into the mainstream processes of the organisation. It should feature within the regular reporting mechanisms of the organisation, the business planning cycle and it should be celebrated within the annual report. On an individual basis the new ways of working and levels of performance should be reflected within the appraisal system and be built into job roles and job descriptions. An influential individual might be given specific responsibility to ensure that the new process or outcome is sustained and this should be reflected within their job description and objectives. The team, which created the change, could come together from time to time to review whether it had been sustained. Make sure that support processes are in place to support the new process.

How to know this factor is present: Teams and individuals cease to refer to the changed system or process as 'new.' Instead, it has become 'the way we do things around here.' There are even suggestions for further improvements, which are encouraged and supported. As individuals and teams change new staff are inducted and trained in the system. It seems impossible and undesirable to go back to the old way, the only way to move is forward.

Top Tip 6 - Celebrate, renew and set the bar higher
We celebrate improvement efforts, but maintaining and sustaining high performance is less glamorous. Celebrate periodically the fact that the indicator has stayed at the improved level over time; for example, proudly post a sign reading 'celebrating six months of lower infection rates'.

How to strengthen this factor: Make definite plans in advance to celebrate continued success and to reflect on progress. Set a new aim or goal and try to improve even more. Use the excitement of improvement to keep the attention up. Make it a continuous improvement effort; never really let it settle into simple maintenance mode. Watch out for weakening targets and satisfaction with progress so far. Find ways to renew the creativity and passion for improvement that was part of the early days of the project.

How to know this factor is present: Celebration of success is the norm and teams focus on positive reinforcement of their efforts. There is an impetus to continually improve and mechanisms in place to continually monitor the improvements made.

We had finished the project and achieved our target of reducing waiting times for patients. We were looking at our run-chart (graph) on the wall and someone said, 'if we can reduce our waiting time from 30 weeks to 16 weeks, why can't we reduce it to 10 weeks or even 6 weeks?' No one could think of a reason why we could not do it…. So we did!
Project Manager, Eastern England

5. How sustainability links to spread?

Since the first Improvement Leaders' Guide to Sustainability and spread was published, the knowledge we have about spreading improvement has advanced and the topic is so huge that it could be a guide on its own and may be so in the future! Here we will just cover the basics; a few key conceptual points drawing on recent developments from the Institute of Healthcare Improvement and the SDO systematic review paper 'How to Spread good Ideas' Greenhalgh et al (2004). This document shows that sustainability and spread are closely linked.

We have seen earlier that one on the reasons that improvements fail to sustain is that they are isolated and do not extend beyond the immediate environment, i.e. the improvement and learning does not spread. What we want to sustain is a culture of continual improvement across the NHS. You can now start to see how sustainability and spread are linked!

To understand this more, here is some further helpful information on spreading improvements….
According to The Institute for Healthcare Improvement 'Getting Started Kit: Sustainability and Spread,' www.ihi.org no matter what level of experience you have with service improvement, it is never too early to plan for spread. By developing a plan and beginning to set the groundwork it will be easier to reach others with improvement effects. This is to ensure that all the improvements - along with the renewed energy and satisfaction they generate - are spread to every relevant part of the organisation. This section of the guide can help you develop a plan and a course of action.

Different impovement ideas are adopted by individuals, and spread to others at different rates, in fact some are never adopted at all and others rapidly abandoned.

The **activity of 'spread'** involves identifying the key learning and the change principles that are constantly emerging from improvement work in portions of the NHS and purposefully creating conditions that accelerate the adoption of those throughout the NHS.

We will know we have succeeded when knowledge for improvement developed anywhere in the system rapidly becomes common knowledge and is actually used.

There are many potential reasons why spread does not always happen as we would like it to:
- a 'not invented here' organisational culture which immediately rejects ideas that come from elsewhere
- the absence of a clear organisational strategy that seeks to learn from other places
- the change itself may be too complicated or not seen as a good fit to the local context
- there may be competing priorities that divert attention away from implementing changes, especially if these were originally developed elsewhere and are not seen as solving the pressing problem of the moment
- a lack of communication about the new idea may mean that other parts of the organisation do not even know about the change
- a lack of vision and plan of how to adapt for the local area or service.

