Transfer of learning from QI training for better impact on care - Transferring learning

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Q Exchange by the Health Foundation.

Contents

Introduction

The need for system transformation and innovation is widely recognised in health and social care in Northern Ireland (NI). The Department of Health (2014) published the Quality 2020 Attributes Framework to develop the knowledge, skills and capacity of organisations in Quality Improvement (QI).

Since then health and social care organisations in Northern Ireland (NI) have been investing significantly in training staff to support and drive Quality Improvement (QI) in practice. Our project, funded through Q Exchange, focuses on the transfer of learning from QI training for better impact on care. One goal of the project was to develop an evaluation framework for QI programmes at Level 3 of the Quality 2020 Attributes Framework from across Northern Ireland.

These level 3 programmes include:

- The Institute for Healthcare Improvement (IHI) Improvement Advisor Programme;
- SEHSCT Quality Improvement Fellowship Programme;
- SHSCT QI Leader;
- The Scottish Improvement Leader (ScIL) Programme;
- The Scottish Patient Safety Programme (SPSP) or the Scottish Quality and Safety (SQS) Fellowship Programme;
- Postgraduate Diploma or MSc in Business Improvement, Ulster University;
- Intermountain;
- Flow Coaching

Our first report provides more detail on the framework we developed which we hope can be used by others looking to evaluate QI programmes within their own organisations or areas. This framework consisted of two stages:

Stage 1- A survey completed by participants from across the programmes listed above.

Stage 2- In-depth interviews with participants identified through the survey as either being Success or Non-success cases in terms of their evaluation of the outcomes/activities they have achieved/engaged in post training.

This report provides a breakdown of our survey results as well as the findings from our interviews.

The first aim of the interviews was to seek participants' views on their ability and opportunity to transfer their training back into work and gain examples of the type of service impacts achieved.

A further aim of the interviews was to identify the enablers and barriers experienced by participants post training. This report identifies these enablers and barriers to implementing QI post training which we hope will be a useful 'transfer resource' for the Q community and HSCQI, especially relevant to those involved in delivering, supporting or commissioning QI training, and with the wider healthcare sector who want to support transfer.

Please note - A more detailed version of this report is also available providing in-depth analysis.

Evaluation Framework Overview

Outlined in more detail in report 1, the framework we developed and used is based on Brinkerhoff's (2003) Success Case Method (SCM). The SCM is particularly useful in looking back at programmes already delivered to identify what has worked and how. It is based on comparing successful and unsuccessful cases (i.e. those who transferred their learning back into their roles and wider organisations) through story-telling.

Stage 1 – Survey of QI training experience and knowledge transfer

Our survey design was informed by a review of the literature, e.g. the habits of an 'improver' (Lucas and Nacer, 2015), overcoming challenges to improving quality (Dixon-Woods, McNichol and Martin, 2012), but primarily a series of interviews with key stakeholders from across NI. Key stakeholders included the sponsors of the level 3 QI training programmes, Trust Chief Executive Officers, QI leads within the Trusts and key personnel leading QI regionally in the Department of Health and Public Health Agency.

The survey developed consisted of 25 outcomes/activities thought to be most associated with success alongside a section to record demographic and work /role related characteristics.

Following submission of the survey tool, those respondents who indicated their interest in a follow-up interview were identified as either a 'successful' or 'unsuccessful' case – determined on the basis of whether they scored higher than the average for all responses on the training transfer total score.

Stage 2 - Interviews

Within SCM, the aim of the interviews is to capture and document the ways in which the learning has been used by participants within the organisation and the experience of participants post programme.

