Sustainability
Model and guide

Institute for Innovation and Improvement
One of the primary reasons why quality improvement is difficult to integrate into an organisation is that many of the changes that are put into place fail to survive. Within the literature there is evidence of a high failure rate, up to 70%, of organisational change (Daft and Noe, 2000. Beer and Nohria 2001).

In an attempt to substantially increase the sustainability of improvements for healthcare services and patients, a NHS Sustainability Model and Guide have 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.

In undertaking this work we found that it was important to be clear about what sustainability means to the NHS and to this initiative in particular.

A short working definition of sustainability can be described as ‘when new ways of working and improved outcomes become the norm’. A more detailed version which includes the notion of ‘steady state’ in addition to promoting the desirability of continued improvement:

“Not only have the process and outcome changed, but the thinking and attitudes behind them are fundamentally altered and the systems surrounding them are transformed in support. In other words it has become and integrated or mainstream way of working rather than something ‘added on’. As a result, when you look at the process or outcome one year from now or longer; you can see that at a minimum 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 evolved alongside other changes in the context and perhaps has continued to improve over time. Sustainability means holding the gains and evolving as required, definitely not going back”

(NHS Institute for Innovation and Improvement 2005)
Method used to develop the model

Using an action research approach, ten factors that play a very important role in sustaining change in health care were identified. Contributors include front line teams, improvement experts, senior administrative and clinical leaders within the NHS and people with expertise in this subject area. The development of these ten factors are based on the premise that the changes that individuals and teams wish to make fulfill the fundamental principle of improving the patient journey experience. The ten factors were weighted by a group of just over 200 staff from the NHS and Department of Health to determine their relative importance. This in turn enabled us to attach a numerical score to each factor which forms the measurement scale of this model. The model has been tested theoretically and has performed well statistically. Practical testing has been undertaken with improvement leaders both within England and America. Early indications are that the model has been extremely helpful in identifying areas that would adversely affect the likelihood of sustainability of their improvement work.

This guide is designed to be used in conjunction with the Sustainability Model (which you can locate on page 2) and has been created with the help of NHS staff for all who are involved in improvement of health care services’.

We believe that the best way to use the model is at several different points in time:

- at the first planning stage which might be the design or selection of your improvement initiative. This will enable you to identify and improve areas that require strengthening right from the start
- around the time of initial pilot testing so that you 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.

Don’t feel restricted by this though you can, in fact, use the model at anytime during your improvement initiative.

About this guide and how to use it

Section 1 presents the Sustainability Model and a detailed breakdown of the model and scoring system.
Section 2 the largest part of the guide, provides practical advice on how you might identify opportunities to increase the likelihood of sustainability. Split into 3 sections: 2.1 Process, 2.2 Staff and 2.3 Organisation.
Section 3 presents the master scoring system and bar chart to help identify the factors with greatest potential for improvement.

We don’t intend that you read this guide like a book from beginning to end, rather move around the different sections targeting those factors that you have identified as needing strengthening. However, a good place to start is at page 2, the Sustainability Model, where you can identify the key areas that you wish or need to work on.

An interactive website has been designed to help teams enter your data, calculate scores that predict the likelihood of sustainability, identify opportunities for improvement and provide guidance on how to make those improvements. This will be available in the Autumn 2006 and will be advertised via the NHS Institute webpage.

We hope you find this guide useful. Please contact Lynne Maher with any advice on how to improve it. lynne.maher@institute.nhs.uk
Using the Sustainability Model on pages 01 to 06, identify the Factors that require attention, locate the Factor on the model opposite and proceed to the page indicated.
Health Service Sustainability Model

Authors
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Directions
The sustainability model can be used by individuals or teams and in addition to providing scores can also lead to useful discussions about the improvement project.

1 - Read through the model.  
2 - Select the level of each factor that best describes your situation.  
3 - Identify the box next to the description with a tick (✓)  
4 - Using the master version of the score system (on pages 87 to 92) calculate the scores and enter into the assessment panel at the bottom of the blank score system.  
5 - Identify the factors with the greatest potential for improvement by plotting the scores onto the bar chart on page 93.  
6 - For advice on how to improve the identified factors locate the related factor within section 2.

Scores
Preliminary evidence suggests: a score of 55 or higher offers reason for optimism while a score of 45 or lower suggests that you need to take some action to increase the likelihood that your improvement initiative will sustain.

Look initially at the factors that have the greatest potential for improvement. (as is shown in the bar chart on page 93). You will find some useful information in the corresponding section of this guide which will help you to devise an action plan for improvement.

You will find it helpful to continue to use the model over time and we suggest reviews at periods of three to six months.

