

# Building Q

Learning from designing a large scale  
improvement community

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**The  
Health  
Foundation**

**NHS**

*Improvement*

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# Glossary

**Application process:** the steps potential members must complete in order to apply to Q.

**Community:** a group of people with a common interest, who collaborate by sharing ideas, information and other resources.

**Design:** the form and shape of Q (ie design as a noun).

**Design process:** the process by which we decide the form and shape of Q (ie design as a verb).

**Health and care:** we regard 'health' as a holistic state of physical and mental wellness and 'care' as a term to include both health care and social care services.

**Improvement:** any structured approach to making things better. This includes, but is broader than, 'quality improvement' methodologies.

**Improvement labs:** a small number of dedicated physical spaces around the UK, each with their own core staff, facilitating work with members and other stakeholders to make progress on key complex challenges that are a priority for the Q community and the system as a whole.

**Network:** a group or system of interconnected people or things.

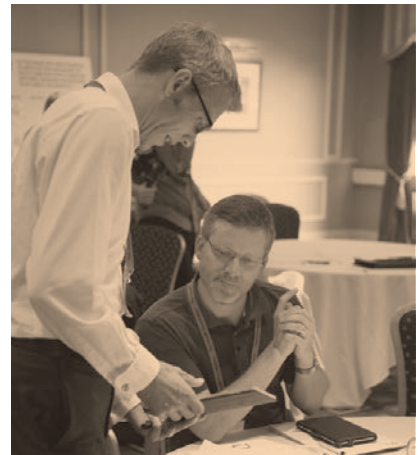
**Quality:** for the purposes of Q, we defined quality in terms of the six domains outlined by the Institute of Medicine: safety, effectiveness, person-centredness, timeliness, efficiency and equity.<sup>1</sup>

**Quality improvement (QI):** There is no single definition of quality improvement. However, a number of definitions describe it as a systematic approach that uses specific techniques to improve the quality of care.<sup>2</sup>

**Recruitment strategy:** the process of attracting and managing applications from potential Q members.

**Social network:** used here to denote a broad network of social interactions and personal relationships, rather than a dedicated website or application.

**Social network analysis (SNA):** a technique to map and analyse connections across a social network.



# Executive summary

To respond to complex challenges now and in the future, all health systems need to develop faster processes of learning to identify what improvements need to be made to the quality of care, how to make them, and the impact of the changes.<sup>3,4,5</sup> Achieving this will require people at all levels in the system to have the time, support and capability to lead processes of learning and change effectively. A range of formal techniques to accelerate improvement have been used for some years in health care, and many have a long pedigree in other industries.<sup>6</sup> While there will be ongoing debate about which techniques are most effective, there is recognition of the need to apply a structured approach if organisations want to achieve sustainable improvement.<sup>7</sup>

Q is a diverse and growing community of people, with experience and understanding of improvement, committed to improving the quality of health and care across the UK. It is an initiative, led by the Health Foundation and supported and co-funded by NHS Improvement,<sup>\*</sup> that aims to provide a sustainable infrastructure that systematically identifies individuals leading improvement and supports them to share ideas, enhance their skills and make changes that bring benefits to health and care.<sup>8</sup>

Q was born out of the 2013 Berwick report, published in the wake of failings of care at Mid Staffordshire Hospitals NHS Trust. This made the case for an NHS ‘devoted to continual learning and improvement’ and made a specific recommendation to establish improvement fellowships. Q was subsequently established in 2015 when the first 231 members – the founding cohort – were selected following nomination by 48 organisations. The intention is to recruit thousands more members in the coming years.

The founding cohort are a diverse group of people at the front line of care, managers, researchers, patient leaders and policymakers already involved in improvement, bringing a range of skills and experience to Q. The role of the founding cohort was to design Q, both for themselves and those that will subsequently join, in order to help ensure that patient care benefits from existing expertise and leading innovations from across the UK health and care systems.

This report aims to share what we have learned so far from setting up this experimental and ambitious initiative. It draws on a variety of sources including an independent, real-time evaluation of Q undertaken by RAND Europe.

## Q’s role in developing connections

Q is first and foremost about connecting people. Our hypothesis is that these connections will boost skills and confidence in making improvement through peer support and development opportunities, and help overcome the well-known challenges with the spread of innovation across the health system.

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<sup>\*</sup> Up to 1 April 2016, NHS England provided support and co-funding.

We had no rigid pre-conceived idea of how best to develop a community of this scale, although we were able to draw upon previous Health Foundation programmes and evidence reviews<sup>9,10,11</sup> that explored the role of networks in health care improvement. We also learned from leading thinkers and practitioners, seeking input on specific areas as needed.

Q members showed considerable appetite to enhance their links with each other and have already begun to show the potential of these stronger links, though it is too early to assess the depth and quality of these relationships. Social network analysis showed during the first six months of Q, members built on average 10 new connections with others within the community. Q members clustered within regions and professions, but also bridged and created new relationships with people from different backgrounds. Members used a range of ways to connect with each other – for example using social media, the Q online directory and through activities at the design events. This increased connectivity was accompanied by early examples of peer sharing and collaboration.<sup>12</sup>

## Q's role in developing the capability of people leading improvement

Supporting the further development of those who already have knowledge and experience of improvement is a core aim of Q. At the outset of the design process, only 46% of respondents to an evaluation survey found it easy to access the information and resources they needed to make improvements to care.<sup>12</sup> They also highlighted particular gaps in the availability of data to assess the progress of change and benchmark against others.

The founding cohort identified a range of ideas for enhancing their skills and knowledge further. As well as greater access to structured development activities and resources, members prioritised opportunities for flexible peer learning, for example through site visits and peer mentoring.

Even during this first phase of Q, some signs of increasing improvement capability are being seen. The proportion of evaluation survey respondents who reported they had the skills and knowledge they needed for the quality improvement work they wanted to conduct increased from 58% at the start of the design work to 74% at the end.<sup>12</sup> Employers also reported perceived benefits for the people they nominated, including greater sharing of good practice, enthusiasm for change and awareness of available resources.<sup>12</sup>

## Q's role in making change on the ground

Q is primarily an 'upstream' intervention that seeks to enable more effective improvement principally through making it easier for individuals and organisations to learn from others doing similar work. Rather than being an additional project, Q aims to help organisations maximise the impact of their local investments in improvement. By ensuring there are individuals who act as a conduit for learning from others across the UK, Q aims to help organisations avoid 'blind alleys' when designing improvement efforts. They will also be able to access peer support to help maintain momentum when obstacles are encountered.

As well as creating efficient ways for members to find and learn with others in order to accelerate local improvement efforts, we are also co-designing improvement labs. These will provide opportunities for members to pool what they know and work together – and with other experts – on shared system challenges. It is currently envisaged that a small number of labs will be established across the UK over coming years, each with their own physical space and core staff. The labs will use a set of methods derived from the innovation labs that are becoming well established in other sectors, combined with improvement techniques more commonly used in health care. By involving the Q community, for example by crowdsourcing ideas and involving them in idea generation and testing work, the labs will seek to develop skills in problem solving and rapidly enhance understanding of different perspectives on complex problems. They will also help make progress on stubborn problems. While the design work for the labs is at an early stage, a prototype of a lab process, looking at reducing unnecessary admissions from care homes to hospital, was very well received by the Q community. This highlighted the appetite for working with others on real-world challenges and tangibly demonstrated the potential of Q.

## Q's role in shifting the context to better support improvement

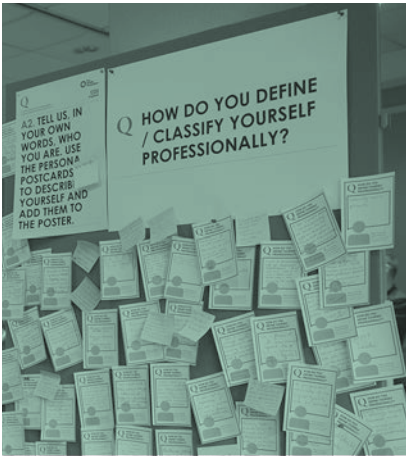
There are multiple factors that need to be in place for people to be able to design, implement and measure changes effectively. The single biggest practical barrier identified by Q founding members was time. This depends on their employers' willingness to support them to participate in Q, and more generally to design and implement improvement initiatives. 38% of evaluation survey respondents reported spending six or more unpaid hours per week on quality improvement work,<sup>12</sup> signalling the extent to which this work depends on discretionary effort outside of core organisational activities. With greater critical mass, plus evidence of the benefits of Q, there is potential for Q to influence employers to invest more time and staff resources in improvement.

## Q: looking forward

Designing Q on such a large scale brought many challenges, for both the project team and Q members, many of whom were unfamiliar with the emergent design techniques used. Some members questioned the value of the process, especially in the early stages and the process surfaced different priorities and perspectives that were not easy to reconcile in generating recommendations for Q. However, while no co-design process on this scale would please everyone, a broad-based community of individuals has been built who report a positive attitude to Q, perceive the initiative as important, and want to stay involved and shape the strategy further. The evaluation has provided recommendations which the project team are acting upon to continue to improve the design and delivery of Q.

In the next phase, the Q project team will work with members and regional leaders from across the UK to implement an effective infrastructure and prototype a set of core activities for Q, with a focus on enabling practical improvements on the ground. The challenge will be to allow Q the space to mature as a self-directed community of peers, with a strong enough supporting infrastructure to demonstrate real impact in terms of enhancing improvement efforts and capability across the UK.





# 1. Introduction

Q aims to provide a long-term supporting infrastructure that systematically identifies those leading work to improve the quality of health and care in the UK. Q makes it easier for people to share ideas, enhance their skills and make changes that benefit patients and the public. There are currently 231 members, and the intention is to expand this number to thousands of people over coming years.

Q is led by the Health Foundation and supported and co-funded by NHS Improvement (until 1 April 2016, the support and co-funding was from NHS England).

In 2015, Q was co-designed with its diverse founding cohort and other stakeholders. This report describes what was learned through this process. The report includes insights on: the range of people involved in improvement in the UK and their development needs; the extent of peer-to-peer networking; and what support people need in their efforts to make care better. We also provide an assessment of the many challenges associated with co-design on this scale and of progress so far with Q.

This report aims to share our learning with those who have committed their time and views to shape this experimental and ambitious initiative. We hope our insights will help others who are developing networks to enable improvement, leading collaborative design projects on a significant scale or more generally seeking to boost improvement activity and capability.



## Methodology

The activities and experiences from the first year of Q generated a significant amount of information from varying sources:

- **Independent evaluation:** We commissioned a developmental evaluation from RAND Europe, which included surveys, interviews, focus groups, citizen ethnography and document review. It involved Q members and their employers, the organisations who nominated the founding cohort and the Q project team. The full evaluation report<sup>12</sup> was published in May 2016. More detail about the role of the evaluation team can be found in appendix 1.
- **Insights from the design process – during and between design events:** Q members and other stakeholders were asked to contribute ideas, prioritise solutions and review and refine a proposed operating model.<sup>8</sup> This was a high-paced and creative process, with synthesised data captured in reports and event materials and shared back with the community.<sup>13</sup>
- **Regional mapping:** We provided funding for work at a regional level to, among other things, understand more about the people involved in improvement within their area. In some instances this involved surveys or other mechanisms for data capture. The emerging insights from this work were explored in a workshop with the local project leads.
- **Experience of the project team:** As well as summarising the project team's experiences, as captured through interviews conducted by the evaluation team, this report draws on the experience we gained through discussions with Q members and other stakeholders and experts.

This report blends information from these various sources in a way that aims to provide an accessible and practical summary of a fast-moving and multi-faceted process. We identify the source of key observations so that readers can understand the level of evidence behind specific findings.

## 2. What is Q and how is it being designed?

### What is Q?

Q is a diverse and growing community of people, with experience and understanding of improvement, committed to improving the quality of health and care across the UK.

Q aims to provide a long-term supporting infrastructure that systematically identifies those leading improvement and makes it easier for them to share ideas, enhance their skills, boost the capability of others and make changes that bring benefits to health and care. Q members encapsulated this as ‘leading to make quality improvement routine’.

Q was born out of the 2013 Berwick report, *A promise to learn – a commitment to act: improving the safety of patients in England*,<sup>3</sup> published in the wake of failings of care at Mid Staffordshire Hospitals NHS Trust. This wide-ranging report made the case for an NHS ‘devoted to continual learning and improvement’ and made a specific recommendation to establish improvement fellowships. NHS England responded to this by proposing a 5,000 safety fellows initiative. Subsequently, NHS England’s Patient Safety team (who now sit in NHS Improvement) approached the Health Foundation in 2014 to explore whether the Foundation would be interested in partnering with them on developing the initiative.

The Health Foundation’s ongoing grant programmes to support innovation, spread and scaling up\* illustrate the breadth and volume of work underway to improve the quality of care in every corner of the UK. Looking at this cross-section of improvement work it can be seen that many groups are trying to make similar changes – and are running into the same problems. The Foundation’s analysis of what holds people back highlights a lack of basic improvement skills in those working at the front line, and that those with improvement skills are often isolated and unsupported. While thousands of people in the NHS have received training in formal improvement techniques over the last two decades, their support in the workplace is often not sustained because of organisational turbulence (at local and national level) and a focus on immediate imperatives.

The Foundation concluded that there is a need to boost and expand the capability of staff to make service improvements, and provide a better and more sustainable infrastructure across the UK for peer learning and support. This finding has been echoed by many others.<sup>6</sup> The experience from Health Foundation programmes and wider evidence<sup>9,10,11</sup> highlighted the potential of networks to help meet these objectives.

\* See, for example, the following Health Foundation reports:  
*Shine: Improving the value of local healthcare services*, 2014 [www.health.org.uk/publication/shine-improving-value-local-healthcare-services](http://www.health.org.uk/publication/shine-improving-value-local-healthcare-services);  
*Spreading improvement ideas: tips from empirical research*, 2014 [www.health.org.uk/publication/spreading-improvement-ideas-tips-empirical-research](http://www.health.org.uk/publication/spreading-improvement-ideas-tips-empirical-research);  
*Overcoming challenges to improving quality*, 2012 [www.health.org.uk/publication/overcoming-challenges-improving-quality](http://www.health.org.uk/publication/overcoming-challenges-improving-quality);  
*Perspectives on context*, 2014 [www.health.org.uk/publication/perspectives-context](http://www.health.org.uk/publication/perspectives-context)

As a result, the Health Foundation agreed to match the funding allocated by NHS England, as well as lead the design of Q (previously referred to as ‘5,000 safety fellows’). The concept was developed into an initiative to develop and support improvement more widely; across all domains of quality and including the UK as a whole.

In 2015 a founding cohort of 231 members was recruited to help shape the initiative. We decided co-designing\* Q would ensure what was developed met the needs of the wide range of people undertaking improvement work across the UK. By involving Q members in co-design, we hoped to surface and utilise their incredible wealth of lived experience and insight.

Through the six-month initial design process, Q progressed from a high level vision to a proposed operating model.<sup>8</sup> The operating model describes how members will be recruited and a range of online and face-to-face opportunities for connecting, learning and collaborating that will be piloted during 2016/17. These activities form part of an integrated strategy that describes how Q will contribute to enhancing improvement efforts and capability building more generally in the UK.<sup>8</sup>

## Who designed Q?

In late 2014, we began the design process by consulting over 300 stakeholders on Q’s potential purpose, scope and role.<sup>†</sup>

In spring 2015, we worked with 48 organisations who together nominated a founding cohort of 231 people from 192 organisations to be involved in the detailed design of Q.<sup>12</sup> We sought a cross-section of improvers including people at the front line of care, managers, researchers, patient leaders and policymakers from across the UK. An overview of the founding cohort’s background is provided overleaf. Appendix 2 contains more detailed demographic data about them.