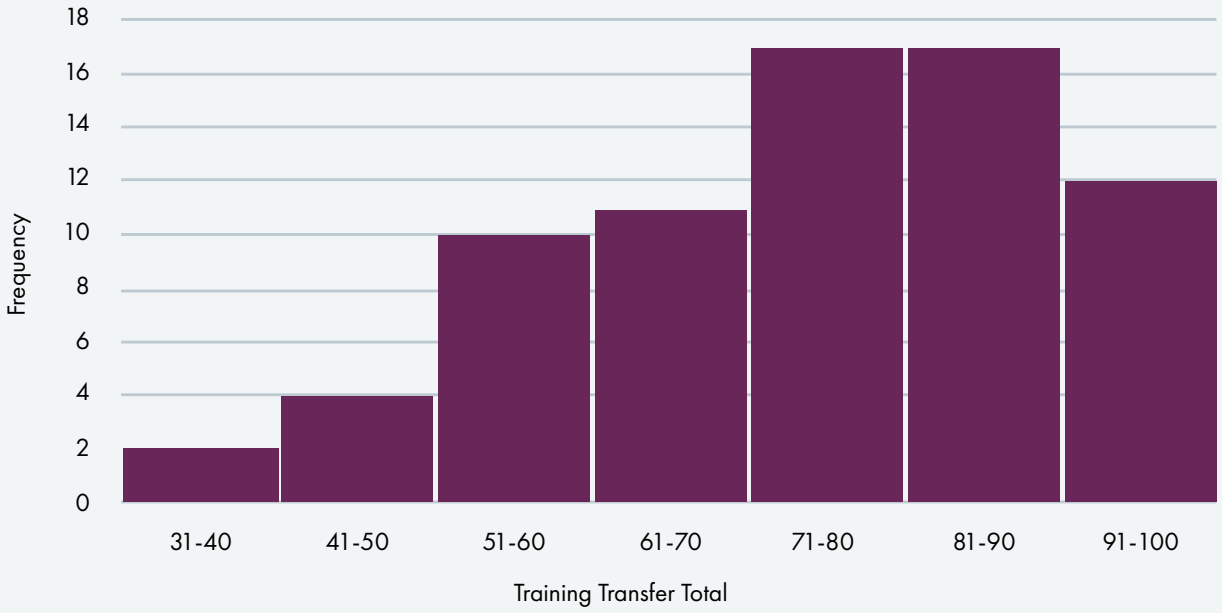
As described above, we also sought to identify the enablers and barriers participants had encountered in relation to achieving this impact.

Survey Results

73 surveys were completed in total with responses from each of the NI Health and Social Care Trusts.

QI training transfer could range from 0 to 100, the average score was 74 with a standard deviation of 16.4. The minimum was 34 and the maximum was 100. The distribution within our responses is shown in Figure 1.

Figure 1. Distribution of QI training transfer totals across our responses



The survey outlined 25 different outcomes/activities from Level 3 QI Training. Recognising that not all will be appropriate to participants depending on their role, opportunities, environment etc., participants evaluated the extent to which they had achieved each in their practice after completing the Level 3 QI Training programme. The following response scale was used:

a) Yes, with clearly positive results. (4 points)

b) Yes, but I haven't experienced any discernible results yet. (3 points)

c) No, not yet, but I expect to. (2 points)

d) No, and I do not expect to. (1 point)

e) Not applicable. (0 points)

Tables 1 and 2 provide the 5 areas the 73 participants believed they had achieved most in their practice and the 5 areas they had achieved least.

Table 1. The 5 outcomes/activities participants believed they had achieved most in their practice

Outcome/Activity	Average out of 4
I have applied the QI training in my practice.	3.70
While working on a QI project, I have been able to win over people or engage people who were initially uninterested orresistant.	3.64
I have gained learning from when change initiatives fail.	3.49
I have identified a problem or opportunity that a QI project could address.	3.42
I have empowered frontline staff to participate in QI initiatives.	3.42

Table 2. The 5 outcomes/activities participants believed they had achieved least in their practice

Outcome/Activity	Average out of 4
Outside of teaching or formal training, I have shared my experiences and learning from implementing QI outside my Trust.	2.48
I have been involved in QI initiatives that cross organisation boundaries (e.g. work that extends beyond my current Trust).	2.48
I have conducted scale and spread of a QI prototype elsewhere in my Trust or regionally.	2.25
I have led a QI network or a collaborative.	1.96
I have secured funding or resource support for QI work.	1.96

As can be seen above, outcomes/activities participants believed they had achieved least in their practice tended to be associated with scale and spread of QI and moving outside the boundaries of their own Trust.