Some necessary theory for spread

Spread is the result of the process of adoption, not the other way round. It is unfortunate that 'spread' is the term commonly used to label what happens as an idea for a better way to do something begins to appear in multiple places throughout an organisation. The unfortunate bit is that the term 'spread' tends to imply an action on the part of someone to 'do unto' another - think of the metaphor of the forceful action of a knife as you spread jam onto your bread. In reality, in human organisations such as the health service, individuals and the sub-sets of the organisation that they work within retain some right to decide for themselves how they will do things.

According to the Institute for Healthcare Improvement www.ihi.org, the starting point is to develop a plan for spread that includes three steps:
- laying the foundation for spread
- developing an initial plan for spread
- refining the plan.

As a leader of improvement you can work to 'spread' improvement ideas as much as you want, but your ultimate success is determined by whether or not others 'adopt' the ideas.

Step 1: Laying the foundation for spread

The foundation for spread rests on the success of the initial work to test, implement, and then hold the gains for one or more of the service improvements within your organisation. The following are some specific actions for improvement leaders at any level to take in laying a strong foundation for spread. These actions should be integrated with the actions and infrastructure established to hold the gains:

Communicate clearly

This is where engagement at all levels is so important. If you are wanting to lead improvement, whatever your position in the organisation, will need to ensure everyone around you understands what you are trying to do and why. Without this, they will not be clear how best to offer their support!

Find an improvement champion in a position of influence

Identifying an improvement champion to take responsibility for leading the spread efforts helps to ensure the sustainability of interventions already implemented. This may be the same senior leader who has led the service improvement efforts to date or it may be another member of the senior team.

Identify a leader to oversee the spread effort and identify individual responsibilities

In many cases, those involved in the team established to hold the gains will also have responsibility for spread. The leader be someone with improvement expertise, or may be an exceptional leader who can effectively communicate, motivate, and harness organisational resources to support the spread effort. Share results of the successful pilots. If the interventions that you intend to spread have been piloted successfully in at least one location, use the results to attract others by showing results and sharing the stories about the impact on staff and patients that the improvements have had.

Step 2: Consider how successful spread may be achieved
Identify any specific actions you will take to reach your spread aim.

Establish an aim
The first step in developing successful spread is to set clear aims. These should include:
• what you intend to spread?
• what is the target level of performance? Identify specific and measurable goals. You may choose to include both outcome and process measures related to the improvements that you intend to spread
• identifying the target population, i.e., to whom will you spread? Try to include the exact number and location of the hospitals, departments and people that you intend to reach
• what is achievable in the timeframes? Short, medium and long term.

Some is not a number, soon is not a time.
(Don Berwick; 2004)

Think about this when you are making your plan for spread. You will need to really drill down into what you want to achieve and be specific about the aim. For example:
• what do you intend to spread?
    • we will spread a way to reduce waiting times for patients waiting for diagnostic tests
    • we will spread a way to redesign care for diabetic patients so that more of their care is delivered nearer to their home
• what is your target level of performance?
    • we will reduce waiting times for every patient waiting for an x-ray investigation including MRI scans. This will equate to 2,500 patients.
    • we will reduce the number of hospital visits and provide care nearer to the patient's home for 80% of all diabetic patients within the SHA Community. This will equate to 700 patients
• to whom will you spread?
    • every member of the Radiology staff including the receptionists and portering team- total 42 staff
    • six Acute hospitals and 17 GP practices. Including 23 Diabetic specialist staff, 42 pathology staff and 207 practice staff
• what is your timeframe?
    • we will achieve XX in 10 months
    • we will achieve XX in 15 months.

Utilise your organisational structure

Spread occurs more rapidly when the places that have tested the improvement and proved it is effective are linked directly to the other areas you want to reach. Consider how you can use reporting relationships, medical staff committees, line responsibility, and other structures to engage clinicians and staff in the interventions and establish accountability for spread.

Tip: As you develop a plan for engaging other departments in an intervention, determine if there are differences that might impact on how the interventions are implemented.

Consider whether there are information or other systems that would help the spread of improvements. Making the new processes as easy as possible will facilitate their adoption. By building responsibility for improvement into operational responsibility as quickly as possible, the improvement should be perceived not as a 'special project' but as part of the processes and procedures of everyday work.