The diversity of the founding cohort goes beyond professional and personal background. They varied in their experience of improvement methods and had different preferences in terms of how they learned, connected with others and consumed information. They also varied in how familiar they were with the ‘emergent design’ processes relevant to the development of Q. As described in appendix 1, while this diversity presented challenges, it also allowed us to ‘stress test’ Q from a range of perspectives to help it cater effectively for a wide range of people as it grows. As well as members telling us what would work best for them as a member of Q, we were able to tap into their particular expertise, for example researchers contributing as ‘citizen ethnographers’<sup>12</sup> or helping to refine the theory of change and future evaluation methodology.

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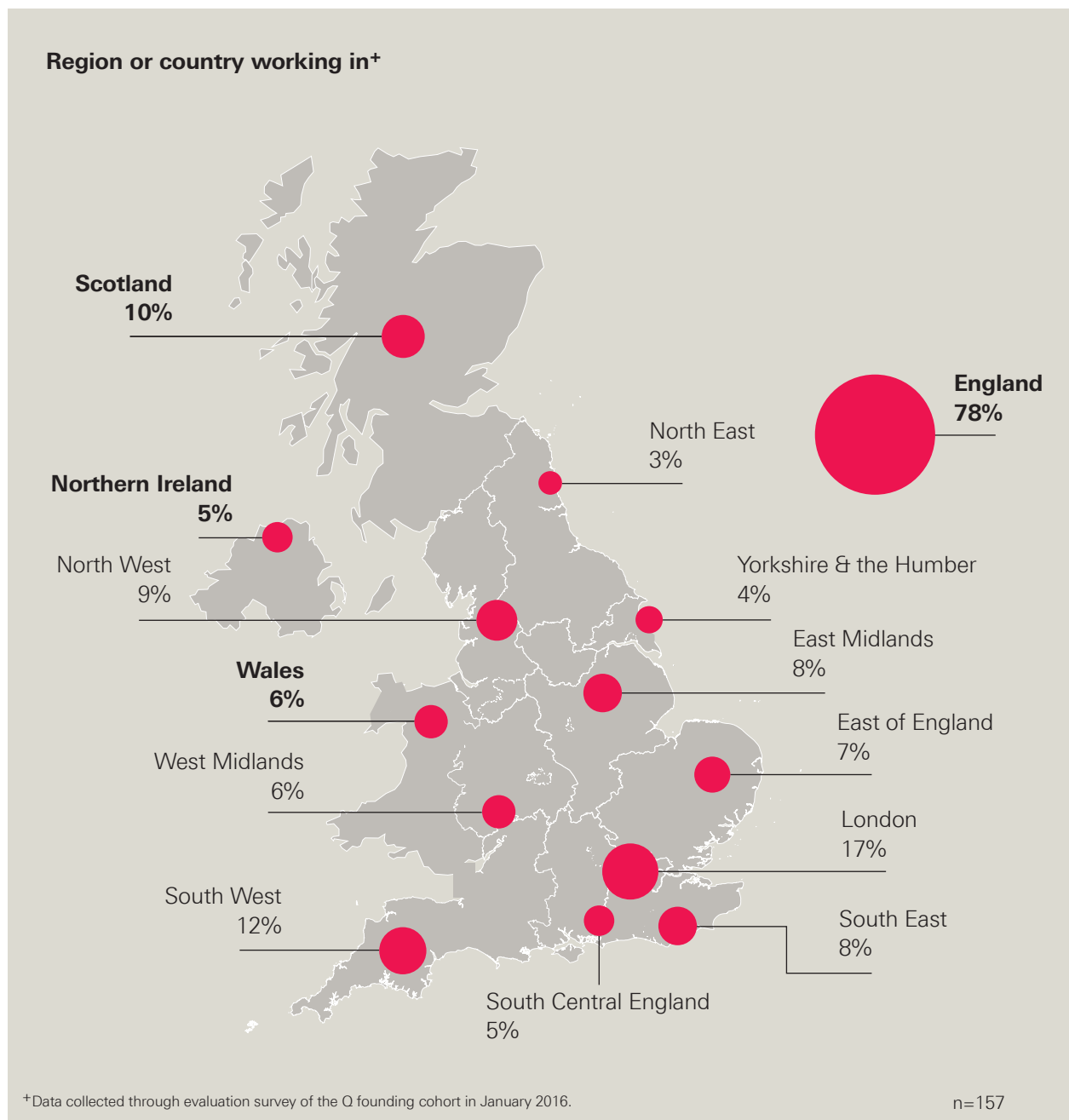
\* Co-design or participatory design began in Scandinavia with the aim of empowering workers in the face of changes being made to industrial processes, and in the USA to improve product development through the use of ethnographic insight. Collaborative design techniques are widely acknowledged to be challenging to apply, but they are also used increasingly as understanding grows about the role they play in generating ideas that secure acceptance and buy in.

† A range of experts and leaders from across the UK and more widely were involved in the early design of Q.

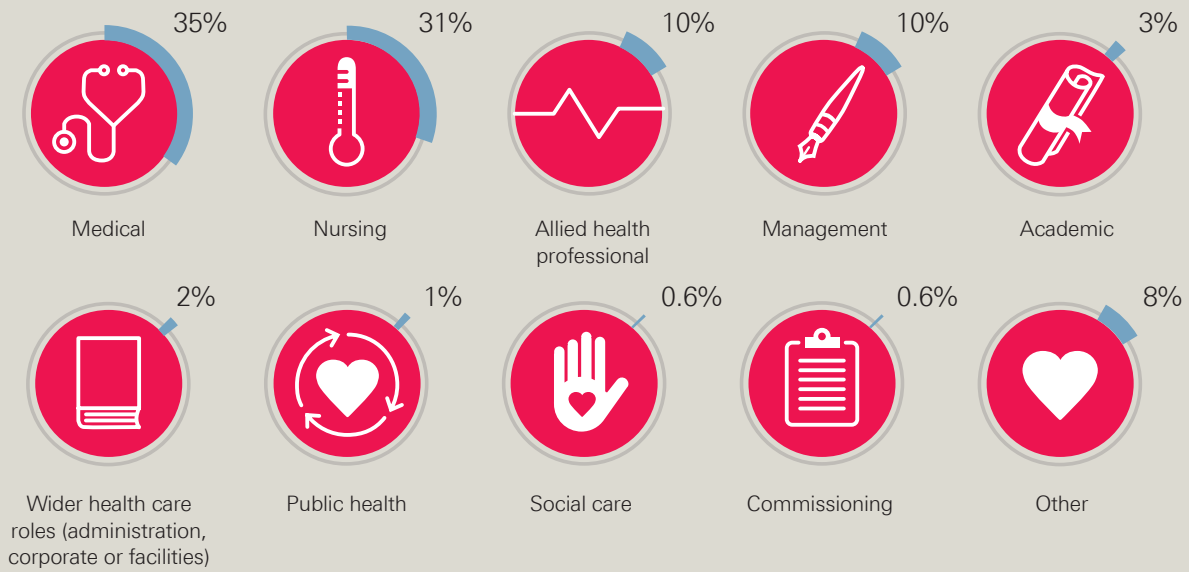
# About the founding cohort

Data was collected from two evaluation surveys of the Q founding cohort in July 2015 (91.3% response rate) and in January 2016 (71.4% response rate). Within each survey the numbers of responses vary slightly from question to question and so the total number of responses included in each infographic are presented here, along with the percentages. Some questions were asked in both the first and second surveys; for these, responses from the first survey were used as the total numbers of responses were slightly higher.

For more details of the founding cohort members, see Appendix 2.



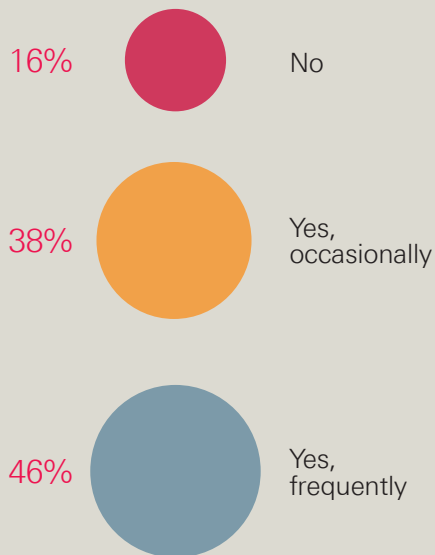
### Professional background<sup>+</sup>



n=154

Many members have more than one current role and these may be different to their professional background. To help understand professional diversity, the second evaluation survey of members in January 2016 included questions on primary and secondary roles and professional background.

### Face-to-face contact with patients / service users\*

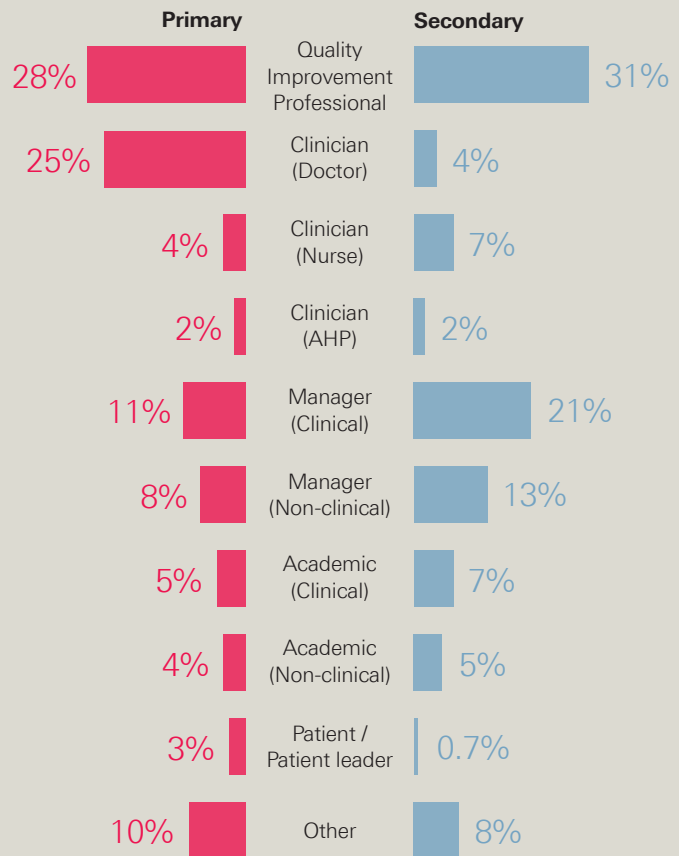


n=208

\* Data collected through evaluation survey of the Q founding cohort in July 2015.

+ Data collected through evaluation survey of the Q founding cohort in January 2016.

### Primary and secondary role<sup>+</sup>



n=150

n=136

## The co-design process

In choosing to co-design Q with members, we were aiming for a people-centred, participative, practical and iterative approach.<sup>14</sup> We needed to develop an operating model, but also to build understanding and momentum behind Q in the process.

By involving a large number of people from the outset, we were able to get a taste of how a large, diverse community might operate. Conscious of the time founding cohort members were investing, we also aimed for a process that would generate insights and connections even in this early design phase that would be of value to their wider work.

Over a period of six months the design of Q was progressed in the following ways:

- Three large scale, two-day design events were hosted, convening founding members to identify what they wanted, needed and expected from Q, as well as what they were willing to contribute (with smaller groups of members volunteering to discuss and refine specific aspects of Q outside of the events).
- An independent evaluation team was selected (RAND Europe) and embedded to assess in real time both the co-design process and Q's potential offer to its members.
- The evolving thinking about the form and shape of Q was articulated in a variety of ways to share and test with all those involved – eg a theory of change, animations describing Q, an operating model.<sup>14</sup> A report that synthesised findings from the events was also produced.
- Work at regional level was commissioned to identify which individuals and groups were doing improvement work locally in each region, and the potential for synergy between Q and local work.

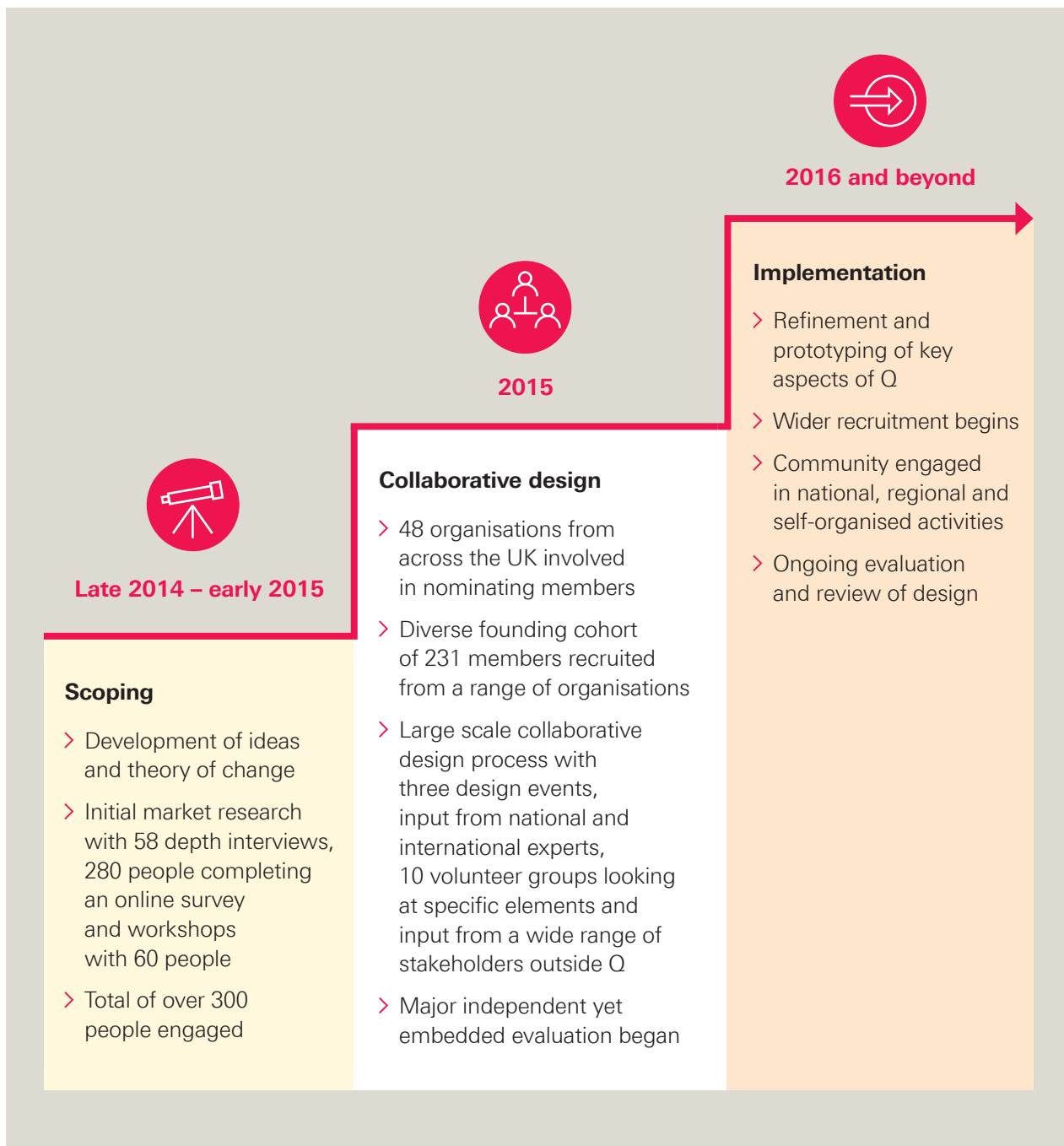
This work was coordinated by a central project team at the Health Foundation, with periodic strategic reviews with NHS England and input from expert advisers and Q members.

