## Approaches to Quality Improvement

The tables below provide an overview of some of the best known approaches to quality improvement in healthcare.

- Always Events®
- Experience Based Co-Design (EBCD)
- IHI Model for Improvement
- Patient and Family-Centred Care (PFCC)
- Virginia Mason Production System (VMPS)

<table>
<thead>
<tr>
<th>Short description</th>
<th>Method</th>
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| **Always Events®** | **Set-up and Oversight of Always Events**  
Always Events are aspects of the patient experience that are so important to patients and family members that health care providers must aim to perform them consistently for every individual, every time.  
These can only be developed with the patient or service user firmly being a partner in the development of the event, and the **co-design is key** to ensuring patients’ needs and what matters most to them are met.  
Further information: [https://www.england.nhs.uk/always-events/](https://www.england.nhs.uk/always-events/) |
| **Co-designing and Testing an Always Events**  
This involves the improvement team of staff, patients, service users, and family members collaborating to co-design meaningful process improvements.  
It also includes testing the components of the Always Event using Plan Do Study Act (PDSA) cycles and an associated measurement plan. |
| **Reliably Implementing an Always Events**  
The creation of a way of working in which the tested process happens for every patient, every time. |
| **Sustaining and Spreading Always Events**  
This is about ensuring successful Always Events are sustained and spread to additional areas of the organization.  
The change needs to be transferred from an improvement project to “the way we do things”. |
<table>
<thead>
<tr>
<th>Experience Based Co-Design (EBCD)</th>
<th>Short description</th>
<th>Method</th>
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<tbody>
<tr>
<td>Experience-based co-design (EBCD) is an approach that enables staff and patients (or other service users) to <strong>co-design services and/or care pathways</strong>, together in partnership.</td>
<td>Patient interviews</td>
<td>EBCD uses narrative video interviews with patients, staff interviews and observations of care to start a discussion between patients and staff about how to improve care.</td>
</tr>
<tr>
<td>Further information: <a href="https://www.pointofcarefoundation.org.uk/resource/experience-based-co-design-ebcd-">https://www.pointofcarefoundation.org.uk/resource/experience-based-co-design-ebcd-</a></td>
<td>Touchpoints</td>
<td>The patient interviews are analysed for ‘touchpoints’. These touchpoints are made into a ‘trigger film’ which is shown at a workshop with patients alongside a technique called ‘emotional mapping’ where patients identify particularly good or bad points on the care pathway, and how they felt.</td>
</tr>
<tr>
<td></td>
<td>[The ‘Accelerated EBCD approach’ uses patient trigger films from the archive at Healthtalk.org]</td>
<td>Facilitated discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Run small co-design teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reporting, evaluating and celebrating success</td>
</tr>
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### IHI Model for Improvement

The Model for Improvement, developed by [Associates in Process Improvement](http://www.ihi.org), is a simple yet powerful tool for accelerating improvement.

The model has two parts:

1. **Three fundamental questions**, which can be addressed in any order:
   - What are we trying to accomplish?
   - How will we know a change is an improvement?
   - What change can we make that will result in an improvement?

2. **The Plan-Do-Study-Act (PDSA) cycle** to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement.

### Setting Aims

The aim should be time-specific and measurable; it should also define the specific population of patients or service users who will be affected.

### Establishing Measures

Teams use quantitative and qualitative measures to determine if a specific change actually leads to an improvement. Measures help teams decide whether to adapt, adopt, or abandon a specific change during PDSA cycles.

### Selecting Changes

Ideas for change may come from those who work in the system or from the experience of others who have successfully improved.

### Testing Changes

The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change in the real work setting. PDSA cycles should be documented by the project team to track progress over time.

### Implementing Changes

After testing a change on a small scale, learning from each test, and refining the change through several PDSA cycles, the team may implement the change on a broader scale.

### Spreading Changes

After successful implementation of a change or package of changes for a pilot population or an entire unit, the team can spread the changes to other parts of the organization or in other organizations.