Develop a communications proposal

Identify your target audience(s) for the interventions you are spreading and the messages that you anticipate will be the most effective for each audience. Consider how you will provide information about the improvement to staff in the new units. Bring staff from the pilot departments to the new departments to share their experience and expertise as well as identifying specific methods for providing feedback to adopters, establishing accountability for results, and providing encouragement and support from leaders.

Segmentation of the communication is really important. Think about how you will provide the communication in different ways to different people; for example you might provide graphical information of performance to the Chief Executive, the clinical evidence to the doctor, patient stories for general communications etc.

Learn More:
- there is more on segmentation of communication in the NHS Sustainability Model and Guide© www.institute.nhs.uk/sustainability and also Section 7 of the Improvement Leaders' Guide Technology to improve service. www.institute.nhs.uk/improvementleadersguides
- track process and outcome measures for each intervention. If you are not sure how to do this, more information is given in the Improvement Leaders Guide 'Measurement for improvement.' This guide covers choosing an appropriate measure and how to present data. You can find this guide at www.institute.nhs.uk/improvementleadersguides

Step 3: Refining the proposal for spread

Adjustments in the proposed plans for spread may be needed in order to accelerate adoption of the interventions. The spread team can identify the need for adjustments from the monitoring of reports on both the process and outcome measures and the rate of adoption data. In addition, the spread leader can also gather additional information from the front line units and departments through formal reports, regular surveys, informal conversations or other methods.

Although it is good practice to have a proposal for spread, do not forget that it also happens to have a large social component. Ideas travel often through conversation and interaction among trusted friends and colleagues. Certain people are 'opinion leaders' whose views influence others. But this does not necessarily correlate to organisational position or authority. Just because someone is made the leader or director of something does not necessarily mean that they become the opinion leader. Further, each professional or social group may have its own opinion leaders: an opinion-leader doctor may not have much influence over the nurses and an opinion leader in one hospital may have no influence at all in another. Knowing the opinion leaders, knowing whether they are informed about an idea for improvement, and knowing where they stand on that idea is a good predictor of the rate and direction of the dissemination of the idea.

Ideas that spread more rapidly than others have attractive qualities. Through research on hundreds of innovations in many sectors, Everett Rogers (2003) and Greenhalgh et al (2004) concurred strongly when identifying the attractor factors opposite:

	Attractor factors: a new idea must have
1	a clear advantage compared with current ways
2	compatibility with current systems and values
3	simplicity of change and its implementation
4	ease of testing before making a full commitment
5	observability of the change and its impact

In addition to these generic factors, there are likely others that uniquely apply to given situations, for example the strength and quality of evidence if the change is clinical.

Example

The factors listed above can be clearly seen in the use of a 'Clinical Microsystems' approach to service improvement used within Yorkshire and Humber Strategic Health Authority and Heart Improvement Network. From a small pilot study, the approach has spread successfully so that over 100 teams have now used microsystems to make improvements to services and patient care. The successful spread was achieved by having the attributes of the approach clear to all. Those delivering care are involved in identifying and implementing the improvement, the advantages are visible to all and the approach allows for PDSA cycles to trial the various stages. This has led to demonstrable improvements and a high level of ownership by the service.

Learn more:
- Professor Greenhalgh identified additional factors such as task relevance, task usefulness, feasibility, implementation complexity, divisibility and nature of the knowledge required to use it. For the full report and more information from this study see www.sdo.lshtm.ac.uk/files/project/38-final-report.pdf.

The people effect of spread

Ideas commonly go through a process of 'reinvention' as they spread. That is, it is often necessary to allow others to adapt the idea to their local context. Because of this, it is essential to think of disseminating change principles rather than specific ways of doing things.

The study of the spread of ideas suggests that it is relatively rare for ideas to spread instantly but there is some natural flow of an idea between groups. From those individuals and sites who are the early adopters, to those who are a bit cautious and take a wait-and-see attitude of observation before they are ready to commit, to those who hold out on adopting the idea until the bitter end. This is a natural process. Champions of ideas often refer to those who prefer to hold out as 'laggards' or 'resistors to change' but this is not very helpful as it sets up conflict. It is better for the champion to refer back to the adoption model and realise that these individuals or groups have either not yet seen a need or they do not believe that the ideas on offer fulfil the need.