Appendix 1 provides further detail on what we learned about how to run a co-design process with diverse stakeholders and the role of the embedded evaluation team.

*'The networking opportunity and time to think about QI cannot be underestimated – we all have busy lives and jobs, but in order to be the best we can be we need to invest our time and energy with others designing and shaping the future we want to lead.'* Q member (evaluation survey 2)



**Figure 1: Timeline of the collaborative design process**



# 3. What we are learning about the role of Q and the people it supports

## Overview

The breadth of the ambition behind Q made it challenging to design, but also made it a particularly rich source of learning for others.

A key element of the design process was to develop a theory of change of how improvement activity could be boosted. It became increasingly apparent that comparatively simple measures, such as training more people or providing a searchable database of experts, would not be sufficient to achieve the underlying objectives. Q aims to identify those leading improvement and make it easier for them to share ideas, enhance their skills, boost the capability of others and make changes that bring benefits to health and care. While interventions such as training are legitimate priorities, supporting and boosting improvement activity for the long term and on a large scale needs other issues to be addressed simultaneously. For example, increasing support from the employing organisations<sup>15</sup> and from peers to help individuals trying to make change. A multi-strand strategy would be required to do justice to the broad and systemic diagnosis and vision of Don Berwick's report.<sup>3</sup>

We heard repeatedly from stakeholders\* and members that Q should avoid becoming 'just another initiative' and 'reinventing the wheel'.<sup>12</sup> They told us Q would add most value if it helped to integrate, connect and underpin existing national, regional and local improvement activities and networks. This represented a more complex design challenge but was key to positioning Q in a way that would be sustainable and truly add value.

The design process was informed by a number of relevant sources of evidence. These included previous large scale initiatives such as the Safer Patients Network,<sup>16</sup> the NHS Institute Improvement Faculty and the Modernisation Agency associates network. Key messages and lessons were identified and reflected on, with the aim of determining the 'active ingredients' for success and learning from past mistakes.

In this section we provide insight into:

- people involved in doing improvement and the challenges to identifying who is doing what
- the potential of peer connections to enable improvement efforts and how to facilitate such connections
- development needs identified by our founding cohort and ideas and considerations associated with meeting these needs
- organisational and policy contexts within which people undertake improvement work.

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\* A range of experts and leaders from across the UK and more widely were involved in the early design of Q

## What do we know about who is working on improvement in the UK?

Our starting proposition was that people working on improvement are often not visible to others who might be doing something similar to them, or want to learn from their work.<sup>17</sup> Regional organisations (the Academic Health Science Networks [AHSNs] in England and organisations responsible for improvement in Wales, Northern Ireland and Scotland) were offered funding to identify the individuals with improvement expertise in their area. The seemingly simple task of mapping who's out there, using surveys and other means (such as events) proved surprisingly difficult. Our hypothesis is that this is in part because of the following:

- **Defining and identifying improvement activity and expertise is not straightforward.** People do not always recognise that what they are doing constitutes improvement work. This is partly because a range of different terms are used to describe the work involved in making health and care better.<sup>12</sup> Improvement is an expanding and contested field encompassing work on many different issues. There are also many debates about, for example, the different approaches that are considered effective and the extent to which assurance and clinical governance or standard-setting strategies would be classified as improvement.

### Mapping improvement capability in the North East

Through Q, work was funded to understand more about who has improvement expertise within each region across the UK. The North East and North Cumbria AHSN used some of this funding to design a survey\* that was distributed widely to practitioners. As of April 2016, 245 responses had been received.

#### Initial analysis of survey results suggests:

- approximately half of respondents deliver training in quality improvement methods to others
- relatively few have formal qualifications in quality improvement
- respondents rate their confidence with soft and learning skills higher than technical skills (particularly measurement related)
- quality improvement projects are not usually written up or published
- there is relatively little experience of formal academic evaluation or commissioning evaluation of quality improvement programmes.

\* The survey was designed through a combination of rapid review of authoritative sources of literature from the back catalogue publications of the Health Foundation and NHS Improving Quality (and its predecessors) and expert input from the North East and North Cumbria Quality Improvement community. The survey was structured around the domains outlined in *Skilled for improvement*. Inspiration for specific questions was drawn from Boaden's *Quality Improvement: Theory and Practice in Healthcare* and the NHS Institute for Innovation and Improvement's *Handbook of Quality Improvement Tools*.

- **There is a lack of easily available data on who has been trained.** With the exception of some regions with developed explicit improvement capability building frameworks and programmes,<sup>\*</sup> it has proven difficult to quantify the number of people who understand established techniques for improving health and health care at different levels of expertise, and indeed what should be considered the key knowledge and skills base.<sup>†</sup> There are many different ways in which people have developed their improvement expertise – some through formal training and some on the job. At a practical level, data about who has completed courses is often lost when organisations change, or will not be shared due to data protection concerns.
- **Low response rates.** In common with others' experience in this area<sup>18</sup> there were low response rates to surveys designed to identify individuals with improvement skills within regions. This may be because those undertaking improvement work prefer to keep their 'heads down' as they pursue local priorities – unless they get the right type of active encouragement and support from organisations or system leaders. Creating time for people working on improvement to share and celebrate their work, or for them to be released to work alongside others doing improvement, depends on broader recognition of the value of this activity compared to competing local priorities.
- **Improvement activity outside the acute sector.** Investment in larger scale quality improvement training and programmes has historically focused on acute hospitals. Those responsible for leading improvement regionally reported that reaching and understanding improvement activity in other care settings is more resource and time intensive.

These factors show that many individuals and their associated skills and improvement activity can be quite hidden in the health and care systems – hidden to national bodies as well as other individuals trying to make similar improvements. Because of this, improvement activity is avoidably underpowered. This underscores the potential value of Q to identify, consolidate and boost the improvement expertise that currently exists in the UK.

<sup>\*</sup> For example:  
Northern Ireland has developed an Attributes Framework to support leadership for quality and safety in health and social care as part of its Quality 2020 programme ([www.nursingandmidwiferycareersni.hscni.net/media/1259/q2020\\_attributes\\_framework.pdf](http://www.nursingandmidwiferycareersni.hscni.net/media/1259/q2020_attributes_framework.pdf)).  
Wales has developed Improving Quality Together ([www.iqt.wales.nhs.uk/home](http://www.iqt.wales.nhs.uk/home)), a national learning programme for all NHS Wales staff and contractors.  
Advancing Quality Alliance (AQuA) has developed an Improvement Capability and Leadership Framework that offers a pathway of progression from novice to expert.

<sup>†</sup> See the Health Foundation reports *Skilled for Improvement* ([www.health.org.uk/publication/skilled-improvement](http://www.health.org.uk/publication/skilled-improvement)), which provides an overview of the capabilities needed by improvers that expands on past frameworks, and *Habits of an improver* ([www.health.org.uk/publication/habits-improver](http://www.health.org.uk/publication/habits-improver)), which takes a different perspective and explores the fundamental habits associated with those doing improvement.

## The role of networks to support people in improvement

*'Networks can provide a neutral environment where individuals from different organisations, disciplines and constituencies can collaborate on an equal footing, freed from the constraints and competition created by more hierarchical structures.'*<sup>11</sup>

There is evidence from other industries that social networks can improve capacity for innovation and productivity.<sup>19</sup> Research suggests networks contribute to health and care improvement by providing a forum for experimentation, creating knowledge, generating information exchange and spreading good practice.<sup>11</sup>

In the health and care system, improvement work is often conducted through pockets of unconnected, localised activity, with consequent duplication of effort and reduced speed of learning and diffusion. Networking approaches offer significant opportunities to accelerate discovery and knowledge generation, boost skills and overcome the isolation that many improvers struggle with.

By their nature, networks can exploit certain attributes better than other types of organisations. These benefits<sup>20</sup> include:

- **rapid and expansive growth** – value for members increases as the network expands and members are motivated to connect and engage with others
- **rapid diffusion** – networks communicate information and resources to their members, allowing them to adapt and spread ideas and collaborate efficiently
- **'small world' reach** – networks can provide short 'pathways' between individuals separated by geographic, organisational, professional, cultural or other barriers
- **resilience** – networks can withstand stresses, including reorganisation of external organisational structures
- **adaptive capacity** – networks can adapt with relative ease, assembling or disassembling capacities, membership and engagement as needed.

### Understanding connections in Q

The founding cohort of Q is made up of individuals who have relationships with other members of the community – the key ingredients needed to form a social network. The capacity of Q to enable connections between peers was identified by members as a primary focus and initial benefit.<sup>12</sup> The potential impact of Q is likely to be strongly linked to how well it enables the effective development of professional relationships that in turn bring benefits for members and ultimately the patients and populations they serve. It is therefore important to measure the way that relationships develop within the network over time.

Social Network Analysis (SNA) was used to understand network connections within the founding cohort over the co-design period, as detailed in figures 2 and 3 (pages 22-23). Data was collected through electronic surveys sent to the founding cohort in July 2015 and January 2016 (before and after the design events). From a list of all 231 members of the community, respondents were asked to indicate which Q members they had any formal or informal connections with that relate to quality improvement in health and care.

Network relationship maps were generated before and after the design events. Many new connections were formed: members reported an average of 10 more connections with other Q members compared to the start of the design period (table 1).<sup>12</sup>

Table 2 details changes in the number of connections between individuals within and between geographical areas and professions. Connection density within areas increased from 17.3% to 34% and density between areas increased from 1.54% to 5.43%. Therefore, while members are still more closely linked to others in their own area, there are over three times as many connections between areas compared to the pre-event baseline. Connection density within professions increased from 4.99% to 11.5% and between professions from 2.27% to 6.55%.

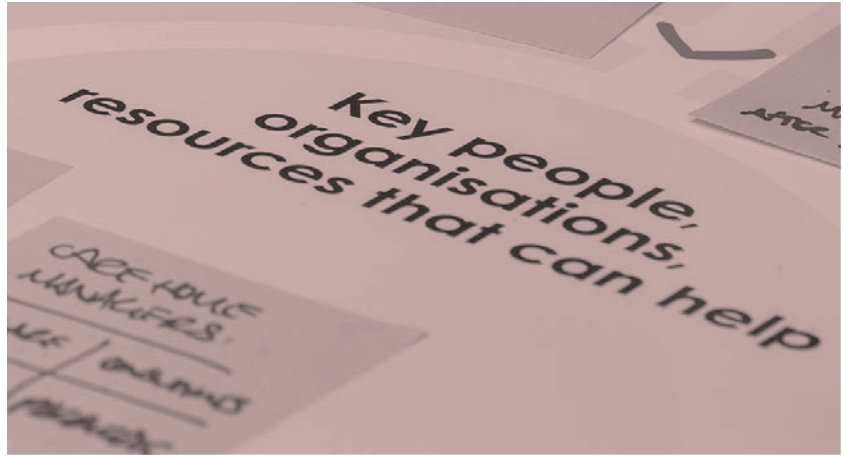
Overall, the absolute increase in connection density within geographical areas and professions suggests members are now able to find and bond with others that have a similar background to themselves. Furthermore, we believe the strong proportional increases of density between different professions and areas indicate that members are taking opportunities to bridge and build relationships with improvers from a diverse range of backgrounds.

The initial survey (figure 2) identified there were a small number of very well connected individuals. This contrasts to the 'after' SNA (figure 3), where we observed a reduction in the number of extremely central members and found that 70% of members report now having at least 10 connections. This strongly suggests that the community will now be less reliant on a few key individuals for knowledge transfer. Standard measures of clustering have decreased, indicating the new connections forming are bridging gaps between groups of people who do not know each other rather than simply increasing the connectivity of groups already connected to each other.<sup>12</sup>

Our hypothesis is that the increased connectivity is unlikely to be simply a consequence of members spending time in the same room. We predict that it was partly due to specific methods used to facilitate networking at the design events, as well as regional networking<sup>21</sup> and the online directory\* that provides an easily searchable list of those in the community (see appendix 1).

*'It has helped build a local network of like-minded people, and made that community stronger. We now meet and are able to pool resources.'* Q member (evaluation survey 2)

\* The Q online directory is a public portal that lists every member and includes a contact form. It is updated by members and includes sections for their biography and areas of interest. Available at: [www.health.org.uk/q-directory](http://www.health.org.uk/q-directory)



While many new connections have been formed, it is too early to assess their quality and potential. A majority of the founding cohort members reported they had established meaningful relationships that have already contributed positively to their improvement work and development of their skills, knowledge and expertise. A minority reported they had not yet formed productive connections with people who share similar interests.<sup>12</sup> As anticipated, forming new connections and maturing relationships through Q will take time.

*'The Q events have made the UK a wee bit smaller.'* Q member (evaluation interview)

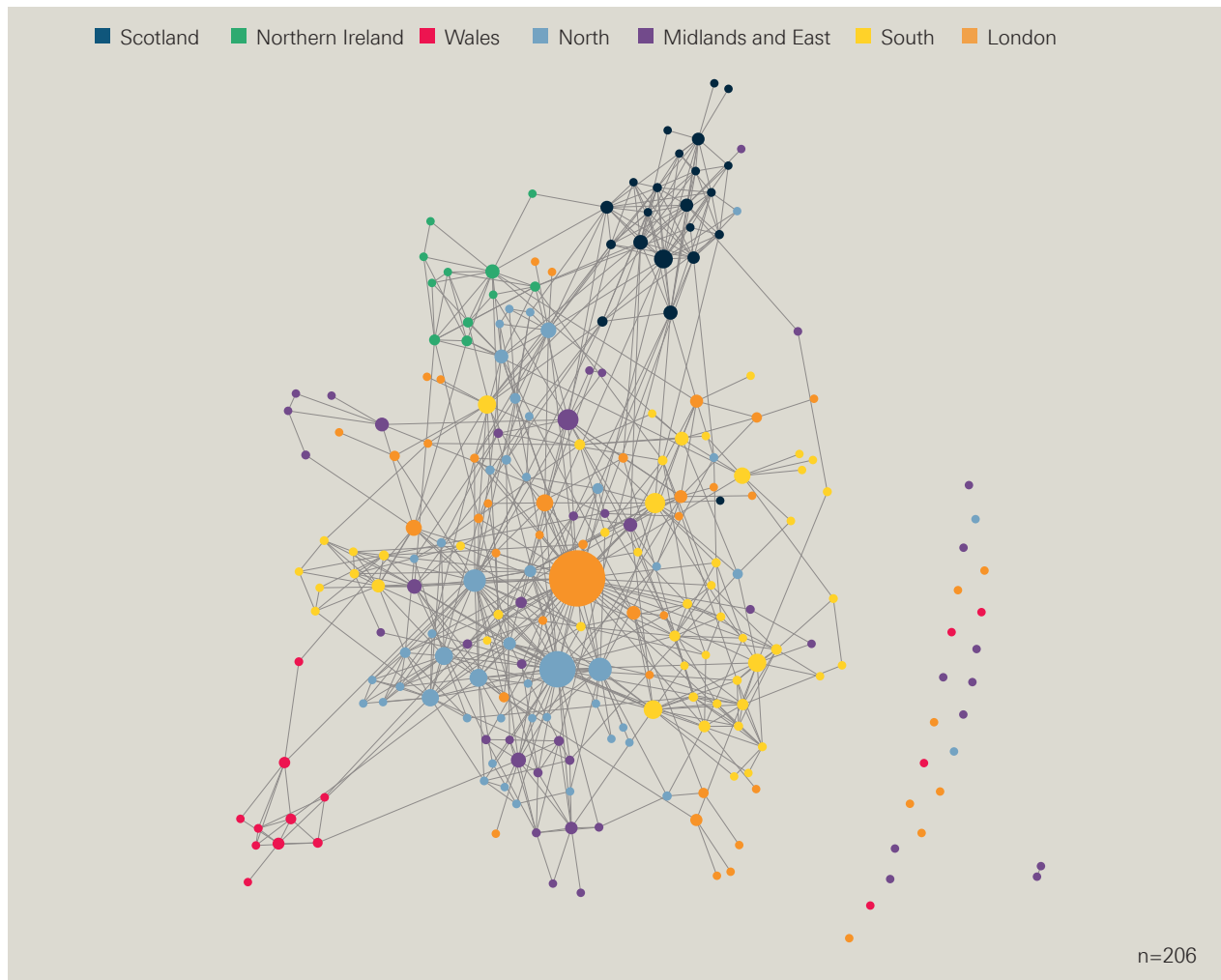
To achieve its aims, Q will need not only to help its members to connect easily, but also to reach out to others. Members voted their preferred Q mission statement to be 'leading to make quality improvement routine'.<sup>\*</sup> Achieving this will require influencing, and collaborating with, colleagues, employers and other stakeholders beyond the membership of Q. The risk of Q becoming inappropriately exclusive was a strong recurring concern for many in the founding cohort and the project team and there were a range of conflicting views on the recruitment process and criteria. Significant time and energy was dedicated to seeking an appropriate balance between inclusivity and exclusivity in relation to who is able to join Q.<sup>8</sup> Continued attention will need to be given to ensuring the benefits of Q flow out to the wider community of people interested in quality improvement, but who are not individually part of Q.