We are continuing to assess the use and impact of the sustainability model. We would be pleased to receive any thoughts or comments that you have for improvement.

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Monitoring Progress
Adaptability
Credibility of Evidence
Benefits beyond helping patients

Section 1 • Factor Definition
**Benefits beyond helping patients**
- In addition to helping patients, are there other benefits?
- Does the change reduce waste, duplication and added effort?
- Will it make things run more smoothly?
- Will staff notice a difference in their daily working lives?

**Credibility of the evidence**
- Are benefits to patients, staff and the organisation visible?
- Do staff believe in the benefits?
- Can all staff describe the benefits clearly?
- Is there evidence that this type of change has been achieved elsewhere?

**Adaptability of improved process**
- Can the process overcome internal pressures and continually improve?
- Does the change continue to meet ongoing needs effectively?
- Does the change rely on an individual or group of people, technology, finance etc to keep it going?
- Can it keep going when these are removed?

**Effectiveness of the system to monitor progress**
- Does the change require special monitoring systems to identify improvement?
- Is this data already collected and is it easily accessible?
- Is there a feedback system to reinforce benefits and progress and initiate action?
- Are the results of the change communicated to patients, staff, the organisation and the wider NHS?

**Factor description**

<table>
<thead>
<tr>
<th>Factor description</th>
<th>Identify (✓)</th>
<th>Factor Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The change improves efficiency and makes jobs easier</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>The change improves efficiency but does not make jobs easier</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>The change does not improve efficiency but does make jobs easier</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>The change neither improves efficiency nor makes jobs easier</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**Benefits of the change are immediately obvious supported by evidence and believed by stakeholders**
- Benefits of the change are not immediately obvious even though they are supported by evidence and believed by stakeholders
- Benefits of the change are not immediately obvious even though they are supported by evidence. They are not believed by stakeholders
- Benefits of the change are neither immediately obvious, supported by evidence nor believed by stakeholders

**The process can be adapted to other organisational changes and there is a system for continually improving the process**
- The process can be adapted to other organisational changes but there is no system for continually improving the process
- The process is not able to adapt to other organisational changes but there is a system for continually improving the process
- The process is not able to adapt to other organisational changes and there is no system for continually improving the process

**There is a system in place to identify evidence of progress, monitor progress, act on it and communicate results**
- There is a system in place to identify evidence of progress and act on it, but the results are not communicated
- There is a system in place to identify evidence of progress and monitor progress. The results are communicated but no one acts on them
- There is no system in place to identify evidence of progress or to monitor progress nor act or communicate it

**Process Total Score**

<table>
<thead>
<tr>
<th>Process Total Score</th>
<th>1st Assessment</th>
<th>Date</th>
<th>2nd Assessment</th>
<th>Date</th>
<th>3rd Assessment</th>
<th>Date</th>
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</table>

Identify your Factor level score by going to the Process master score system on page 88
Section 1 • Factor Definition

Training and Involvement

Attitudes

Staff

Senior Leaders

Clinical Leaders
Staff involved and training to sustain the process

- Do staff play a part in innovation, design & implementation of change?
- Have they used their ideas to inform the change process from the very beginning?
- Is there a training & dev infrastructure to identify gaps in skills & knowledge and are staff educated and trained to take change forward?

Factor description

<table>
<thead>
<tr>
<th>Factor Level Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5</td>
<td>Staff have been involved from the beginning of the change and adequately trained to sustain the improved process</td>
</tr>
<tr>
<td>6.3</td>
<td>Staff have been involved from the beginning of the change but not adequately trained to sustain the improved process</td>
</tr>
<tr>
<td>0.0</td>
<td>Staff have not been involved from the beginning of the change but have been adequately trained to sustain the improved process</td>
</tr>
<tr>
<td>-0.3</td>
<td>Staff have neither been involved from the beginning nor adequately trained to sustain the improved process</td>
</tr>
</tbody>
</table>

Staff attitudes toward sustaining the change

- Are staff encouraged to express their ideas and is their input taken on board?
- Are staff able to run small-scale tests (PDSA) based on their ideas, to see if additional improvements should be recommended?
- Do staff think that the change is a better way of doing things that they want to preserve for the future?

Factor description

<table>
<thead>
<tr>
<th>Factor Level Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0</td>
<td>Staff feel empowered as part of the change process and believe the improvement will be sustained</td>
</tr>
<tr>
<td>5.1</td>
<td>Staff feel empowered as part of the change process but don’t believe the improvement will be sustained</td>
</tr>
<tr>
<td>5.1</td>
<td>Staff don’t feel empowered by the change process but believe the improvement will be sustained</td>
</tr>
<tr>
<td>0.0</td>
<td>Staff don’t feel empowered by the change process or believe the improvement will be sustained</td>
</tr>
</tbody>
</table>

Senior leadership engagement

- Are the senior leaders trustworthy, influential, respected and believable?
- Are they involved in the initiative, do they understand it and do they promote it?
- Are they respected by their peers and can they influence others to get on board?
- Are they taking personal responsibility & giving time to help ensure the change is sustained?