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Further information:

[http://www.ihi.org/resources/Pages/HowtoImprove/default](http://www.ihi.org/resources/Pages/HowtoImprove/default)
<table>
<thead>
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</table>
| **Patient and Family-Centred Care (PFCC)** | **Select a care experience**  
This involves choosing the care experience that you want to improve for patients and families. The care experience must be defined from patients’ and families’ points of view. |
| | **Establish a guiding council**  
This step involves setting up a guiding council to guide and champion the work. |
| | **Evaluate the current situation and develop a sense of urgency**  
The gathering of baseline data to understand the current situation and what to improve on. |
| | **Develop working groups to carry out the improvement work**  
The working group should consist of relevant staff from across the organisation. |
| | **Develop a shared vision for the ideal patient experience**  
Writing the story of the ideal experience of care as if you were the patient or family member. |
| | **Identify individual projects and improvement teams**  
Working group uses data to decide on improvement projects. To implement the changes, it is recommended that the ‘model for improvement’ is used with small tests of change evaluated using PDSA cycles. |

Further information:  
### Short description

**Virginia Mason Production System (VMPS)**

A system-based transformation approach based on systematic use of lean techniques to continuously improve quality and safety, eliminating waste and reducing cost.

*Virginia Mason Institute* (VMI) is a non-profit corporation that provides education and training in the VMPS management method.

### Method

It is based on the use of lean improvement techniques to improve quality and safety, thereby reducing waste and cost.

Such techniques include Plan Do Study Act, Rapid Process Improvement Workshops (RPIWs) and kaizen events focused on incremental changes, and 3P workshops (Production Preparation Process).

NHS Improvement is in a 5 year partnership with VMI and 5 NHS Trusts to support them to develop a ‘lean’ culture of continuous improvement which puts patients first ([https://improvement.nhs.uk/resources/virginia-mason-institute](https://improvement.nhs.uk/resources/virginia-mason-institute)).

An evaluation will commence in early 2018 with final report due in March 2021.

Further information: [https://www.virginiamason.org/vmps#How](https://www.virginiamason.org/vmps#How)
Key components of the approaches

The tables above outline some of the main approaches used for quality improvement in healthcare, but there are many other tools and techniques that can be used. Also, as stated by the Health Foundation (2013)¹, “no one approach is better than the others, and some may be used simultaneously.”

As outlined in the table below, the different approaches to quality improvement share many common features, improvement tools and methods. For example, ‘Plan-Do-Study-Act’ where changes are tested in small cycles forms a central part of IHI’s ‘Model for Improvement’ but can also be used as a tool in other quality improvement approaches.

The table shows the aspects that form the ‘core’ part of the quality improvement approaches and not necessarily all the tools and techniques that can be used. For instance, whilst patient shadowing is a key aspect of the Patient and Family-Centred Care (PFCC) approach, other tools are also recommended in the PFCC toolkit such as ‘driver diagrams’, ‘process mapping’ and ‘snorkelling’. Similarly, whilst patient shadowing may not feature as a key aspect in other QI approaches, this technique could be used as part of the process.

### The key components in some quality improvement approaches

<table>
<thead>
<tr>
<th>Component</th>
<th>Always Events®</th>
<th>Experience Based Co-Design (EBCD)</th>
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<th>Patient and Family-Centred Care (PFCC)</th>
<th>Virginia Mason Production System (VMPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both patients/families and staff identify opportunities for improvement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Emphasis on staff driving improvements / changing staff perceptions</td>
<td></td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Oversight team to champion the work</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Development of working group/s</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Improvements are co-designed</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Filmed patient interviews</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Patient shadowing</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Both patients and staff are interviewed in the process</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Emotional mapping used</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PDSA cycles used for testing a change</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LEAN techniques used (e.g. Rapid Process Improvement Workshops, 3P Workshops)</td>
<td></td>
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<td>✓</td>
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<tr>
<td>Spread change</td>
<td>✓</td>
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</tr>
<tr>
<td>Free online toolkit (tools/templates)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>