<sup>\*</sup> Outcome of exercise on the mission for Q at the second design event. This involved members voting from a choice of statements that sub-groups of members had produced. Reflected in the *Q theory of change*.

# Social Network Analysis

To help to measure the nature of relationships across the network and how these change over time, the evaluation included a social network analysis (SNA) component. Members were asked to complete a survey question before and after the three design events, identifying from a list Q participants that they have formal or informal connections with which relate to quality improvement in healthcare within the founding cohort. The resulting SNA relationship maps are shown below in Figure 2 and 3.

**Figure 2: Network connectivity before design events**



**Table 1: Differences in measures of connectivity before and after the Q design events**

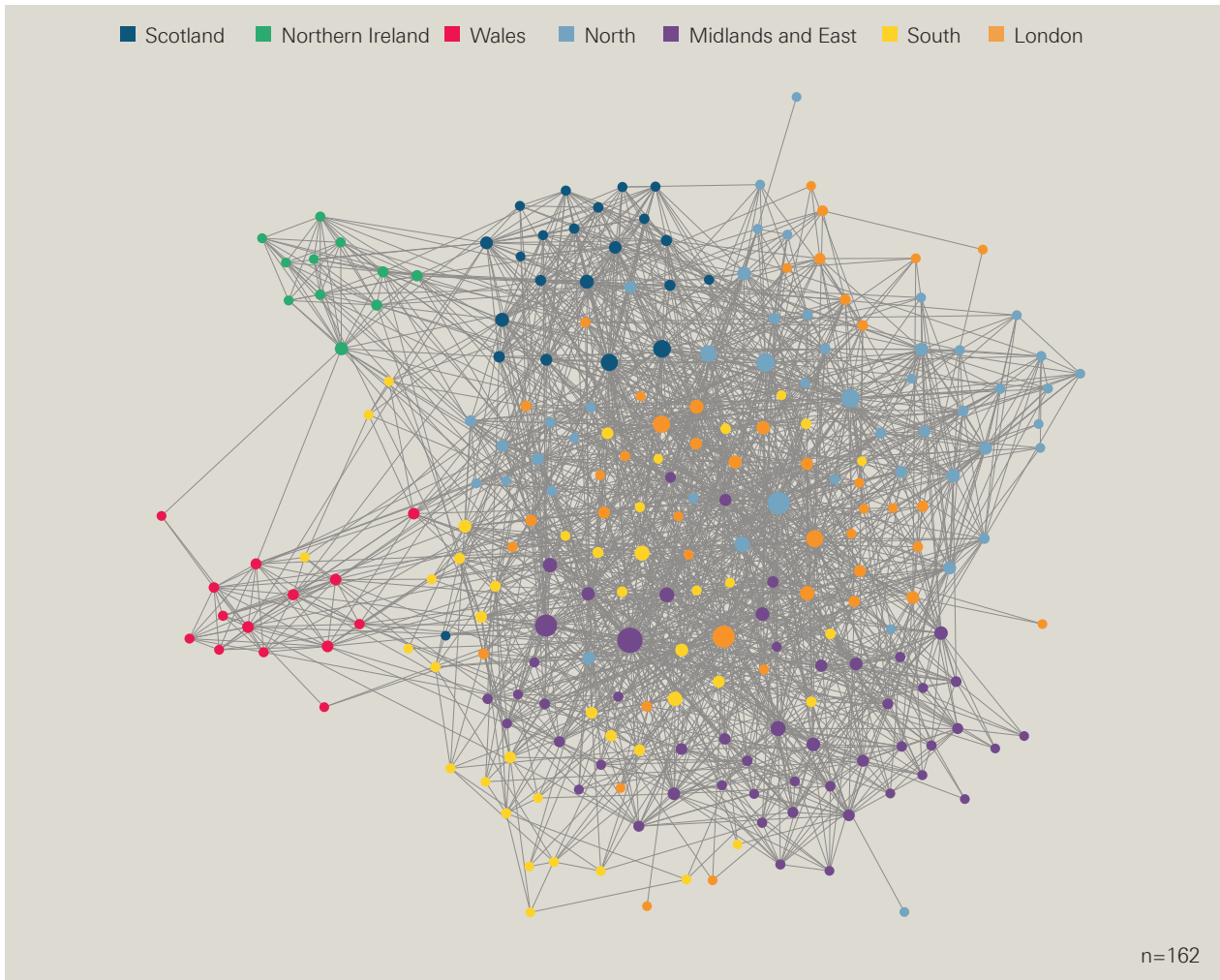
	Before	After
Average number of connections reported	4.7	14.9
Proportion of respondents reporting no connections	16%	2%*
Proportion of respondents reporting at most three connections	51%	7%
Proportion of respondents reporting at least ten connections	13%	70%

\*Although 2% of respondents did not report any connections themselves, they were all identified as a connection by at least one other member. Therefore there were no isolated nodes in the second SNA map.



Each circle or 'node' represents an individual member. Each line or 'edge' represents a connection between two members, where either member reports a 'formal or informal connection'. The size of the node represents the 'betweenness centrality' of a member. Informally, 'betweenness centrality' describes how likely information is to pass through a given node if it is to travel from one point of the network to another as quickly as possible. The colours represent the country or NHS England region that the member works in.

**Figure 3: Network connectivity after design events**



**Table 2: Differences in measures of geographical and professional connectivity before and after the Q design events**

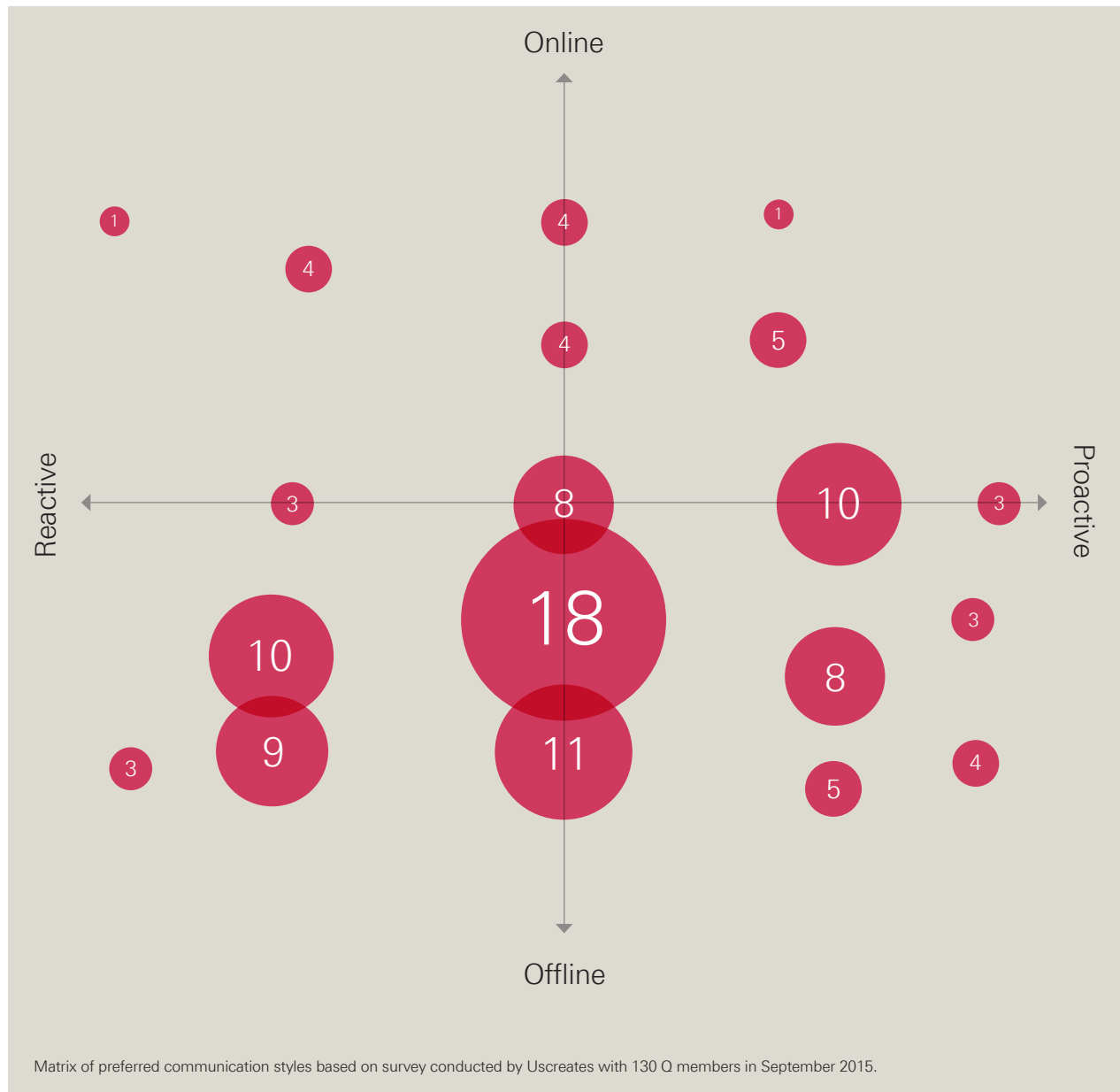
		Before (%)	After (%)	Absolute increase (%)	Proportional increase
Geography	Density within areas	17.3	34.0	16.7	1.96
	Density between areas	1.54	5.43	3.89	3.52
Profession	Density within professions	4.99	11.5	6.55	2.31
	Density between professions	2.27	6.55	4.29	2.89

## How to enable connections for learning and collaboration

While early signs of increased connectivity are promising, there remains much to be done to design sustainable ways to enable connections at scale through Q.

During the co-design process we tried out a range of mechanisms for facilitating connections of different types. The majority of the community prefer connecting face-to-face as detailed in figure 4, but there is also a need for online mechanisms for members to connect remotely, and at greater scale, as Q grows.

**Figure 4: Communication preferences of the founding cohort**



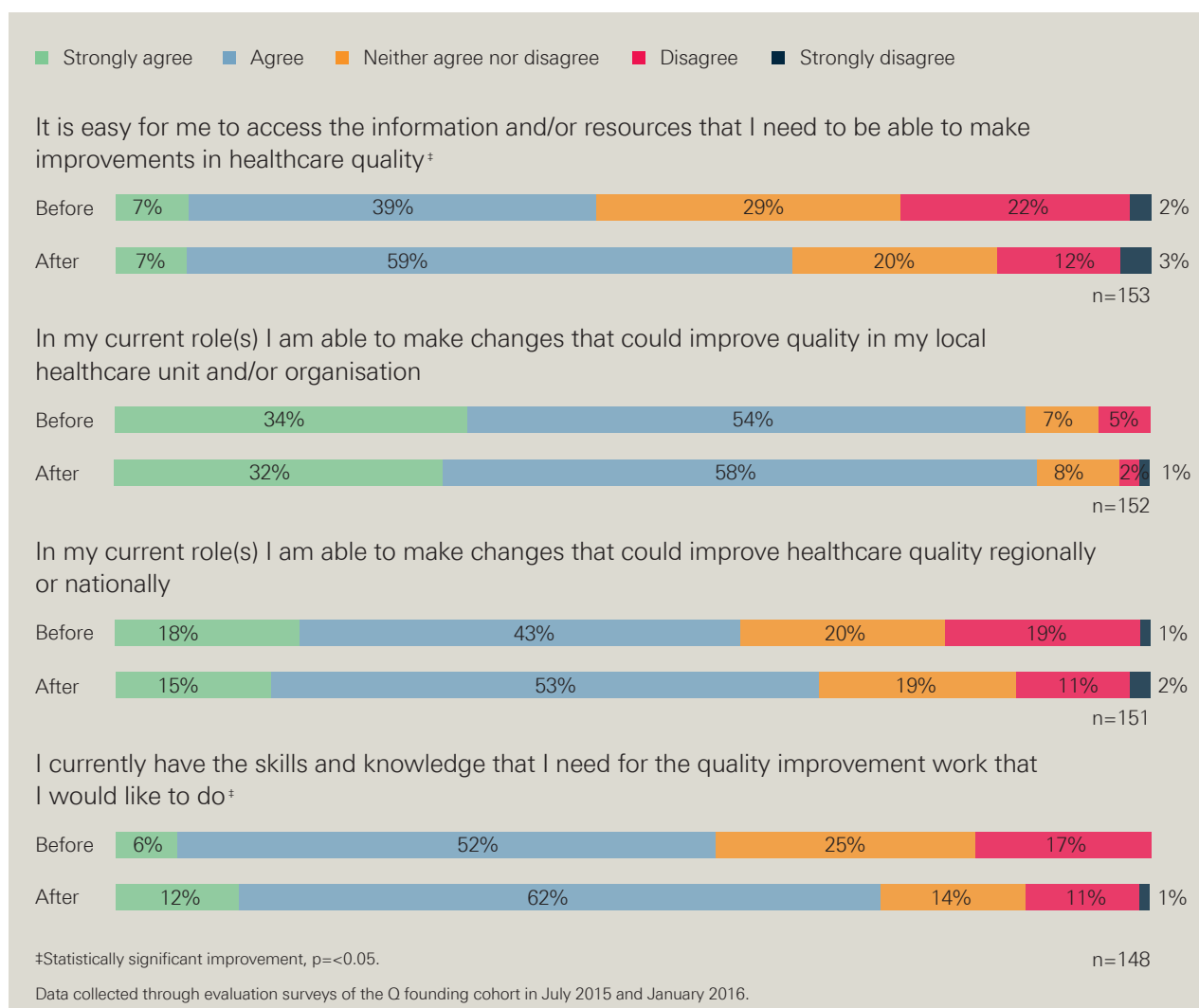
In the Health Foundation’s experience it is challenging to encourage people to use new online platforms. Finding an approach to online connecting, learning and collaboration that appropriately fits with face-to-face activities and meshes with existing platforms is one of the key design challenges for Q going forward.

## Enabling the development of improvement skills, knowledge and expertise

From the start, supporting the development of members was one of the core objectives for Q. As became evident through the design event discussions, Q members had a wide variety of knowledge and experience in improvement<sup>13</sup> and Q will need to cater for diverse development needs.