Factor description

<table>
<thead>
<tr>
<th>Factor Level Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0</td>
<td>Organisational leaders take responsibility for efforts to sustain the change process and staff generally share information with and actively seek advice from the leader</td>
</tr>
<tr>
<td>6.2</td>
<td>Organisational leaders don’t take responsibility for efforts to sustain the change process but staff generally share information with and seek advice from the leader</td>
</tr>
<tr>
<td>5.7</td>
<td>Organisational leaders take responsibility for efforts to sustain the change process but staff typically don’t share information with or seek advice from the leader</td>
</tr>
<tr>
<td>0.0</td>
<td>Organisational leaders don’t take responsibility for efforts to sustain the change process and staff typically do not share information with or seek advice from the leader</td>
</tr>
</tbody>
</table>

Clinical leadership engagement

- Are the clinical leaders trustworthy, influential, respected and believable?
- Are they involved in the initiative, do they understand it and do they promote it?
- Are they respected by their peers and can they influence others to get on board?
- Are they taking personal responsibility & giving time to help ensure the change is sustained?

Factor description

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>15.0</td>
<td>Clinical leaders take responsibility for efforts to sustain the change process and staff generally share information with and actively seek advice from the leader</td>
</tr>
<tr>
<td>6.7</td>
<td>Clinical leaders don’t take responsibility for efforts to sustain the change process but staff generally share information with and actively seek advice from the leader</td>
</tr>
<tr>
<td>5.5</td>
<td>Clinical leaders take responsibility for the efforts to sustain the change process but staff typically do not share information with or actively seek advice from the leader</td>
</tr>
<tr>
<td>0.0</td>
<td>Clinical leaders don’t take responsibility for efforts to sustain the change process and staff typically do not share information with or actively seek advice from the leader</td>
</tr>
</tbody>
</table>

Staff Total Score

<table>
<thead>
<tr>
<th>1st Assessment Date</th>
<th>2nd Assessment Date</th>
<th>3rd Assessment Date</th>
</tr>
</thead>
</table>

Identify your Factor level score by going to the Staff master score system on page 90
Choose the **Factor Level** that comes closest to your situation and circle the area to the left of it.

### Fit with the organisation's strategic aims and culture
- Has the organisation successfully sustained improvement in the past?
- Are the goals of the change clear and shared?
- Is it contributing to the overall organisational aims?
- Is change important to the organisation and its leadership?
- Does your organisation have a ‘can do’ culture?

<table>
<thead>
<tr>
<th>Factor Level</th>
<th>Identify</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>✔</td>
</tr>
<tr>
<td>3.3</td>
<td>✔</td>
</tr>
<tr>
<td>3.5</td>
<td>✔</td>
</tr>
<tr>
<td>0.0</td>
<td>✔</td>
</tr>
</tbody>
</table>
- There is a history of successful sustainability and improvement goals are consistent with the organisation's strategic aims
- There is a history of successful sustainability but the improvement and organisations strategic aims are inconsistent
- There is no history of successful sustainability but the improvement goals are consistent with the organisation's strategic aims
- There is no history of successful sustainability and the improvement goals are inconsistent with the organisation's strategic aims

### Infrastructure for sustainability
- Do you have enough good quality, trained staff?
- 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?

<table>
<thead>
<tr>
<th>Factor Level</th>
<th>Identify</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.7</td>
<td>✔</td>
</tr>
<tr>
<td>4.4</td>
<td>✔</td>
</tr>
<tr>
<td>3.3</td>
<td>✔</td>
</tr>
<tr>
<td>0.0</td>
<td>✔</td>
</tr>
</tbody>
</table>
- Staff, facilities and equipment, job descriptions, policies, procedures and communication systems are appropriate for sustaining the improved process
- There is an appropriate level of staff, facilities and equipment, but inadequate job descriptions, policies, procedures and communication systems for sustaining the change
- The levels of staff, facilities and equipment to sustain the change are not appropriate although job descriptions, policies, procedures and communication systems are adequate
- The staff, facilities and equipment, job descriptions, policies and procedures and communication systems are all not appropriate for sustaining the change

### How to calculate your score

Add the **Process**, **Staff** and **Organisation** scores together and place in the **Sustainability Total Score** box.

Now go to page 93 and plot the scores onto the bar chart provided.