Interview Results

We were able to arrange 20 interviews with those who volunteered to be surveyed and based on their survey responses, 12 could be considered 'Success cases' (i.e. they evaluated their training transfer at the average or above) and 8 'Non-success cases' (i.e. they evaluated their training transfer at below the average).

'Success' and 'Non-success' is based on the survey respondents' own views. They are not used in a pejorative manner - not all outcomes/ activities will be appropriate to participants depending on their role, opportunities, environment etc. 'Success' and 'Non-success' simply represents the extent to which the participants themselves believe they have been able to transfer their QI training back into their service and the impacts achieved as a result.

The division of interviewees into these categories allows us to explore their views later, particularly in the context of the enablers and barriers they experienced post training.

The remainder of this report present the analysis of these interviews in terms of:

- Participants views on their ability and opportunity to transfer their training back into work and examples of the type of service impacts achieved;
- The factors participants believed had enabled them to make these impacts; and
- The barriers were encountered.
- An organisational checklist for those seeking to ensure the transfer of learning from QI training.

Training Transfer and Service Impacts (Kirkpatrick Level 3 and Level 4)

Determining the extent to which the participants have been able to transfer their QI training back into their service and the impacts achieved as a result is obviously an important undertaking for those evaluating QI training.

This can be thought of as level 3 of Kirkpatrick's (1994) well known evaluation model i.e. has there been a change in behaviour/application of learning back in participants' work. The current project was not intended to be an evaluation of the QI training programmes as such, although it does provide an evaluation framework that others could use.

A key aspect of SCM is that success cases need to be proven, to mitigate self-reporting bias. If someone is identified as a successful case through the survey, this is based on their perception. By qualifying successes as the first part of the interview, it allows us to determine if their perception is backed up by objective and verifiable evidence. Unverifiable success cases (i.e. based on perception alone) can be considered as unsuccessful.

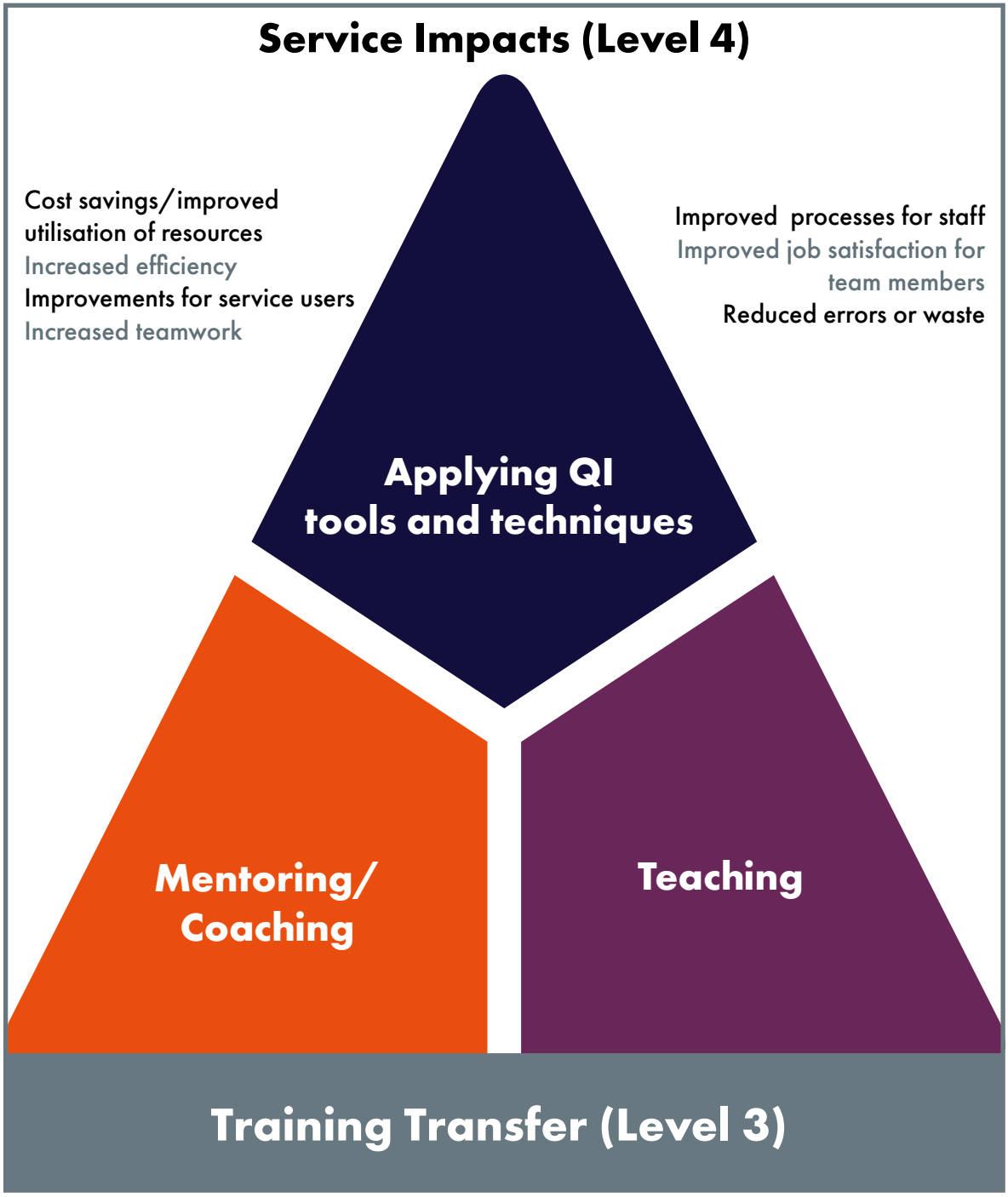
This process allowed us to determine whether Success and Non-Success Cases were indeed different and hence whether the classification could be used to look at the differences they experienced in terms of enablers and barriers.