Prior to the design events, 58% of evaluation survey respondents reported they had the skills and knowledge needed for the improvement work they wanted to conduct, compared to 74% following the third design event.<sup>12</sup> At the outset of the design work, just 46% said they found it easy to access the information and resources they need to make improvements to care.<sup>12</sup> When members were asked to identify the information or resources they found difficult to access, data and benchmarking information were cited most consistently.<sup>12</sup>

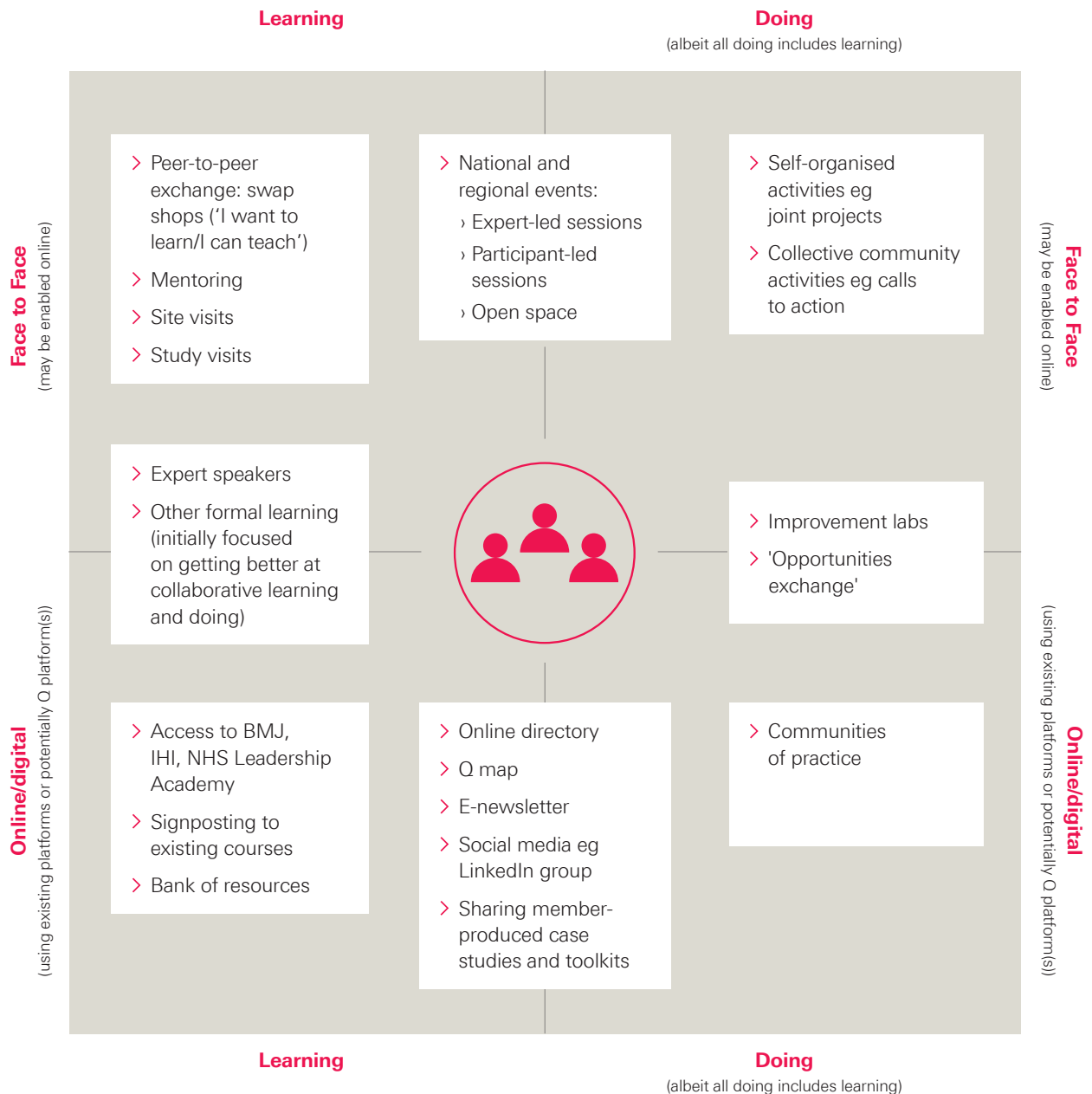
**Figure 5: Founding cohort members' skills, knowledge and ability to improve**



One way of supporting the development of individuals through Q would be to identify what skills members have, where gaps are according to a preconceived framework, and to help plug these gaps. Another approach would be to support people to identify what their own development needs are and the potential routes to address these needs. While the former might be easier to describe and navigate and ensure a stronger common knowledge base, the latter is perhaps better suited to the diverse priorities and needs of a community of many thousands.

Q will offer a combination of structured activities and resources, as well as flexible opportunities for sharing assets, peer learning and development along with collaborative work on real issues.<sup>14</sup> This seeks to make the most of the potential presented by the Q community, while avoiding duplicating more structured development offers available elsewhere. It also ensures that development is tailored to the context of individual members and the improvements they want to make. This is particularly important given the diversity of types of experience, organisation and roles.

**Figure 6: Activities being prototyped within Q during 2016/17**



Activities and resources that could be included in a future development strategy were identified with members in 2015. These include access to online resources, peer learning activities such as mentoring and site visits and ideas for national and local events. RAND Europe noted that, even through the design phase, Q had given members access to new tools, resources and knowledge (for example licences for the IHI Open School and BMJ Quality platform) to support their improvement work and these were well received by members.<sup>12</sup> Figure 6 highlights the range of learning and improvement activities generated through the design events which are being prototyped this year. During 2016 and 2017, we will explore further what other more structured approaches to building capability and accrediting expertise might be appropriate to signpost or offer within Q.

## The challenges faced by people working on improvement

Even if Q and other initiatives managed to provide effective development of improvement skills and peer networks, insight from the Q design process suggests this would not necessarily be sufficient to increase the scale and impact of improvement efforts.

Q members highlighted the gap between the widely promoted vision of improvement as a national and local priority in the NHS and the resources and support available to those leading such work. The barriers to improvement work include:

- **Turbulence in the system:** organisational structures (locally and nationally) and individuals' employment base can change often, disrupting improvement and connections between collaborators.
- **Improvement often being peripheral:** there can be limited time, space, resources and support to conduct effective improvement work, and improvement is often not seen as part of the day job.

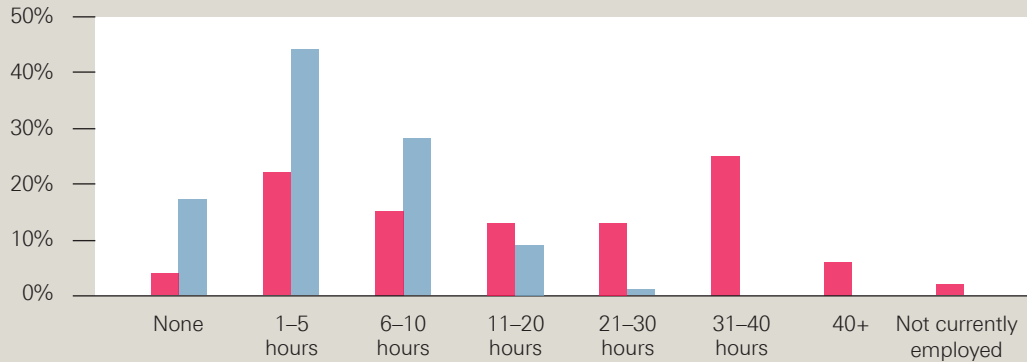
Figure 7 shows that while 72% of Q members who responded to the evaluation survey spend at least six paid hours per week on quality improvement work, 38% also report spending six or more unpaid hours per week on quality improvement work. Figure 8 shows that about one in 10 respondents indicated that they do not receive the support they need from their organisations, professional and wider networks to do the quality improvement work they want to do.

These issues featured strongly in members' discussions about what they would like to influence. Contextual factors pose risks in terms of people having the time and support to engage meaningfully in Q. However, the challenging context also underscores the importance and appeal of Q. We found members' motivations for undertaking practical improvement work were often reinforced through discussions at the Q events, with some members reporting they came away feeling re-energised and supported by their interactions with others in the community.

*'Great contacts [made at the event]. [I] found people who knew something I didn't. Now [I] will have assistance/work with Q participants in other local organisations.'* Q member in event evaluation

**Figure 7: Time spent on quality improvement work: paid and unpaid**

- Approximately how much of your time in **paid** employment is currently spent in work directly related to improving healthcare quality?
- Approximately how much of your time that is **not paid** is spent on quality improvement work? This could include voluntary work, unpaid evenings or weekend, for example.

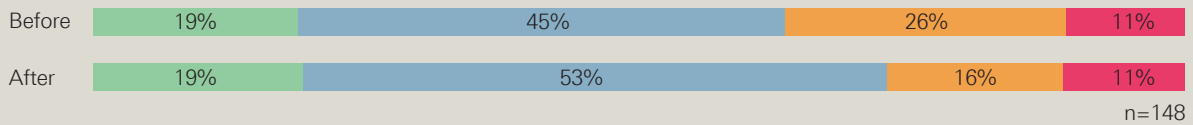


Data collected through evaluation survey of the Q founding cohort in July 2015

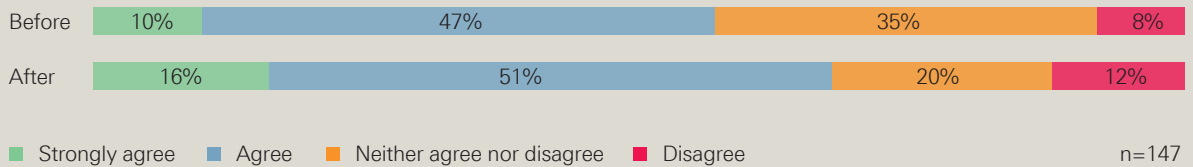
n=209

**Figure 8: Support from organisations and networks**

I get the support I need from my organisation to undertake the quality improvement work I want to do



I get the support I need from my professional and wider networks to undertake the quality improvement work I want to do



■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree

No members strongly disagreed to these questions

Data collected through evaluation surveys of the Q founding cohort in July 2015 and January 2016.

## The role of Q to support improvement

The focus of the central project team in 2015 was on the design of Q rather than supporting actual improvement. Nonetheless, Q members have started to organise self-initiated projects that are more directly focused on delivering improvements on the ground.

While Q principally seeks to support people with their existing improvement work, we also developed a potentially important new concept in which people can collaborate together to make practical improvements to complex challenges. The idea of ‘improvement labs’ was developed with stakeholders and the founding cohort – with an early prototype very positively received at the November 2015 design event. Q members had the opportunity to review what’s known about a chosen topic (avoiding unnecessary admissions from care homes) and then worked in small groups to highlight other work they were aware of, thinking together about what new solutions might be appropriate and exploring what could be done to share widely what works.

This early stage prototype provided the opportunity to explore (in two hours) what a lab might ultimately be able to deliver once fully resourced and working for six to 12 months with Q members who had particular expertise in the chosen topic. Even given the limitations of the exercise, there was widespread support for the idea from those who participated. Further details on the plans for labs will be developed and shared during 2016, with the first labs going live in 2017.<sup>22</sup>

### Early member initiated activity

In the first five months, in addition to designing Q, members of the community reported:\*

- 62 had used design methods developed through Q in their local work
- 58 had connected outside the design events to share knowledge and skills
- 24 had set up or joined a project group on a shared interest
- 77 had used the online learning resources made available through Q
- 68 had helped organise or attended local or regional Q events

\* Source: anonymous project team led survey at November design event (n=149)

# 4. What we have achieved so far

## Overview of progress

In this section we outline the progress made during the first year of Q and summarise some challenges and issues that require further consideration in the next phase.

The focus in the first year was on designing Q with members rather than directly supporting them to make improvements in the quality of care. Many elements of Q's infrastructure, including support for improvement activity, are being piloted in 2016. Others are still at the discovery stage, prior to more in-depth prototyping, piloting and full implementation.

*'I really want to influence a shift in culture from the top down and bottom up to place the patient at the centre of patient care both in the acute, community and home settings.'* Q member (evaluation survey 1)

The evaluation by RAND Europe identified the following areas where progress has been made during the first year:<sup>12</sup>

- **Recruitment of a founding cohort and a good diversity of members:** The people recruited as part of Q broadly reflect the demographics of people working in the NHS. While the founding cohort did not aim to represent every perspective or part of the health and care system, the range of views captured at each stage suggests we achieved sufficient diversity to stress test how the design of Q could meet a wide range of needs. This should put Q in good stead as we reach out to new audiences. Despite proactive targeting, only a relatively small group of members were recruited who defined themselves primarily as patients or carers. Working with the group we recruited is providing useful learning to help us understand what more needs to be done to ensure Q develops in partnership with patient leaders (see box overleaf).
- **Developed ownership for Q's aims by members:** There is a widespread view among members that Q has an important and legitimate role to play.<sup>12</sup> While Q will not be able to meet all expectations of all members, the operating model corresponds with what a majority of members say is needed. On this basis, Q is moving into the pilot and delivery phase. The level of critical engagement inherent in the co-design process means there are a significant number of members who understand the design principles and trade-offs that led to the proposed model. This is highly valued and it is hoped they will continue to challenge and help refine the operating model as Q grows.

*'I have made some fantastic contacts, learned much through sharing experiences, and hope to be able to take forward some of the educational opportunities.'* Q member (evaluation survey 2)



## Patient leaders\* in improvement

We sought to attract patients with experience and understanding of improvement through the nomination process. A relatively small number of those responding to the evaluation survey defined themselves primarily as 'patient leaders' (3%). However, we did find that 32% of the cohort defined themselves as able to bring a different perspective as a patient and carer or acting within an organisation that represents patient and public perspectives.<sup>†</sup>

In the same way that patients are critical partners to help set priorities and design and implement service improvements, patients are crucial to the design and implementation of Q. Patient leaders are being prioritised in the next phase of recruitment.

Through our design work to date, we have learned that:

- identifying and attracting a diverse range of patients with experience of improvement to be involved in Q is a challenge and needs more thought; not all like the description of patient leader
- having separate criteria for patients to join Q was not, on balance, supported by the patient leaders in our founding cohort. Instead, the criteria used for selection were crafted with input from patient leaders with a view to avoiding inadvertently excluding people from beyond the paid health and care workforce
- once selected we will need to work with patients to establish how we continue to design Q so they are able to fully participate.