Remember we are all laggards at something! Think of something in your own experience that you have embraced and wanted to adopt early on, it may be at work or outside, such as a microwave or mobile phone. Now think of something where you could be considered a laggard, you may own a piece of equipment but only use one of its many functions, or choose not to learn how to use it at all! None of us is at the 'leading edge' in everything!

Rather than advancing the current argument for the spread of the change with more vigour, it may better promote engagement by developing an understanding of how these seeming 'hold-outs' view the change and addressing any possible fears they have resulting from it.

Most of the literature on spread and adoption of change refers to the process of individuals' choice and action. In the case of an idea to be adopted within an organisation like the NHS, it could be that individuals are quite ready to adopt a change but organisational constraints block the way. In order for changes to spread in organisations like the NHS, some minimal infrastructure to support the change is needed.

Learn more:
- you will find more useful advice in another guide in this series, Managing the human dimensions of change www.institute.nhs.uk/improvementleadersguides especially Section 4.2.

Improving spread and adoption

Below we have compiled some of the best advice to maximise the chances for the adoption of new ways that have been proven useful in other settings. We have learned from both successful and not so successful spread efforts.

Are you absolutely clear about what you want others to adopt?

Think: As an Improvement Leader you might be tempted to encourage others to adopt the way that you did things; but each team, service or organisation is different: different staff, different department, different relationships, and different populations of patients. Our advice is to encourage the adoption of the change principles that your solution is based on, rather than the specific solution that may have worked in one place

Is the improvement attractive to others?

Think: Remember in the previous section that ideas that spread most rapidly have certain attractive qualities such as clear relative benefit compared to current ways, natural fit with values and systems, simplicity, and the ability to be observed and tested out before having to make a full commitment. Also consider setting up site visits to places where the change is in action so that others can see it for themselves.

Have you identified all the different people you need to involve?

Think: There will be many different people you will need to work with and you need to understand that different people will respond differently. There are, however certain distinct groups that it is useful to consider.

- opinion leaders: these are the highly respected people in any organisation or team who have influence. Cautions: Don't confuse vocal or enthusiastic individuals with opinion leaders. Further, understand that opinion leaders may not necessarily have formal roles in the hierarchy of the organisation
- adopters: these are the staff who you will be encouraging to actually implement and work with the change you are advocating. They will most probably be front line staff such as doctors, nurses, therapist, technicians and administration staff
- groups: although we have spoken up to this point about individuals, do not underestimate the power and influence of a group. This may be a professional or social group
- yourself: you have a major role as the 'spreader' or Improvement Leader so do not overlook yourself and the impact you will have. Be aware of you own values and beliefs, personal styles, motivations and needs. Be prepared to admit that your ways of thinking may actually be getting in the way of successful adoption of change and be prepared to accept others' beliefs, styles, and needs as being right for them.

Make sure you tailor your message to your audience

'It's not what we say it's how we say it' is an old phrase, which is so relevant in encouraging people to adopt new ways of thinking and working

Think: Make sure you understand your audience, even if you are meeting just one or two people initially. Know the context in which you will be working and any underlying cultural or organisational issues that will affect your message. Remember that receptiveness is important, so link your message to what matters to the people you are talking to and be aware of the timing of a message relative to other things that are going on.

To do this:
• keep your message simple and don't get carried away with details.
• use case studies and stories to show the benefits. Collect case studies from different parts of healthcare, so you can relate to any audience
• look for new ways to communicate in addition to the formal meetings and communication strategies.

Finally: Be honest when sustaining change that is mandated

There are limited situations where certain changes simply must be adopted by all ('must be done'), like it or not. If that is your situation, make that fact clear in all your communications. Don't try to cover it up. Be honest. At the same time, work through the tips and find ways to link into values, beliefs, and needs as perceived by the potential adopters. Look for win-win. Stay at the change principle level and allow as much freedom as possible for local adaptation. But always be clear that, in the end, this is something that simply must be done and that is simply not negotiable. Fortunately, in many cases individuals have a choice in deciding what they will and will not adopt, remember, fantastic quality improvements may not be mandated!