Training Transfer was presented to us in 3 main ways:

- Mentoring/coaching others on using QI within their work.
- Specific examples of applying QI tools subsequent to the training.
- Teaching QI within their organisation or creating QI resources for others.

Service impacts could be considered level 4 of Kirkpatrick's model i.e. what are the final results of the training for the organisation. The service impacts associated with this training transfer are shown in Figure 2.

Figure 2 - Training transfer and service impacts achieved after QI training



Training Transfer (Kirkpatrick Level 3)

All interviewees were asked if they had used any of the learning or tools provided by the programme. In addition to specific example of using QI tools, participants often mentioning mentoring or coaching others regarding using QI within their work, teaching QI within their organisation or creating QI resources for others.

- 55% of interviewees overall (75% of Success Cases and 25% of Non-Success cases) could provide specific examples of using QI tools subsequent to the training.
- 83% of Success Cases and 75% of Non-Success Cases provided examples of them mentoring or coaching others on using QI within their work.
- 50% of Success Cases and only 13% of Non-Success Cases provided examples of them teaching QI within their organisation or creating QI resources for others.

Service Impacts (Kirkpatrick Level 4)

8 of the 12 (75%) Success cases provided an example of service impact they had achieved in comparison to 4 of the 8 Non-Success cases.

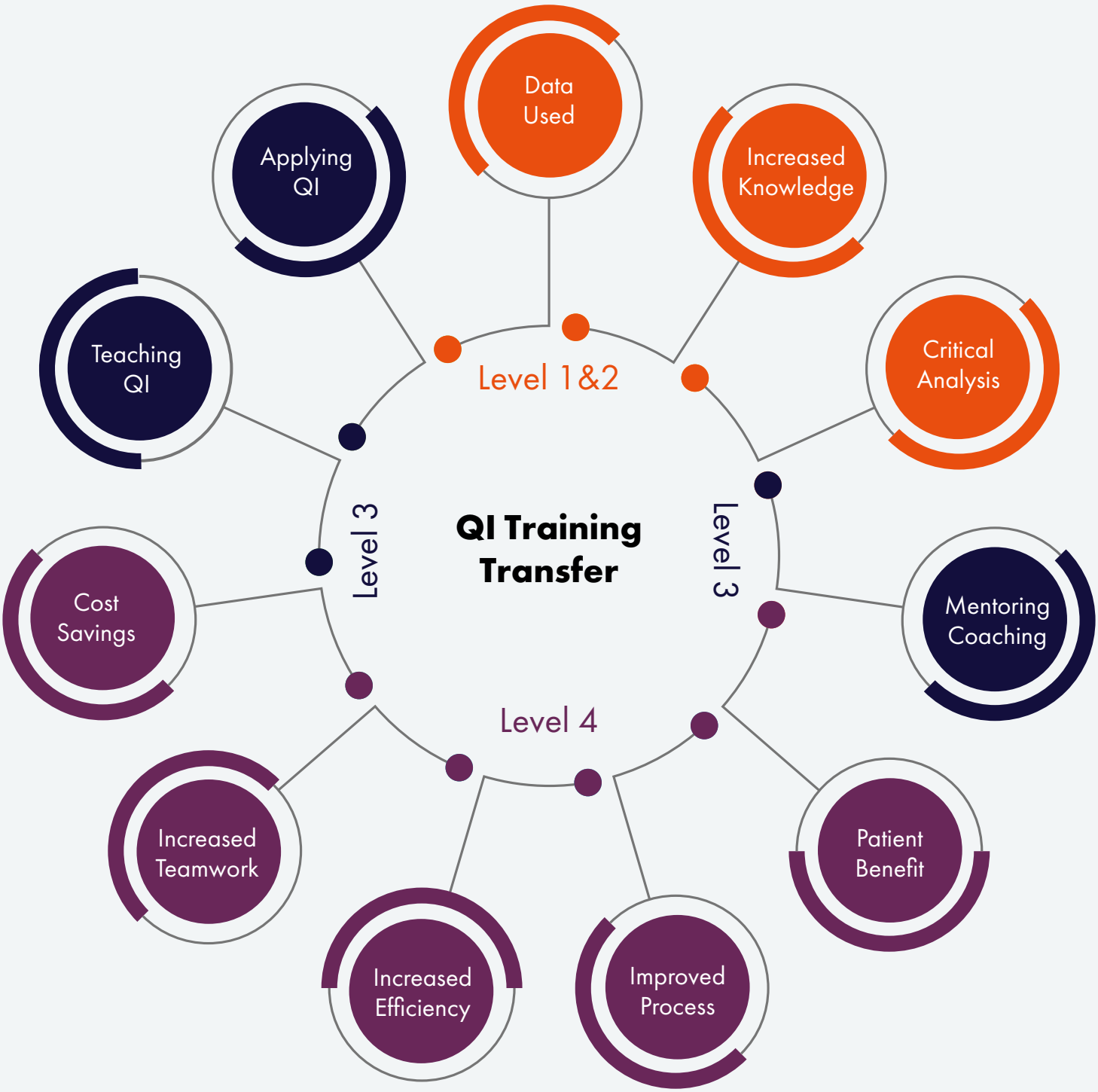