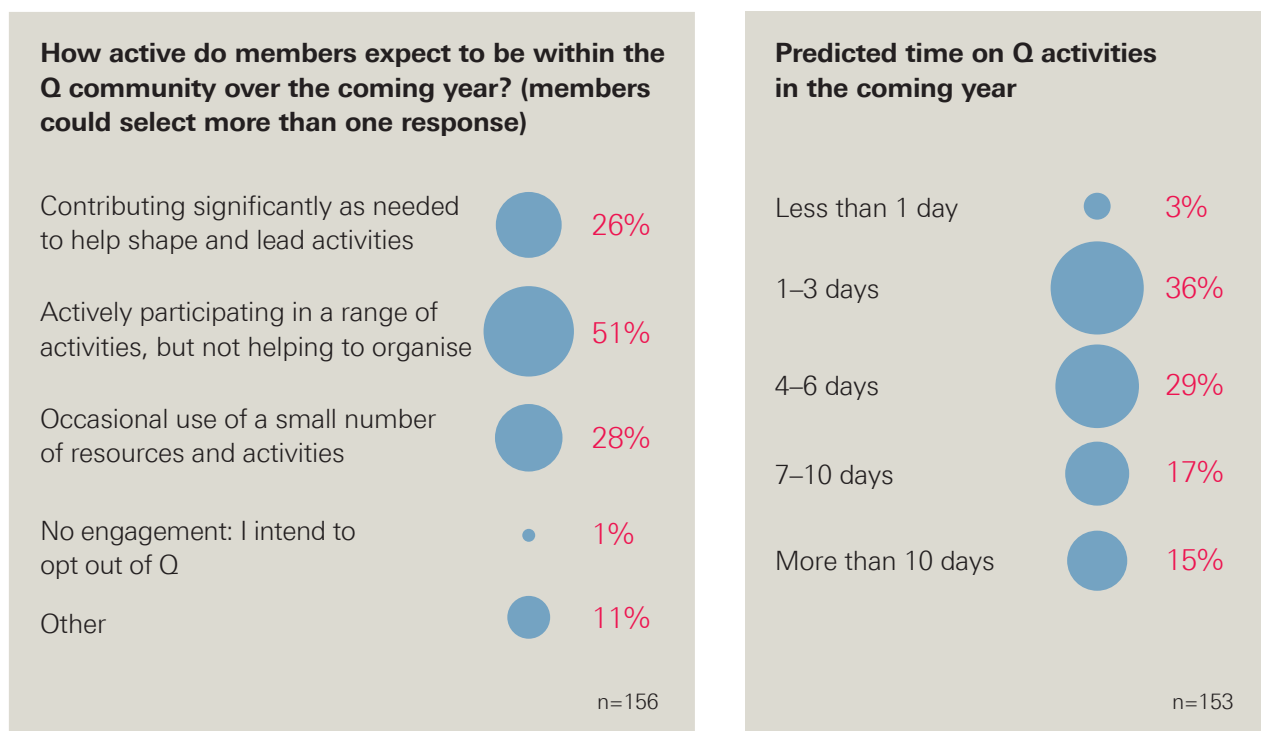
\* Patient leaders are doing a wide range of things and no single title was widely acceptable to our founding cohort members. There are many labels used by different groups and with somewhat different emphasis to describe those active in wanting change who have substantial experience as patients or carers or as representing the perspective of patients and carers. Terms include 'lay members or representatives', 'experts through experience', 'system leaders from a patient perspective' and 'community leaders'. National Voices in 2013 defined patient leaders in 11 different categories. The Centre for Patient Leadership distinguishes two types of leader: Transformers who are system-facing and Enablers who are community facing. (National Voices, *Patient leadership: the start of a new conversation*. 2013.)

† In the evaluation survey following the final design event 32% of members answered yes to the question: 'Would you describe yourself as a patient leader?' The definition provided was: Patient leader, in the context of the Q community, means people who combine commitment, understanding and experience of improvement with their perspective as a patient or carer, or as a leader within an organisation that represents patient and public perspectives.

*'I have made new links with people in my own region and there are a growing number of forums where we meet up... It has greatly increased my confidence and gives me a sense of support for quality improvement work.'* Q member (evaluation survey 2)

- Continued involvement and commitment from members of Q:**  
 Following the design phase, the majority of Q members reported a positive attitude towards the future of Q. We encouraged and received a lot of critical challenge through the co-design process and there are many complex issues raised by Q that are inevitably contentious. It is recognised that a minority of the cohort were not in favour of the design approach taken or do not support the proposed operating model for Q. While this tension may be uncomfortable, we understand that this is natural within networks and it will be impossible to please everyone. However, attendance rates have been high at events (over 80%), no members have formally left, and nominating organisations have continued to participate even during stages when detail has been lacking about the benefits Q will bring. The evaluation team found that all but one person who responded to the survey in January 2016 would like to stay involved with Q in some capacity<sup>12</sup> – see figure 9.

**Figure 9: Predicted cohort activity for 2016**



Data collected through evaluation survey of the Q founding cohort in January 2016

- **Early signs of peer-to-peer learning and collaboration:** The desire for networking to enhance improvement efforts was strongly expressed by members<sup>12</sup> and we have seen increased connections and active collaboration as outlined earlier in this report. The evaluation noted statistically significant improvements of:
  - Q members’ ability to access information and resources
  - their self-assessment of the skills and knowledge needed for the quality improvement work that they want to do
  - the number of connections they reported with other Q members.

Some employers also reported perceived benefits for the people they nominated, including an increase in the sharing of good practice, more enthusiasm for change and greater awareness about available resources.

The design process generated a plethora of specific insights and innovative ideas for accelerating improvement. This included member-initiated ideas such as ‘swap shops’ where people could request skills, knowledge and data from other members,<sup>\*</sup> as well as major developments such as the proposed improvement labs. While some members and stakeholders wanted the detailed design of specific elements of Q to progress more quickly to action, taking time to explore underpinning design questions with members and generating a broad range of ideas is intended to provide a more resilient platform for the implementation phase of this long-term initiative.

*‘We embrace the value of innovation in our organisation and hope that being active participants in Q will help drive this.’ Q employer survey.*

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\* ‘Swap shops’ is an idea developed by the founding cohort. It would enable members to request help from another member in the form of skills, knowledge, data, resources, experience or support.

# 5. Where next?

## What is needed to make Q successful?

Q is still at an early stage. We have a mandate to proceed, which is based on the input of hundreds of stakeholders and intensive co-design with the founding cohort. We are clearer about the potential role Q can play in supporting transformational change, as set out in the Q operating model.<sup>8</sup> However, Q will need time to mature and have impact. A longer term independent evaluation is currently being designed to ensure we have rigorous measurement and analysis of the contribution Q is making.

For Q to be successful, simultaneous progress across three fronts will be needed: the development of an effective infrastructure, wider system support and making the best of the opportunities.

### The development of an effective infrastructure for Q

In the first year we learned a lot about how Q could support its members. The challenge at the next stage is to implement what was agreed at scale and pace.

Q members' requirements to make connections and share information appear deceptively simple. The harder task is bringing this about with the speed and flexibility people have come to expect, and without creating an unwieldy or overly rigid structure. We need an appropriately robust approach to selecting and welcoming people into Q, and allowing them to connect, without the investment in Q's infrastructure taking disproportionate resource and energy from delivering activities available to the Q community.

We need a menu of high quality and relevant activities and resources regionally and nationally that are focused on practical benefits for those delivering change on the ground. The founding cohort conducted much of their networking through the design events, and this level of organised, facilitated face-to-face activity will be challenging to maintain with the numbers we hope to recruit. There will be a requirement to maximise opportunities for collaboration regionally and online.

We will pilot different aspects of Q's infrastructure in 2016 and 2017 and then consolidate efforts around those elements that demonstrate most value. We will continue to draw on existing evidence, evaluative input and insight from the Q community to inform these decisions.

## Wider system connections and support for Q

Q was founded with significant financial investment from the Health Foundation and NHS England. There is indicative future support for at least the next three years from the Health Foundation and NHS Improvement. The ongoing support of the 48 organisations who nominated initial Q members is also key.

The challenge is to show benefits from this investment while also allowing Q time to develop. To be sustainable, Q must synergise with other relevant initiatives. It is also important to recognise that the aims of Q will only be fully realised if there is action by employers and national bodies to remove the barriers that get in the way of people making improvement to services.

The single biggest barrier to participation identified by founding members has been lack of time,<sup>12</sup> which in turn normally depends on their employers' willingness to support their participation. Employers have remained supportive, but they will need to continue to believe in Q for it to succeed. This will depend on the extent to which they can identify ways that Q can facilitate their own organisational objectives. A priority for 2016 will be the communication of Q's benefits to the community and wider stakeholders.

## Making best use of the opportunities provided

Ultimately, it is what the members of the community do as part of Q that will really count. It will be within the gift of members to ensure Q is purposeful and outward-looking to spread the skills, knowledge and ideas from the community to others who can benefit. This will rely on a core group of active leaders within the Q community, as well as the choices and actions of all who join.

The project team, founding cohort and other stakeholders remain concerned about the risk that Q could become inappropriately exclusive, or appear hard to justify in the context of financially pressured health and care systems. While there will be things that can be built into the design of the recruitment process and infrastructure to help guard against this, it will be for the members to ensure the opportunities available are put to good use.

## Reflections on the size of Q and future growth aspirations

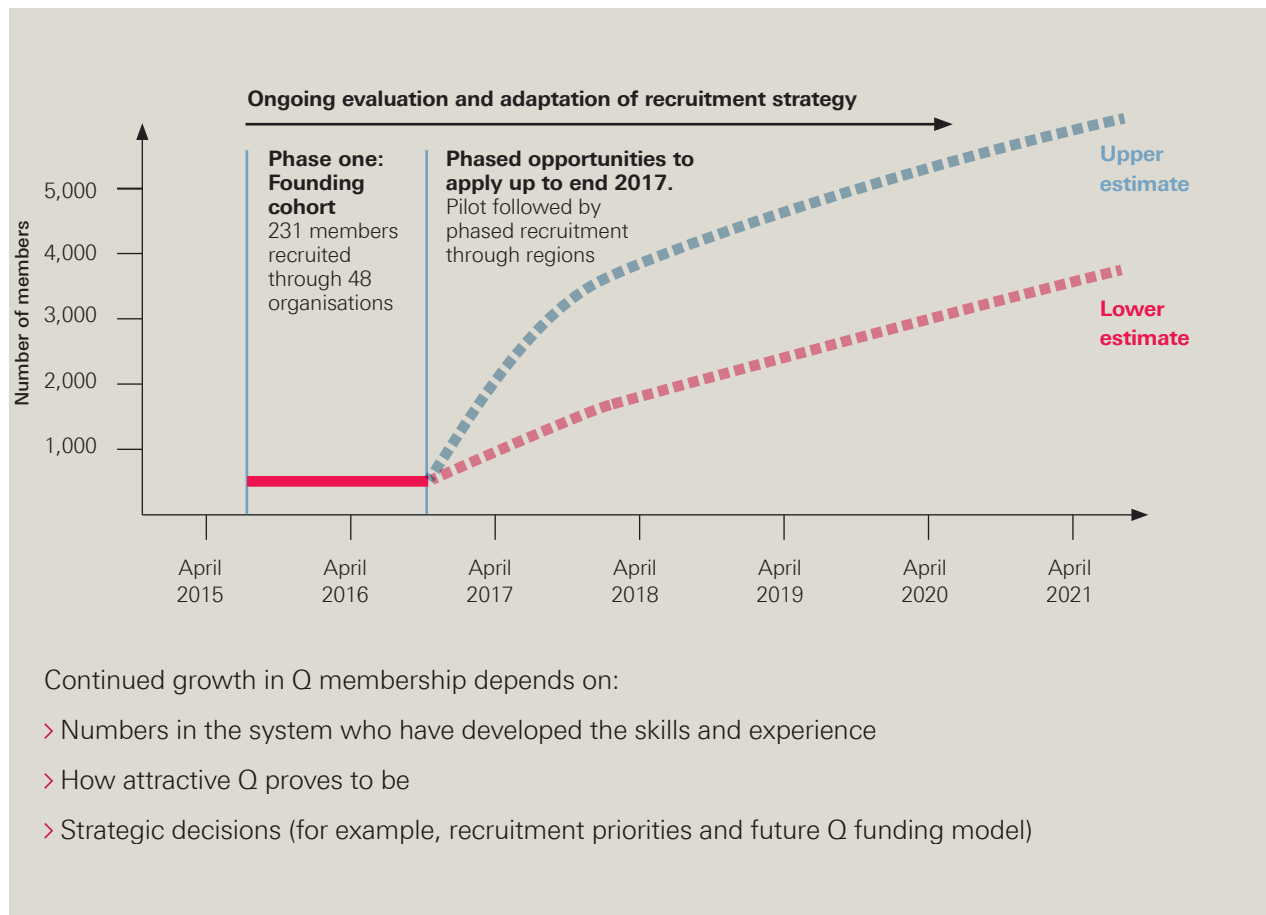
The scale of the founding cohort allowed us to start to explore the implications of developing a diverse community with hundreds of people, including providing the opportunity to trial different ways to facilitate networking.

As we learn more through each round of recruitment, we will assess the original aspiration of attracting up to 5,000 people. This figure provides a broad indication of Q's potential size and scale, but was never intended to be a hard target or maximum cap.

The process for recruiting to Q in 2016/17 will seek to allow everyone who feels they meet the agreed criteria to apply. We are aiming for ambitious but managed growth. As we grow Q we expect to learn more about the current state of capacity and capability in improvement and how best to reach people who could benefit from joining. This will in turn allow us to refine our recruitment ambitions.

*‘Q should be the skeleton of UK improvement and have the credibility at senior level to allow useful disruption.’ Q member.*

**Figure 10: Potential Q recruitment trajectory**



## Q's potential and the role of iterative learning and improvement

If successful, Q could grow into a large sustainable community of experts bringing improvements across the UK's health and care systems. It could significantly speed up learning and discovery about service change and the spread of innovation and improvement. In time, it could become a platform to enable the ambitious cross-professional and cross-system transformation of care called for in national strategies.\*

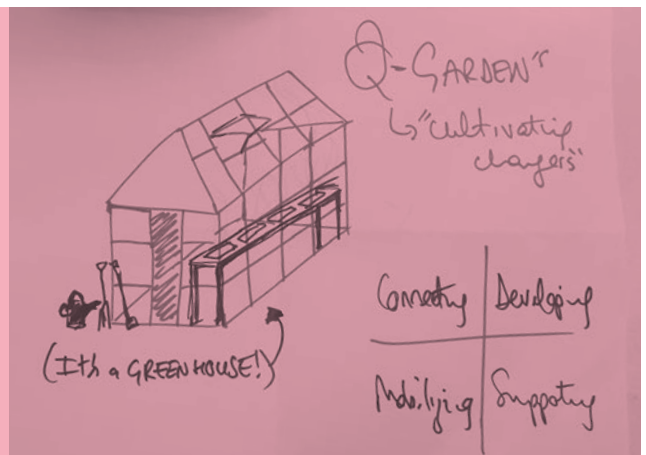
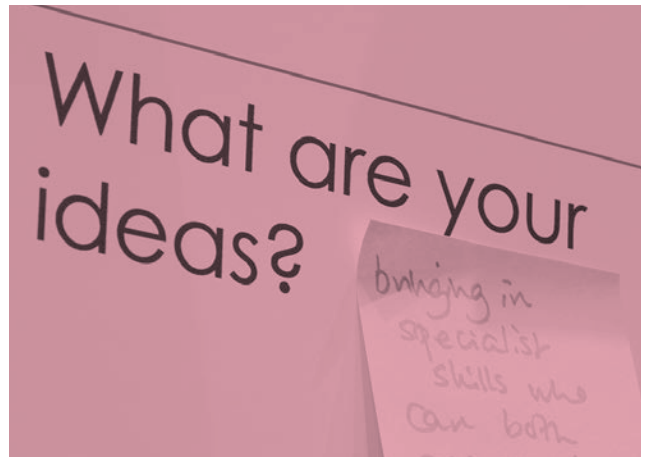
At all levels, the process of iterative learning is critical to achieving these goals – to improve quality of services as well as develop Q. We can only do this with the commitment and support of the community and our partners.

In choosing to co-design Q, we invited critical challenge and opened up complex choices with no obvious solution that will please all. There are still many questions left to answer. However, the commitment of stakeholders and members to date is testament to widespread belief in the potential of Q.