Caution: Avoid over-using this approach. If you establish a good reputation for working with others and really trying to meet their needs, you will have a somewhat easier time when you must be rather firm. If you are viewed as someone who is always telling others that they 'must do' you will begin to notice that people bristle and become resistant when you simply walk into a room.

6. Frequently asked questions

Question

What should be sustained and how do I know if my improvement is good enough to be sustained?

Answer

It should be noted that not all changes necessarily deserve to be sustained. It sometimes happens that we become enamoured of a new idea simply because it is new; so-called 'innovation bias.' In all the excitement we might even be able to get the idea to work for a while but because of lack of fit with the wider context, values, existing systems and so on, it isn't actually a good way to do things in your organisation. Remember that all improvement requires change, but not all change is an improvement.

Some questions to consider of your change before you try to sustain it:
- is it near the final state of development? If there were room for further changes, would these completely alter the way the solution has been implemented?
- are the measurements demonstrating real improvement?
- who cares about this improvement? Is the solution representative of the wider views of those involved?
- what policy or technology changes may render this solution redundant? Is this likely to happen soon
- is the potential for spread present?
- do people understand their role in sustaining the change?
- is the necessary infrastructure in place to promote sustainability?

Question

How can I predict sustainability?

Answer

If you are wanting to predict the sustainability of you can use the NHS Sustainability Model and Guide© www.institute.nhs.uk/sustainability

Question
Can you measure sustainability?

Answer
The short answer is Yes, but you may wish to measure specific things.
Be certain before you start to measure, that you know exactly what it is that you are measuring!. This may sound very obvious, but you can get caught out here. Think back to the 'Top Tips' in section 4.3 in this guide, considering the things you want to sustain are the same things you can measure. Decide if what you want to measure is:
- the specific change
- the change principle
- the measured outcome of the change
- the underlying culture
- the set of relationships that enabled you to make the change
- some combination of these.

You can find much more detail on measurement in the Improvement Leaders Guide 'Measurement for improvement'
www.institute.nhs.uk/improvementleadersguides. Section 2 shows ways in which measurement can be used, whilst section 4.4 highlights issues of measurement related specifically to sustainability.

Question
Are there ways of ensuring sustainability?

Answer
In short the definitive answer is No! However, there are many things you can do as an Improvement Leader to contribute to the likelihood of sustainability such as using the Sustainability Model and Guide©. www.institute.nhs.uk/sustainability

Whilst sustainability and spread are issues that seem to naturally follow a successful improvement effort, if that is the first time you think about them it may be too late. You should be actively considering sustainability and spread issues from the very beginning of the improvement project; this will increase the likelihood of success.

Question

How long should I expect to be able to sustain a change?

Answer

Until an even better way of doing it comes along!!!

Question

I have a wonderful idea that has worked well for me, what should I be trying to spread?

Answer

Whilst the idea may have worked well for you, consider that factors in your situation that may have contributed to the success. The specific change idea might not work as well for others. Further, the fact that you thought deeply about it and had some ownership for the change idea may also have played a role in the success. Therefore, you should seek to spread the change principle that lies behind the idea. Allow others the joy of 're-inventing' a specific change idea that fits their unique context.

Question

What should I do about those who don't want to change?

Answer

The key point to keep in mind is that we all reserve the right to make up our own mind about whether we think that some new idea will work in meeting a need that we recognise. If you find yourself thinking that others are resisting change, ask yourself if you really understand the issue from their perspective. Look at past instances in which they have gladly adopted a change and ask what that suggests about their natural attractors. Look at the Improvement Leaders' Guide to Managing the human dimensions of change
www.institute.nhs.uk/improvementleadersguides

Question

How can I promote engagement with reluctant colleagues?

Answer

Begin by working with their more enthusiastic colleagues. Allow the reluctant ones to simply observe so they can make up their own mind. Use champions and opinion leaders to engage and influence. If research and evidence influence their opinion, find the evidence that supports your case. Use the views of patients and carers to underline the need for change. Consider linking the desired change to other things that they want such as new equipment. In the end, seek to understand their points of view and their attractors. Make peer pressure, shame and withdrawal of resources the very last things you would consider.

