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The National Institute for Health Research Leadership Programme

An evaluation of programme progress and delivery

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The research described in this document was prepared for the Department of Health (England).

Preface

This report, prepared for and funded by the English Department of Health, presents the results of an evaluation of the National Institute for Health Research (NIHR) Leadership Programme, which is delivered by the Ashridge Business School. The aim of the evaluation is to assess the extent to which the NIHR Leadership Programme has delivered on its three core objectives of developing individual leaders, building research team capacity and fostering leadership in the wider research community, and to look at the impact of the programme more broadly.

In this report we present the findings of our evaluation according to four broad levels of analysis under which the NIHR Leadership Programme can be expected to contribute to research excellence. These include general reactions and impressions of the basic delivery and interventions included in the leadership programme, the extent of acquired learning and new skills, the extent of behaviour change among programme participants, and the nature of wider impacts on research performance to which the programme might be contributing. The evaluation was undertaken from February 2011 to September 2011.

This report will be of interest to government officials with an interest in supporting biomedical research and maximising the performance of researchers. In addition, it will be of interest to individuals in the leadership sector, in particular those with an interest in biomedical and health research and the extent to which leadership might be considered to be a science policy intervention.

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Background

This report presents the findings of an evaluation of the National Institute for Health Research (NIHR) Leadership Programme conducted by RAND Europe. The aim of the evaluation is to assess the extent to which the NIHR leadership programme has delivered on its three core objectives of developing individual leaders, building research team capacity and fostering leadership in the wider research community, and to look at the impact of the programme more broadly. There are four key aims to the evaluation:

1) to evaluate the programme's activities against its stated objectives, including whether the methods of the leadership programme map against the objectives;
2) to determine the impact of the programme in relation to participants' leadership skills and participants' impact on immediate staff and colleagues;
3) to evaluate the extent to which leadership skills and capabilities are becoming 'embedded' within NIHR as a result of the programme; and
4) to determine the contribution of the programme to NIHR and health research in general, and to begin to understand the feasibility of evaluating the impacts of the programme going forward.

The evaluation is designed to enable the English Department of Health (DH) to account for the expenditure of public funds and extract lessons for the future, as well as develop plans for the next phase of the leadership programme. The focus and methodology of the evaluation has recognised these considerations.

The NIHR Leadership Programme began delivering to researchers in January 2009. It was commissioned against a backdrop of an increasing emphasis on high-quality clinical research in the National Health Service (NHS) in the wake of *Best Research for Best Health* (Department of Health, 2006) and the Cooksey Report (Department of Health and Davies, 2006), and a need to deliver high-quality research within the NHS.

Delivery of this agenda requires an effective research base and system of leadership supporting it. It is widely accepted that leadership training can have a hugely beneficial effect on an organisation, no matter whether its setting is in research, the public sector or private industry. Therefore, there was a real opportunity to develop the skills and capabilities of NIHR leaders and to enable them to make a real difference to the health research environments in which they work. In this context, the programme can be thought of as an attempt at a 'science policy intervention': by investing in the leadership skills of senior researchers and future developing leaders within NIHR, there might be an

improvement in the ability of the research base to deliver a strong, robust and globally competitive UK health research sector.

The National Institute for Health Research Leadership Programme

By focusing on three key objectives of developing individual leaders, building research team capacity and fostering leadership in the wider research community, the programme aims to help achieve change by first enabling researchers to become leaders, then supporting them in achievement of wider institutional, organisational and national goals. There are three levels of participant in the NIHR Leadership Programme:

1) *senior leaders* are the most senior researchers in the NIHR;

2) *development leaders* are individuals who are on course to reach senior positions; and

3) *trainee leaders* are making the transition to being independent researchers and are taking on their first significant management and leadership roles.

The NIHR Leadership Programme is run by the Ashridge Business School (hereafter, Ashridge) and comprises four streams of activity:

1) development in the work setting;

2) leadership practice;

3) a combination of one-to-one work and support, especially for more senior leaders, and groupwork and support, particularly for developing leaders; and

4) provision of focused skills relevant to leadership in a research setting.

Within these four overarching streams a range of specific activities or 'interventions' are offered to participants according to their leadership group. These include:

- accompanying and one-to-one coaching
- biannual learning conferences
- bespoke 360-degree feedback
- virtual workshops
- tailored learning guides
- periodic phone conversations and conferences on emerging issues
- biomedical research unit or biomedical research centre strategy workshops
- action learning or peer project support groups.

Each programme is tailored to the leadership cohort level and the individual being supported, although there are some common features shared across all leadership groups. Senior leaders receive greater accompanying and individualised coaching support and are offered an '*à la carte*' approach to the programme activities, while trainee leaders follow a more structured programme centred on group learning and targeted workshops. The action learning groups are common to all levels of leader and are meant to be one of the main vehicles for participant learning during the programme, where insights and learning on the programme are converted into actionable solutions to real-world problems.

The evaluation process

In order to evaluate the impact of the leadership programme and the extent to which it is delivering against its three objectives, we used the Kirkpatrick Model for evaluation.[1] The Kirkpatrick Model uses four levels of analysis to understand how the learning was received and the wider impacts that it had on the participant. For our evaluation, the model was applied to understand basic reactions to the delivery of the leadership programme; what learning and new skills were acquired during the programme; whether any behaviour change had occurred as a result of the programme; and finally, whether the leadership programme was contributing to wider outcomes and results. This framework was applied throughout the evaluation methodology, which consisted of five primary workstreams.