*'If [Q] succeeds, the NHS in the UK will be leading the world in creating, at national scale, system-wide capacities for improvement. [...] This will not be easy. It will demand long-sightedness, ongoing commitment, serious investments of time and energy from leaders and staff, and trust and flexibility to allow for local learning and adaptation. But the benefits to patients, carers, communities and the people of the NHS can be immense.'* Don Berwick

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\* See for example:  
NHS England, Care Quality Commission, Health Education England, Monitor, Public Health England, Trust Development Authority. *NHS Five Year Forward View*. London: NHS England, 2014. Available at: [www.england.nhs.uk/ourwork/futurenhs/](http://www.england.nhs.uk/ourwork/futurenhs/)  
Department of Health, Social Services and Public Safety. *Quality 2020: a Ten-Year Strategy to Protect and Improve Quality in Health and Social Care in Northern Ireland*. Belfast. 2011. [www.dhsspsni.gov.uk/publications/quality-2020-ten-year-strategy-protect-and-improve-qualityhealth-and-social-care](http://www.dhsspsni.gov.uk/publications/quality-2020-ten-year-strategy-protect-and-improve-qualityhealth-and-social-care)  
Welsh Government. *Together for Health – A Five Year Vision for the NHS in Wales*. Welsh Government, 2012. <http://bit.ly/1xDZRV6>





# Appendix 1: What we have learned about collaboratively designing a large scale initiative

*'Q could be seminal. It is a big enough community to make change happen at a scale far beyond the "lone wolves" of improvement that we've seen in the past. Yet we have to be mindful of history – previous initiatives have shown us that a heavy reliance on a central team has prevented members of a community from developing connections within the network as whole.*

*'Q has to be well-coordinated by a central team, but its members will need to lead too. Only by building their own connections and momentum across Q, will members be able realise the significant opportunity that Q presents. Learning to lead within a diverse community such as Q also offers opportunity to develop the skills improvement leaders increasingly need in local work, transforming care across health systems.'* Helen Bevan

## Overview

We believe co-designing Q with its founding cohort of 231 people is the largest collaborative design process ever undertaken in improvement in health and care.

As outlined in section 2, the co-design process involved:

- three large scale two-day design events
- real-time evaluation from an embedded team
- sharing the evolving thinking about the form and shape of Q with participants
- identifying improvement work being done locally in each region, and the potential for synergy between Q and local work.

In this appendix we share insights and practical techniques that may prove useful to others doing similar work.

Our experience of large scale co-design emphasises the importance of:

- being prepared for the considerable challenges involved in synthesising and managing the many different perspectives and diverging opinions that surfaced, as well as the tensions inherent in the design of complex initiatives
- thinking carefully about how to support people through a process unfamiliar to many, and providing communications throughout to those involved to inform expectations, particularly in the lead up to events
- evaluating the process in real time so that insights can inform the work as it develops.

## Working with multiple stakeholders – understanding and balancing tensions

Designing complex approaches that require the input of a diverse range of people inevitably reveals tensions or differences in expectations that are not easily resolved. When using a co-design process, different perspectives become more visible. This is ultimately helpful in developing a robust and sustainable solution, but can be more challenging during the design process.

We introduced the concept of polarities to understand and manage key tensions, using polarity mapping – a technique that was well received by members. Polarity management recognises that sometimes you cannot simply make a choice between different options, but need to balance priorities that are in tension (see figure 11 for more details).

### What are polarities?\*

- Unsolvable problems that need to be managed
- Often two opposing positions
- Usually expressed as ‘from’ one polarity ‘to’ another
- A tension not a choice with an objective ‘right’ answer
- Often associated with pendulum swings of discussion and policy unless managed

**Polarity management** seeks to maximise the benefits associated with each side of a given polarity, while minimising the downsides. This is done by identifying the positive and negative consequences associated with both poles of an identified polarity. You then identify the early warning signs that would tell you if the downsides are overly dominant. You end by identifying the actions that would lead to enhancing the positive benefits.

There were a number of key polarities that were revealed as we began to shape Q. This included intense debate about the extent to which Q should be exclusive or inclusive. Another polarity was the extent to which Q should be designed (and ultimately managed) centrally or by its members.

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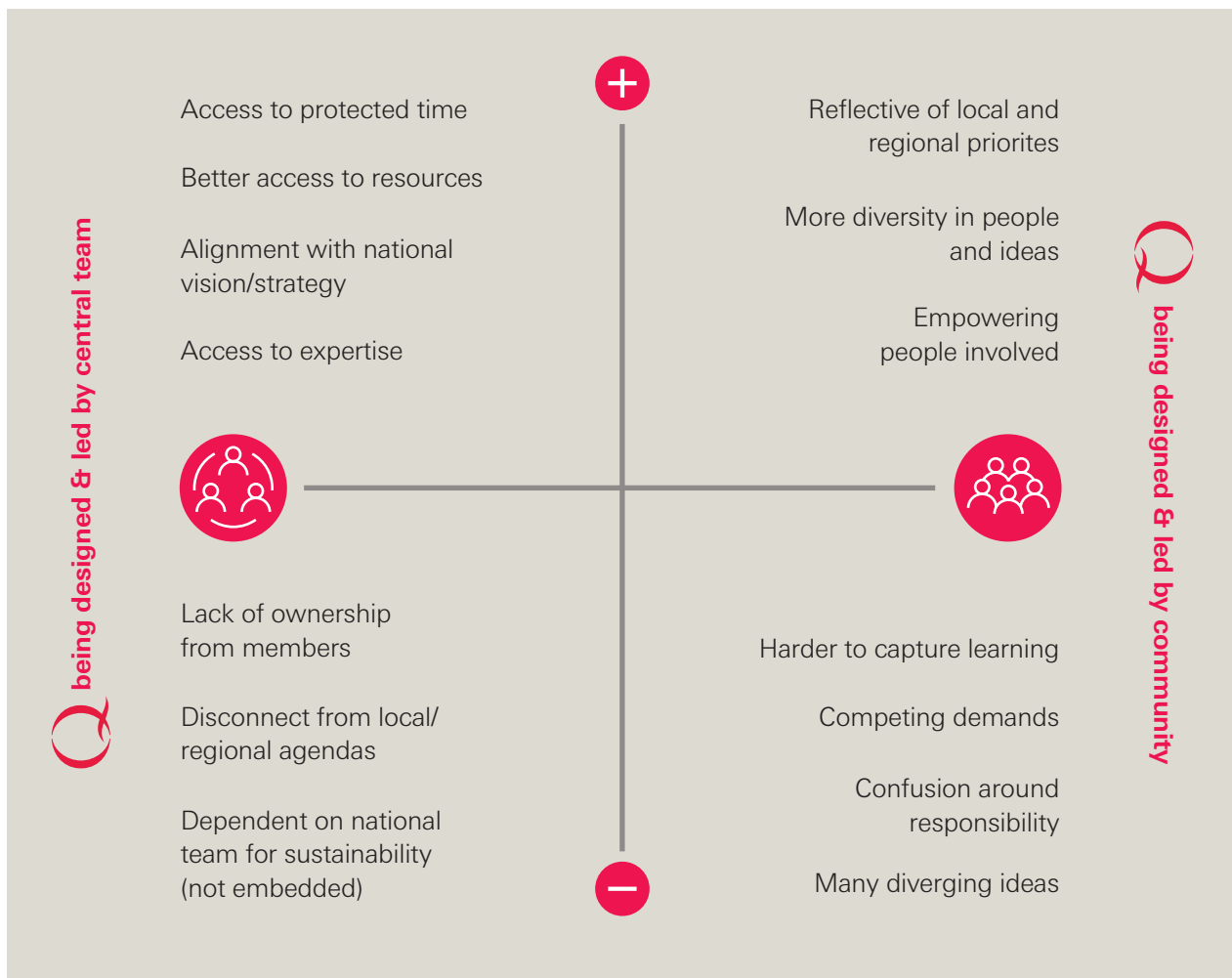
\* For more information on polarity mapping, see: Johnson B. *Polarity management: Identifying and managing unsolvable problems*. Amherst, MA: HRD Press. 1996.

**How far should Q be centrally designed and managed, and how far should it be shaped and led in a bottom-up way by its members?**

This is a familiar polarity for many projects and particularly important for network-type initiatives where success often depends on generating ownership from those involved. During the design, there was a recurring tension between demands for clarity and effective process management and decision making, all of which imply a degree of central control, and the desire for Q to reflect and tap into the ideas and priorities that emerged from the Q community.

As illustrated by a simplified ‘polarity map’ below, the Q community identified a number of different advantages and disadvantages to both central and community leadership for Q. Mapping the polarities did not eliminate the tensions, but did generate collective understanding of the issues and a jointly agreed action plan focused on minimising the downsides of each polarity. The ideal future governance structure for Q is yet to be determined, and a Q member is currently undertaking a piece of work assessing options for this.

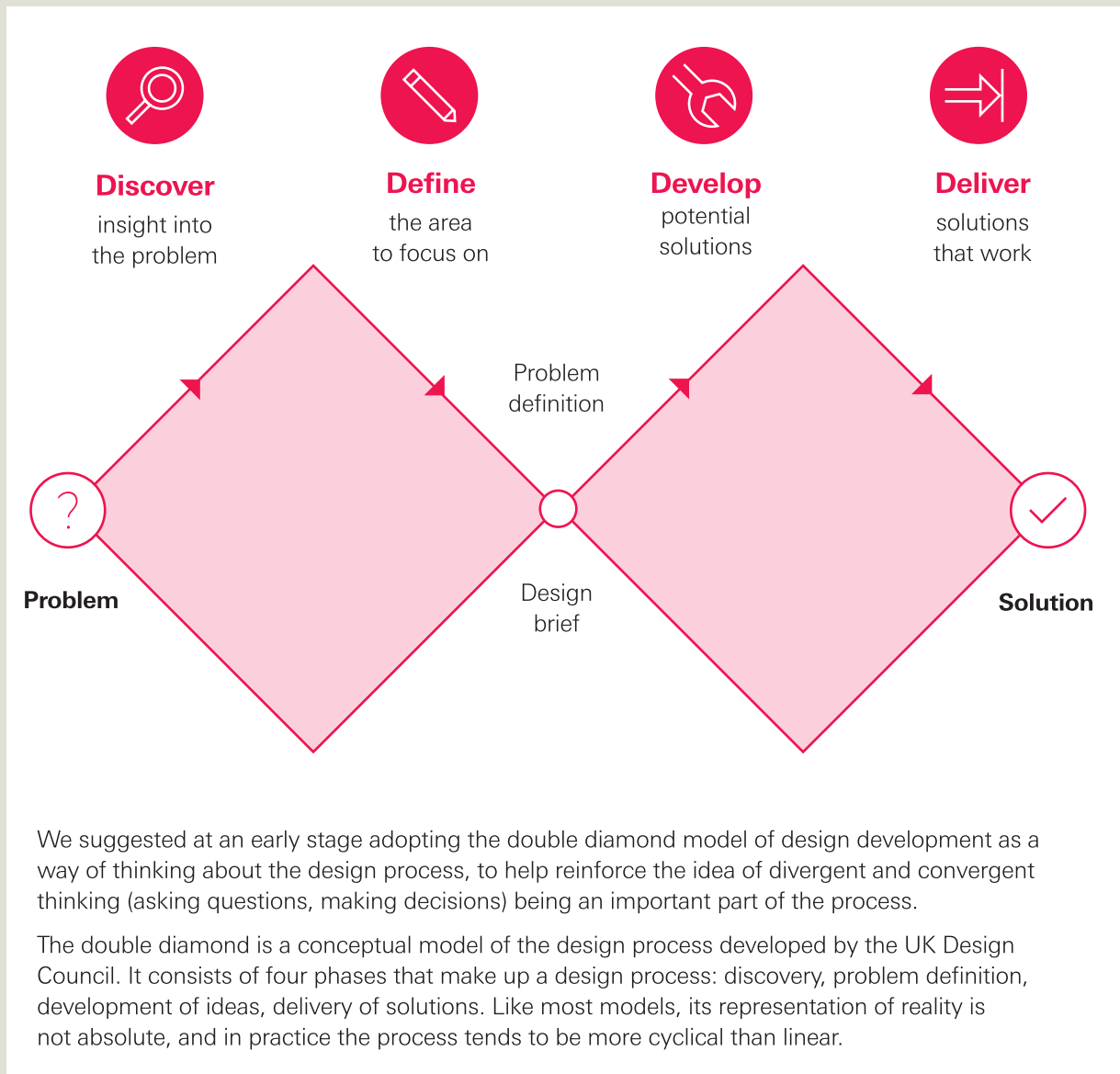
**Figure 11: Polarity map looking at Q bring designed and led by central team vs the community**



## The use of the double diamond design model

We introduced the 'double diamond' model, a well-established approach to design since its development by the UK Design Council in 2005.<sup>23</sup> Introducing this model helped build both understanding of the iterative nature of co-design approaches and confidence that progress would result.

Figure 12: Design Council's Double Diamond



We suggested at an early stage adopting the double diamond model of design development as a way of thinking about the design process, to help reinforce the idea of divergent and convergent thinking (asking questions, making decisions) being an important part of the process.

The double diamond is a conceptual model of the design process developed by the UK Design Council. It consists of four phases that make up a design process: discovery, problem definition, development of ideas, delivery of solutions. Like most models, its representation of reality is not absolute, and in practice the process tends to be more cyclical than linear.

This model provided an overall organising structure for a wide range of specific techniques that were used as part of the events. While a design process is rarely as linear as the double diamond suggests, the model encourages people tackling complex design challenges to start by looking widely to generate insights into the issue, before using different techniques to distil that into a more defined and specific problem statement. In a similar way, the process of generating solutions uses a range of approaches that encourage people to open up multiple ideas and then select the most promising.

A series of methods cards\* were made available at the design events to help the founding cohort understand the methods used and make it easy for them to apply specific techniques elsewhere. These were well received, with 62 members reporting they had used some of the design tools in the first five months.<sup>†</sup>

\* Methods cards available via [www.health.org.uk/sites/default/files/Q%20Method%20Cards.pdf](http://www.health.org.uk/sites/default/files/Q%20Method%20Cards.pdf).

† Data collected through an anonymous survey designed and analysed by the project team at the November 2015 design event.

## Addressing high levels of ambiguity involved in the fluid process of co-design

Many members expressed unease with the ambiguity involved in the design process. The methods applied to explore ideas and reach decisions in design were not familiar to many of the project team and founding cohort members.

This was challenging particularly where it was unclear where the onus lay to make concrete decisions about the shape of Q and how quickly these decisions could be taken. There was an expectation among some of the members that the project team would propose a more concrete prototype for Q earlier in the process, while project team members were not clear about the decisions they should progress before discussion with members.<sup>12</sup>

The following factors were considered helpful in addressing some of this inevitable ambiguity:

- Significant pre-briefing and allocation of discussion time at events to help align expectations.\*
- Efforts to develop a common, shared language in relation to Q, for example an agreed definition of quality improvement.
- Avoiding jargon and recognising varying skill sets and levels of expertise.
- Investing in visual communications to help promote a shared understanding of Q, for example the use of animations and design exercises that used professionally formatted, pre-tested materials.
- A conscious shift by the project team away from more traditional project management approaches to a more agile way of working – which helped to foster a more collaborative and creative approach.<sup>12</sup>

## Gathering insights from a large group of people

The size of the founding cohort (231 people) led to a wide range of ideas and input, and allowed practical experiments in networking large numbers of people. However, this inclusive approach to the design also significantly magnified the challenges involved in synthesising input and making decisions. This presented challenges not just for the project team, but also for members, some of whom reported that they found it harder to engage meaningfully in plenary sessions.<sup>12</sup>

We found the following approaches helpful in gathering insights from participants through the design process:<sup>12</sup>

- Hosting smaller break-out sessions at the events proved the most effective means of gathering contributions from members – groups of five to seven people appeared to be the optimum size for meaningful conversations.

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\* The team used normalisation process theory to focus on what people would need to understand to fully participate and engage. May C, Finch T. Implementation, embedding, and integration: an outline of normalization process theory, *Sociology* 2009;43(3):535–54

- Setting up working groups to examine particular issues and creating a ‘black hat’\* volunteer group helped the project team scrutinise ideas in more depth and anticipate challenges.
- Dot-voting and digitally enabled polling during events provided open feedback in real time, although the use of online voting technology could introduce time delays.