See also Section 8 in the Improvement Leaders' Guide Leading improvement. This gives information on engaging clinical colleagues and introduces the 'continuum of engagement'. www.institute.nhs.uk/improvementleadersguides

Question

How can I find out more about sustainability?

Answer

The reference list at the end of this guide will give you some key texts to start you off. The list is not comprehensive but will help you as you begin to learn more about this subject.

Question

Shouldnt improvement be part of everybody's role?

Answer

Yes. The Knowledge and Skills Framework (KSF) has improvement as a core element. Therefore part of all personal development plans should include the development of improvement skills. www.dh.gov.uk/PolicyAndGuidance/Human ResourcesAndTraining/ModernisingPay/AgendaForChange/fs/en

7. Jargon buster

Adoption is a receptive word and indicates 'pull'. Greenhalgh et al (2004) emphasise the nature of adoption as a process rather than as an isolated event. This process is often described as having five stages: awareness, persuasion, decision, implementation and confirmation.

Change principle. It is not possible to just transfer a change or solution that works well in one organisation to another and expect it to have the same positive effect. Even where two organisations seem similar (two local hospitals, two GP practices, two nursing teams, even two wards in the same hospital) there will be differences in culture, working practices and many other factors. The change principle therefore, is the factor or factors that made the change successful in one organisation, not the change itself. These factors can be transferred and locally adapted by a new organisation so they work in the new context. The solution is not transferred, just the principles that allowed the change to happen.

In diagrammatic form:
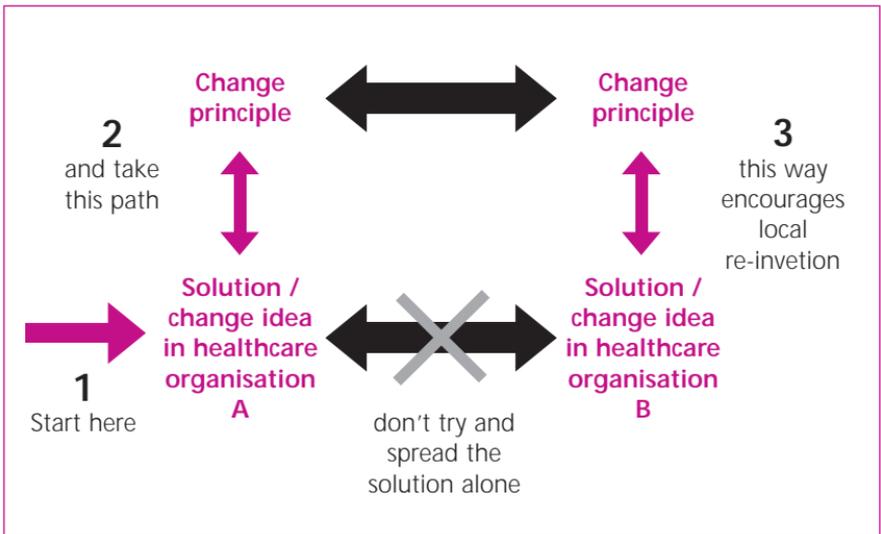
Spread is an active term and indicates a 'push' process by which working practices are transferred into other organisational contexts. Sarah Fraser (2002) identifies four different types of spread which each have different implications for the implementation of good practice in the NHS. These four types of spread are summarised below:

Scatter	when an innovation is to be disseminated widely and adopted by a large number of people
Switch	a practice from one context is spread to a different context, industry or environment
Share	this type of spread refers to the sharing of practices within the same organisation
Stretch	a practice in a pathway of care is spread within an organisation across divisional and organisational boundaries.

Sustainability is the process by which an improvement becomes normal practice and is maintained for a given period of time. The fact that an improvement has been sustained also suggests that the new process has been able to withstand external changes or challenges. This may mean that the process has evolved over time to cope with these changes and even may have continued to improve.

Sustainability means holding the gains and evolving as required definitely not going back

8. Find out more

Useful reading and resources for more information and ideas

Much has been written about improvement and change. So much, that it is very easy to get overwhelmed by all the material. The problem is also that new information comes along all the time and resource lists get quickly out of date.