Success cases were more likely to provide examples of service impacts through transfer of training in terms of: increased efficiency; improvements for service users; increased teamwork; and cost savings/improved utilisation of resources.

Table 3. Service impacts achieved through transfer of QI training

Types of Service Impacts	All Interviews (20)
Increased efficiency	30%
Improvements for service users	30%
Increased teamwork	25%
Cost savings or improved utilisation of Resources	10%
Improved processes for staff	10%
Reduced errors or waste	10%
Improved job satisfaction	5%

Success cases were more likely to provide examples of service impacts through transfer of training in terms of: increased efficiency; improvements for service users; increased teamwork; and cost savings/improved utilisation of resources.

Figure 3 - QI outcomes across each of the Kirkpatrick Levels



Enablers for implementing QI training back in work

What enablers were experienced?

All 20 interviewees had experienced enablers helping them to implement QI training back in work. The most commonly experienced enablers could be grouped into three themes:

- 'Organisational' (mentioned by 100% of interviewees)
- 'Project' (70%)
- 'Project Leader' (45%)

When looking at enablers in these broad themes, there is considerable consistency in the frequency with which enablers that were classified as 'Organisational' and 'Project' were mentioned by the interviewees identified as Success and Non-Success Cases. For example, all 12 Success Cases and all 8 Non-Success cases mentioned an enabler that could be classified as an 'Organisational'.