## Designing events for effective engagement

We learned a lot over the three events, with praise from members on the way the project team acted on feedback each time to inform subsequent events.<sup>24</sup> We found the following helpful in maintaining engagement from members and keeping events productive:

- varying the pace, content and style within each event to help maintain energy
- giving considerable attention to helping members connect with each other, for example through the use of colour-coded name badges, lunch tables clustered by care setting, a social media help desk and member profiles.

With the benefit of hindsight, we suggest the following actions would have helped make for a more efficient process:

- Increasing the time available between events for aggregating insights and making sense of differing perspectives.
- Building in more time to help people get to know each other and build relationships – with less focus on needing to keep people busy with design tasks.
- Presenting a prototype of Q earlier in the process, prior to the final design event.
- Avoiding focusing on some aspects of the *Theory of change for Q*<sup>25</sup> that absorbed too much time in discussion, for example debating specific choices of words.

Engaging all 231 members fully in the co-design process was ambitious – it is highly likely that we would have made faster progress with a smaller cohort. However, we believe that reducing the number involved would have been associated with a corresponding reduction in the breadth of ownership for the work.

While the design process proved challenging, most members of Q reported they enjoyed the experience,<sup>12</sup> with some reporting that they found it interesting to observe the process and their involvement in the co-design events had been helpful in their own professional development.

\* The ‘Black Hat’ group consisted of Q members who were prepared to contribute feedback from a perspective of ‘what might go wrong’ for Q

## The role of developmental evaluation

As part of the first year of Q, the Health Foundation appointed RAND Europe to undertake an independent, embedded real-time evaluation of the work.\*

The evaluation team worked closely with the Q project team, for example attending regular team meetings and all three events. This embedded approach brings many advantages, allowing emerging findings from the evaluation to feed into the development of Q in real time. However, this arrangement can also present a threat to the independence of the team undertaking the evaluation. Consequently, both RAND and the Health Foundation maintained awareness of potential conflicting principles when making decisions (see table 3).

**Table 3: Principles of an embedded independent evaluation**

Embedded	Independent
RAND Europe is embedded in the Q project team	RAND Europe will maintain a critical distance from the Q initiative
RAND Europe provides evaluation results in real time, so they can be used to maximum effect as Q evolves	RAND Europe cannot be responsible for the design of Q as it would then be evaluating its own work
RAND Europe attends project team meetings both for the purpose of data collection and to provide relevant evidence from work already completed	RAND Europe is not part of the project team and will not make suggestions for the design of Q based on intuition or untested theory

The aim of the evaluation was to inform the direction and strategy of Q through regular feedback that identified problems and potential solutions. It proved invaluable in helping to understand the experience of members and perceptions of the initiative. Evaluative evidence informed the development of the programme and format of design events, shifts in approach during the process such as moving decisions forward rather than trying to satisfy all, and improving project team processes. Having evaluation partners in the room further enhanced routine reflective practice, which became a particular strength of the project team.

\* Embedded evaluation is suitable for emerging and complex projects which require a stream of evaluative evidence to support course correction and adaptation. Ling T. Evaluating complex and unfolding interventions in real time. *Evaluation* 2012;18:79–91.

We found:

- evaluation teams can provide a valuable interface between the implementation team and key stakeholders\*
- developmental evaluation can provide useful data and evidence to support decision making
- there are challenges in joining up insights from multiple sources and ensuring information is not managed in silos, and some research methods inevitably introduce a time delay
- embedded evaluation teams can reduce the risk of compromising their independence by ensuring that some members remain distant from the project team and through the use of formal quality assurance processes.<sup>12</sup>

### How successful was our approach to co-design?

Co-design processes can be instrumental in the success of initiatives that depend on engagement from end-users. Midway through the process, members expressed uncertainty about how the co-design events were feeding into the design of Q. However, by the third event the majority supported the proposed operating model for Q.<sup>†</sup> There was a prevailing view among members that the final event had been the most productive.<sup>12</sup>

Designing Q collaboratively on such a large scale proved challenging and resource intensive, yet the design events also created positive connections among members and built momentum and energy, with attendance rates remaining high for all three events.<sup>24</sup>

While there are still many elements of Q that require further design and prototyping, the process of agreeing the core principles and direction with the founding cohort gave the project team the mandate to move forward to testing and implementation.

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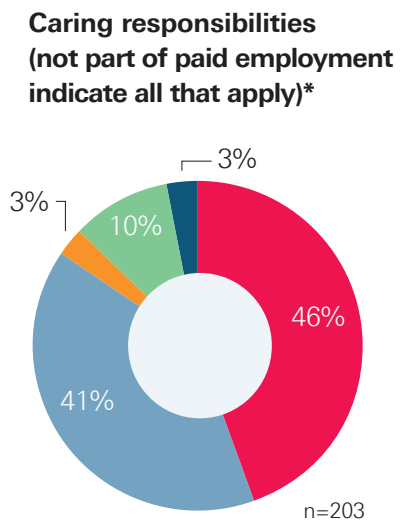
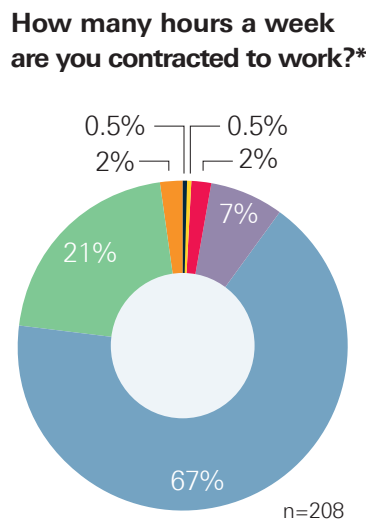
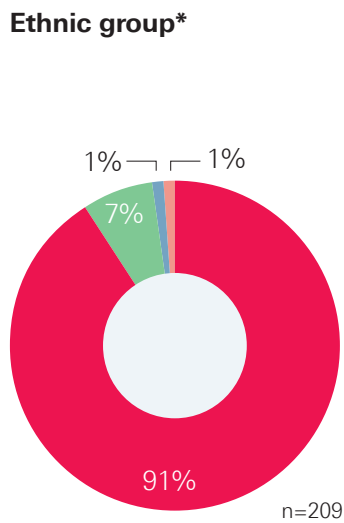
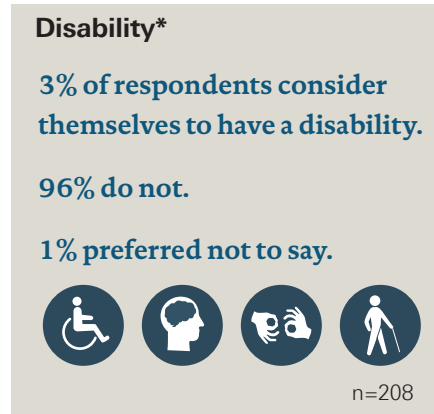
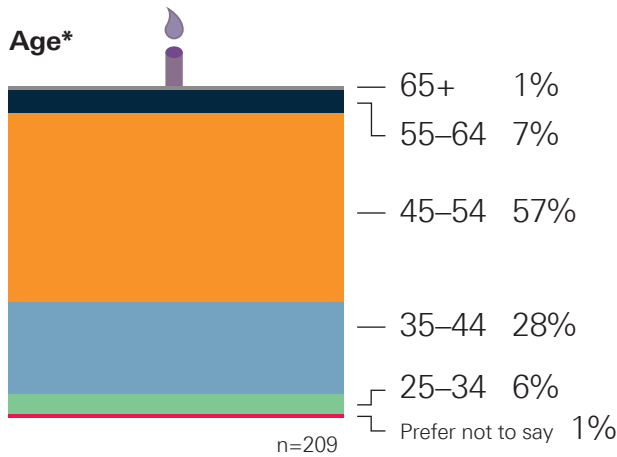
\* Through evaluation activities, such as focus groups, stakeholders have an opportunity to input and voice their opinions, ensuring that they feel they are being listened to.

† The project team collected data via a live web-based Slido poll at the third Q design event.



# Appendix 2: The founding cohort

Data was collected from two evaluation surveys of the Q founding cohort in July 2015 (91.3% response rate) and in January 2016 (71.4% response rate). Within each survey the numbers of responses vary slightly from question to question and so the total number of responses included in each infographic are presented here, along with the percentages. Some questions were asked in both the first and second surveys; for these, responses from the first survey were used as the total numbers of responses were slightly higher. More information about the founding cohort members can be found on pages 12-13.



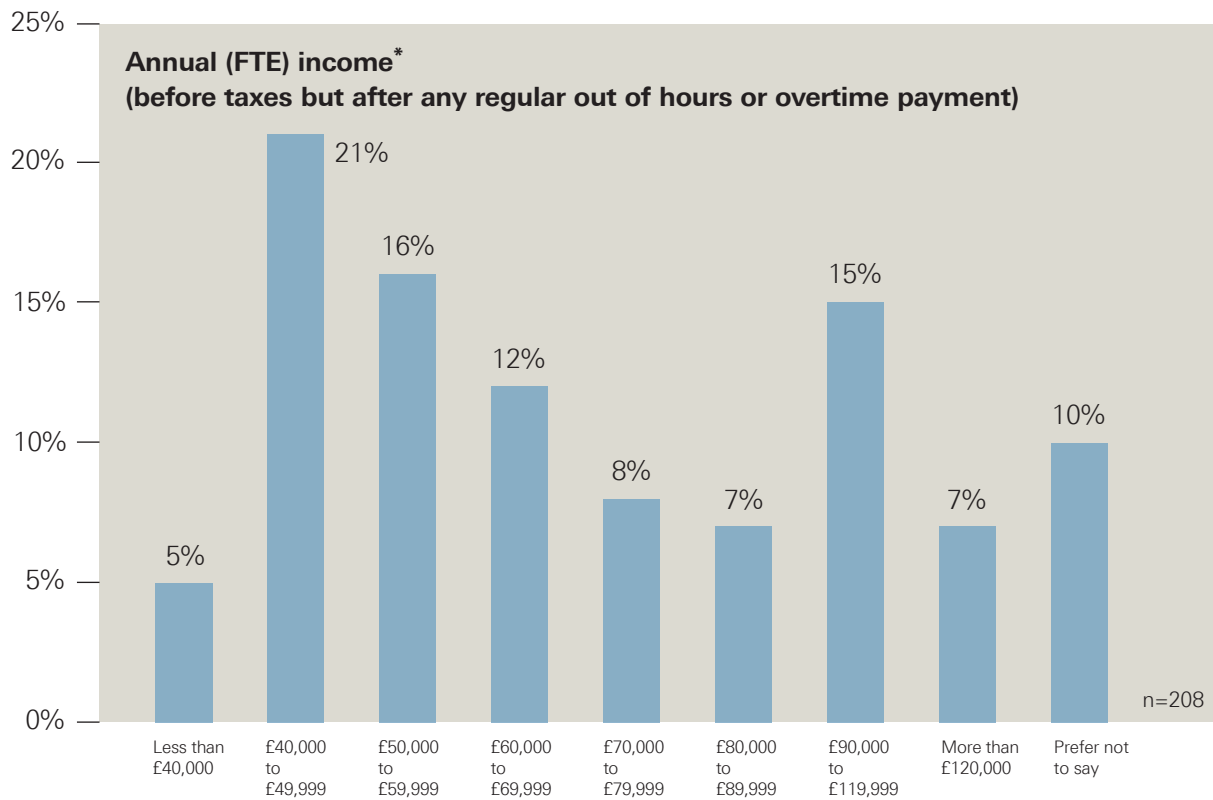
- White
- Asian /Asian British
- Black / African / Caribbean Black British
- Prefer not to say
- Mixed / Multiple ethnic groups: 0%
- Other ethnic group: 0%

- 0-5 hours
- 6-10 hours
- 11-20 hours
- 21-30 hours
- 31-40 hours
- 40+ hours
- N/A - not currently employed

- None
- Primary carer of a child / children (under 18)
- Primary carer of older person / people (65 and over)
- Secondary carer
- Prefer not to say
- Primary carer of a disabled child / children: 0%
- Primary carer of a disabled adult (18 and over): 0%

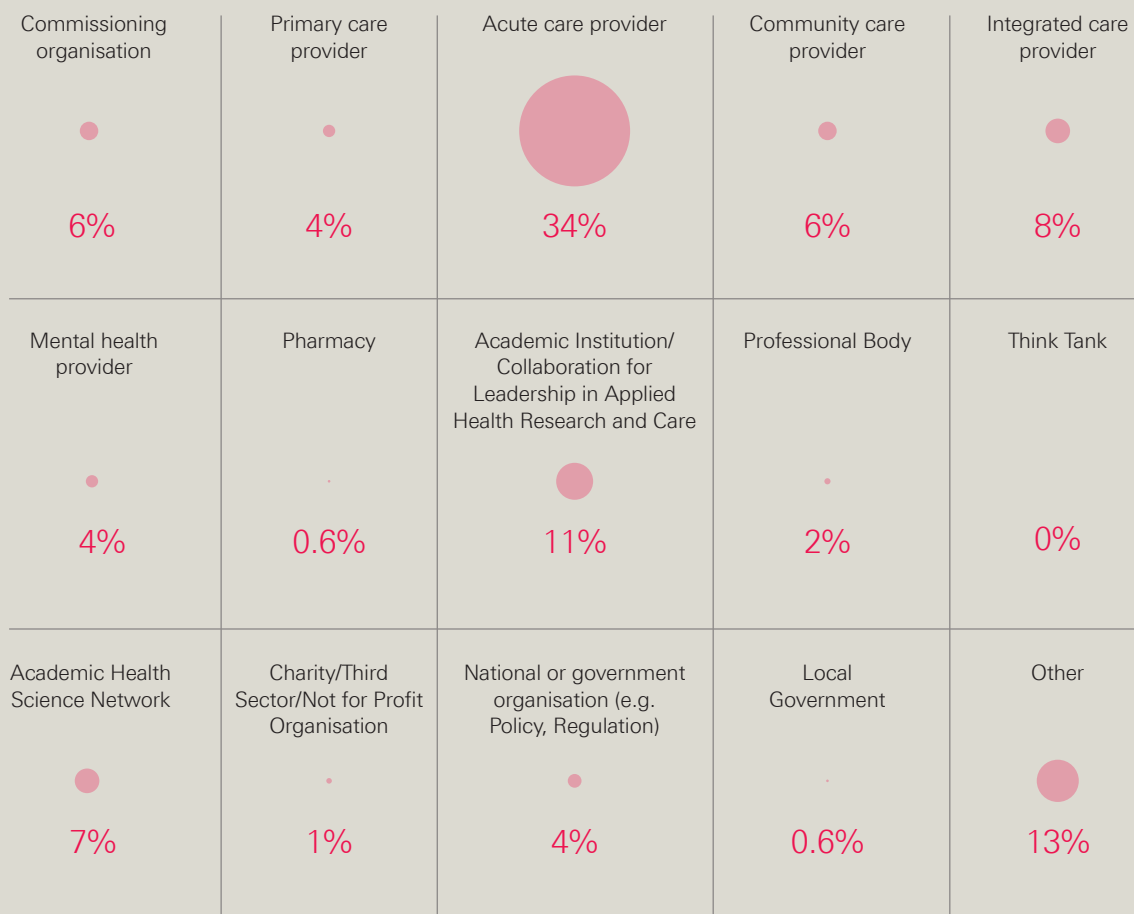
\*Data collected through evaluation survey of the Q founding cohort in July 2015.

Note: due to rounding, totals may not equal exactly 100%



\* Data collected through evaluation survey of the founding cohort in July 2015.

### Primary place of work<sup>+</sup>



<sup>+</sup>Data collected through evaluation survey of the Q founding cohort in January 2016

n=158

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