References used within this guide

- Beer, M. Nohria, N. (2001). Cracking the code of change. Harvard Business Review. May-June 2001, p1

- Daft, R. Noe R. (2000). Organisational Behaviour. London: Harcourt

- Fraser, S. W. (2002). Accelerating the spread of good practice. Kingsham Press, UK

- Greenhalgh, T. Robert, G. Bate, P. Kyriakidou, O. Macfarlane, F. Peacock, R. (2004). How to spread good ideas. A systematic review of the literature on diffusion, dissemination and sustainability of innovations in health service delivery and organisation. London: NHS Service Delivery Organisation

- Jones, D. Womack, J. (1996). Lean Thinking. New York: Simon and Schuster

- Kotter, J. (1995). Leading Change: why transformation efforts fail. Harvard Business Review. vol.73, (no 2), p59-67

- Rogers, E. (1995). Diffusion of Innovation, 4th edition Free press London

- Senge, P. (1999). The Fifth Discipline: The Art and Practice of The Learning Organisation. London: Random House

- Shediac-Rizkallah, M. and Bone, L. (1998). Planning for the sustainability of community based health programs: conceptual frameworks and future directions for research, practice and policy. Health Education Research, 13, 87–108

Other useful resources

• **The sustainability and spread of organisational change, modernising healthcare.** Buchanan D A, Fitzgerald L, Ketley D (editors) (2006). Cranfield University, De Montfort University, and NHS Institute for Innovation and Improvement. Routledge. This is a comprehensive source on spread and sustainability within health

• **The Improvement Leaders' Guide series**
The improvement Leaders' Guide series are a key resource for anyone wanting to develop improvement capability. They cover all the key areas of improvement work and share the tools and techniques that have the greatest improvement effect. The guides are available on-line at www.institute.nhs.uk/improvementleadersguides

• **The Institute for Healthcare Improvement**
Founded in 1991 and is based in Cambridge, Massachusetts, The Institute for Healthcare Improvement (IHI) is a non-for-profit organization leading the improvement of health care throughout the world. Their website www.ihi.org/ihi contains a large amount of information on all aspects of improvement work as well as publication

• **Research into Practice**
The Research into Practice work covered a wide range of activity related to sustainability and spread. This work is accessible at www.wise.nhs.uk/sites/crosscutting/sustain/default.aspx and contains
  • full reports: completed research/evaluation studies on spreading and sustaining improvement
  • posters: conference posters presented on spread and sustainability.
  • short reports and papers: summary reports or research studies, discussion papers and miscellaneous documents pertaining to spread and sustainability
  • research methodologies: research proposals and additional methodological papers on studies of spread and sustainability
  • presentations: examples of presentations/workshops on spread and sustainability.

- **NHS Sustainability Model and Guide©**

  The NHS Sustainability Model and Guide© has been developed for use by individuals and teams who are involved in local improvement initiates. It can be used to predict the likelihood of sustainability and guide teams to things they could do and increase the chances that the change for improvement will be sustained. The Model and Guide are available at www.institute.nhs.uk/sustainability

- **NHS Centre for Involvement**

  The NHS Centre for Involvement can help support NHS staff and organisations to work with patients and the public to more effectively evaluate and develop services. Key to this process is understanding the experience of patients and the public and implementing changes based on their views. The Centre does this through identifying and disseminating examples of good practice, utilising high quality evidence based research, facilitating networks of professionals, patients and the public to help improve the development of services and supporting the NHS to embed involvement into its culture. www.nhscentreforinvolvement.nhs.uk

The Improvement Leaders' Guides have been organised into three groups:
General improvement skills
Process and systems thinking
Personal and organisational development

Each group of guides will give you a range of ideas, tools and techniques for you to choose according to what is best for you, your patients and your organisation. However, they have been designed to be complementary and will be most effective if used collectively, giving you a set of principles for creating the best conditions for improvement in health and social care.

The development of this guide for Improvement Leaders has been a truly collaborative process. We would like to thank everyone who has contributed by sharing their experiences, knowledge and case studies.

The mission of the NHS Institute for Innovation and Improvement is to support the NHS and its workforce in accelerating the delivery of world-class health and healthcare for patients and public by encouraging innovation and developing capability at the frontline.

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