One group of enablers for which a difference does emerge is 'Project Leader'. These types of characteristics were mentioned as an enabler by 58% of the Success Cases compared to only 25% of the Non-Success Cases.

Figure 4 - Enablers to implementing QI training back in work

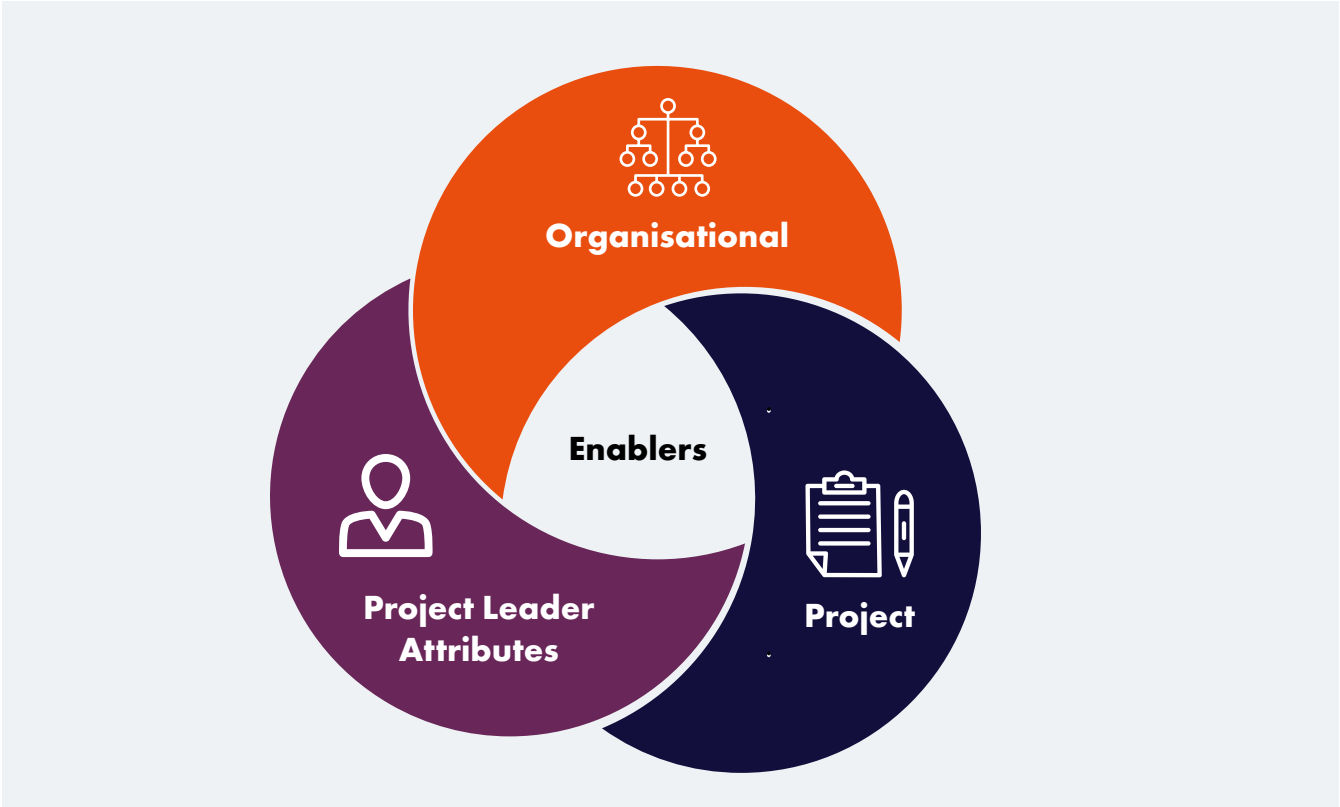


Table 4. The most common enablers by theme

Theme	Enablers (% of interviewees)			
Organisational	Immediate Management and/or Senior Management support (75%)	Expertise/On the ground support (40%)	Accountability (20%)	Opportunity to use QI training (20%)
Project	People Involved (30%)	Having or building a compelling case for QI (25%)	Communication with Those Affected (20%)	
Project Leader Attributes	Motivation and Commitment (20%)	Resilience and Persistence (10%)	QI Knowledge and Experience (10%)	Ability to Influence Upwards (10%)

The two most cited 'Organisational' enablers were perceived as:

- 'Immediate Management and/or Senior Management support' (75%)
- 'Expertise/On the ground support' (40%)

Both were more likely to be mentioned by Success Cases.

Other 'Organisational' enablers were:

- 'Education and QI celebration events' (20%)
- 'Accountability' (20%)
- 'Opportunity to use QI training' (20%)
- 'QI becoming part of the Trust's way of working/culture' (15%)
- 'QI as part of existing role or complements existing role' (10%)

The main 'Project' enablers were:

- 'People involved' (30%)
- 'Having or building a compelling case for the QI project' (25%)
- 'Communication with those affected' (20%)

'People involved' included those who had an investment or interest in the QI project but also the nature of those people and what they brought to the project.

Success Cases were more likely to mention 'Having or building a compelling case for the QI project' as a 'Project' enabler.

Success Cases were also much more likely to mention 'Project Leader' attributes as enablers than Non-Success Cases with 'Motivation and Commitment' of the project leader being the most frequently mentioned.

Suggested enablers that are needed

A wide variety of suggestions were made in relation to enablers that could further help level 3 training participants implement QI training back in work.

The 5 most frequently suggested enablers that would help participants implement QI more effectively post training:

1. Strategic selection and utilisation of QI trained people
2. Continuous Professional Development
3. Opportunity to use QI post programme
4. Accountability
5. Time

Barriers to implementing QI training back in work

What barriers were experienced?

All 20 interviewees had experienced barriers to implementing QI training back in work. The most frequently mentioned barriers to implementing QI back at work were:

- 'Staff engagement' (mentioned by 85% of interviewees)
- 'Time' (80%)
- 'Resistance specific to the project' (60%)
- 'QI within the wider organisation' (55%)
- 'Lack of opportunity to implement QI or use training in time' (50%)
- 'Alignment to Trust Strategy and Priorities' (35%)

Non-Success Cases were more likely to mention several barriers including:

- 'Lack of opportunity to implement QI or use training in time' – mentioned by 75% of the Non-Success cases and by 33% of the Success Cases; and
- 'Alignment to Trust Strategy and Priorities' – mentioned by 50% of the Non-Success cases and by 33% of the Success Cases.

As shown in Table 5, some of these barriers also broke down into different facets.

Figure 5 - The most frequently mentioned barriers to implementing QI back at work

Table 5. Barriers which broke down into facets

Barriers	Facets (% of interviewees)			
Staff Engagement	Attitude to QI (40%)	Lack of Knowledge about QI (30%))	Competing Demands (30%)	Change Fatigue (20%)
QI within Organisation	Lack of Accountability (20%)	Poor Utilisation of QI Trainee (20%)	Lack of support for Scale and Spread (15%)	Lack of Incentive/ Reward (15%)
Alignment to Strategy/ Priorities	Trust strategy and/or senior leadership priorities not being progressed through QI (30%)		QI projects grounded in the needs of the service (10%)	

Staff engagement around QI was the main barrier to implementing QI back at work mentioned by the interviewees. As can be seen in Table 6 above, several facets were discussed in relation to Staff Engagement as a barrier.

As may be expected, time was identified as a significant barrier by many of the interviewees. This included the importance of having protected time to work on a QI project and that this not be removed once the training was over. Several interviewees discussed how their QI work was completed on their own time.

Resistance specific to the project refers to instances in which interviewees were describing resistance from affected staff to the target or content of their QI intervention that they had been involved in implementing post QI training.

As can be seen in Table 6, several facets were discussed which can be grouped under the place of QI within the wider organisation.

Lack of opportunity to implement QI or use training in time was mentioned by 75% of the Non-Success cases and by 33% of the Success Cases. This was a separate category to lack of time.

Alignment to Trust strategy and priorities included specific barriers like 'Trust strategy and/or senior leadership priorities not being progressed through QI' and 'QI projects grounded in the needs of the service'.

Other barriers

A number of other barriers were discussed by interviewees including: issues relating to the QI Training Programme, Resources and Lack of management support as shown below.

1. QI Training Programme Issues
2. Resources
3. Lack of management support

A number of issues have been grouped as they related to the QI training programme. Some of the interviewees felt that the training programme they had been on focused on clinical and/or acute areas with limited examples/consideration outside of these. Staff being 'sent' onto a programme was observed by some of the participants on their training which they felt would be a barrier for those participants to implementing QI post programme. That a number of different QI programmes were being completed was felt to be a potential barrier as the shared QI approach could be somewhat 'disjointed'. Lastly the expense of the programme was suggested as a barrier as it could limit the number of people who were trained.

Resources refers to comments other than or in addition to time constraints e.g. budget, staff.

Lack of management support related to managers not understanding the hidden costs of QI work that the staff were seeking to engage in.

QI Training Transfer Organisational Checklist

To enhance the impact of training transfer on service delivery and outcomes in Health and Social Care Organisations consideration should be given to the following domains:

Organisational Accountability

Quality Improvement is integral to Positive Organisational Culture

- The value of QI recognised by Senior Management Teams and incorporated into Organisational Strategy.

Accountability of Trainee and Organisation

- Consideration of a joint learning agreement with the trainee and management prior to and post training.

Expectation of Outcome for Investment

- Outcomes to be considered in relation to the domains of Quadruple Aim.

Organisational Support

Senior Management Sponsorship

- Trainee and Quality Improvement initiatives have tangible senior manageable support.

Importance of a Visual Sponsor

- Building will for improvement is enhanced by recognisable support.

Line- Management Support

- Local understanding and resource to enable trainee to propagate improvement.

Trust Strategy Alignment

Projects Aligned to Organisational Strategy

- QI initiatives with most long term impact are aligned to Organisational Strategy.

Senior Managers use QI Skilled Staff to Deliver on Organisational Priorities

- Recognition of the value added to Trust initiatives by staff skilled in QI approach

Resources

Resources to enable improvement impact include:

- Protected Time
- Job Planning
- Career Pathways in QI
- Admin Support
- Data Analytics for Initiatives
- IT systems to support QI initiatives
- QI Expertise in Organisation to support projects
- Mentors

Support for Scale and Spread

Recognition of effort to facilitate interdisciplinary/ interorganisational coordination necessary to enable scale and embed positive improvements.

Recognition of the Value Added to the Organisation by QI

Recognition of Effort and Impact

- Celebration of success.
- Organisational sponsored assessment of impact.

Incentive/ Reward

- Individuals and teams have incentive to improve quality and bring value adding initiatives to the organisation.

Evaluation

Evaluation embedded into QI investment

- Resources are allocated for evaluation of QI effort.

Overall accountability and impact with regards to Quality Improvement

- Essential organisation expectation and scrutiny of QI effort.

Organisational Metrics to evidence impact of service improvements and innovations

- Partnership with performance and governance teams in planning organisational QI strategy.

Networks

Establishment of QI Networks

- Organisational establishment of QI Networks supporting people trained in QI.

Connecting and Building a QI Community

- Resource and facilitate participation of staff and teams in local, regional and international networks.

Acknowledgements

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- Dr Anne Kilgallen - Chief Exec Western Health and Social Care Trust
- Professor Charlotte McArdle - Chief Nursing Officer
- Hugh McCaughey - Chief Exec South Eastern Health and Social Care Trust
- Colin McMullan - Quality Improvement Lead BHSCT
- Jacqueline Morton - Quality Improvement Lead SHSCT
- Dr Mark Roberts - Clinical Director HSCQI
- Myra Weir - Director of Human Resources and Corporate Affairs SEHSCT
- Dr Paddy Woods - Deputy Chief Medical Officer
- Gill Smith – Innovation and Quality Improvement Lead NHSCT

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