1) **Desk-based research** to understand the approach and philosophy of the programme, review the findings of internal evaluations and identify literature on leadership evaluation.

2) **A web-based survey** of all programme participants to solicit as large a range of views as possible about the impact of the programme.

3) **A series of semi-structured, in-depth interviews** with a selection of leaders and their colleagues to develop a deeper understanding of the specific impacts and areas of learning on the programme.

4) **Structured benchmarking** to enable comparative analysis against programmes addressing similar challenges and to allow us to make informed judgements about effectiveness of the NIHR Leadership Programme in context.

5) **A small workshop** with health and research leadership experts to test the robustness of the findings and recommendations.

In any evaluation of an intervention such as the leadership programme, there will be a problem of attribution and contribution. In other words, while the leadership programme may contribute to wider outcomes, we may not be able to attribute these outcomes solely to the leadership programme. While we have taken steps to link outputs and outcomes to specific inputs and processes (through careful design of survey and interview tools, and triangulation of evidence), we recognise that there are caveats to this approach and have highlighted them throughout the report.

Evaluation findings

- *Overall, the NIHR Leadership Programme delivered by Ashridge is positively received by participants. The majority of interventions that form part of the programme are perceived by participants to be useful, and they would recommend the programme to others. However, there are differences of opinion both within and across levels about the usefulness of specific interventions within the programme.*

The leadership programme fills an important gap in academic and clinical researchers' professional development which otherwise might not be filled through their own

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[1] http://www.kirkpatrickpartners.com/OurPhilosophy/tabid/66/Default.aspx

institutions. We believe that this attests to the overall positive contribution that the programme makes to the sector, but also should be a caveat to consider when reviewing the findings. This is because individuals have little against which to compare the programme.

While all levels of leaders found the one-to-one coaching activities useful, development and senior leaders did not find other activities as useful. Overall, action learning groups were thought to be least useful by these two groups of researchers and there was variable uptake, with many not participating in them. This is surprising, given that the action learning group is a forum for bringing together the learning from all other leadership programme activities.

Trainee leaders found the action learning groups and the tailored workshops to be the most useful; however, generally they indicated a wide range of activities to be useful and programme coordination was viewed most positively by this group (as compared to some less positive views from development and senior leaders). Trainee leaders receive the most structured delivery of the activities, and we conclude that their more positive reflections on the coordination of the programme as a whole are due in part to this.

- *There has been a particularly strong contribution to individual leadership development, personal awareness-raising and confidence-building as a result of the programme. There is some evidence of the programme contributing to the objective of building research teams and institutional leadership.*

The majority of participants across all levels indicated that the programme had either a 'major' or 'significant' impact on their personal approach to leadership. The participants indicated that they were acquiring new skills and that these were translating, to varying extents, into changed behaviours.

Although individuals in fact may be learning and adopting new behaviours which could have wider institutional impacts, they may not always be aware of the link between the two. More than 75 percent of the respondents across all groups indicated that they are better able to manage their current institutional tasks and are more aware of the external context in which they operate. This suggests that there may be impacts on their institution due to the fact they are more aware of the context in which they work and how to manage their tasks better. However, fewer than 50 percent of development and trainee leaders thought that the programme helped them to have a major or significant impact on their own institution, and only 53 percent of senior leaders felt that they had a major or significant impact on their institution. In their comments, many respondents indicated that the impacts they felt they were having were related to being more reflective and confident as a leader, again emphasising the importance that the programme has had in fostering personal leadership development, but raising questions as to how higher-level objectives were being met.

- *Although individuals are reporting strengthened leadership characteristics and leadership performance as a result of the programme, we did not find evidence that research outputs and research performance are improving, and the links between leadership and research performance could be strengthened.*

There is weaker evidence for the impacts on research leadership, specifically within the NIHR, or more broadly within the biomedical research sector. Participants across all

leadership cohorts indicated that the programme had helped to improve their performance as a leader significantly by building their confidence, but it had not been as significant in building their credibility as an intellectual leader or in helping them to influence colleagues. Insights from the in-depth interviews suggest that improvements in leadership were more about interpersonal relationships and self-awareness, rather than strengthening their ability to overcome or address research challenges: in other words, to contribute to strengthened research capacity in the NIHR.

We include a caveat in this next point, in that higher-level impacts such as improved research outputs or higher quality research are of a more long-term nature, and we would not expect to find strong evidence of these only three years into the programme. More than 60 percent of all participants, including more than 75 percent of senior leaders, reported that they believe the programme has helped them to strengthen links across research disciplines with other colleagues. However, when asked about the extent to which individuals felt the programme was enabling them to have either a personal, institutional or wider research community impact, many commented on improved self-awareness; few mentioned improved ways of doing research which otherwise might be suggested by the previous finding. This suggests that the link is not yet being made between improved leadership and research performance, and the individual's leadership role in the wider community.

- *The delivery of the NIHR Leadership Programme is currently balanced in a way in which there is more emphasis on individual leadership development and less emphasis on the development of institutional and wider research community leadership within the NIHR. This suggests that there is either a mismatch in the way that the programme interventions are linked to the wider objectives and aims of how the NIHR would like to foster and support its leaders, or it may be a matter of timing and that the future focus of the programme should be balanced more equitably.*

The venn diagram in Figure i illustrates what we believe the current balance of the NIHR Leadership Programme to be across the three objectives.
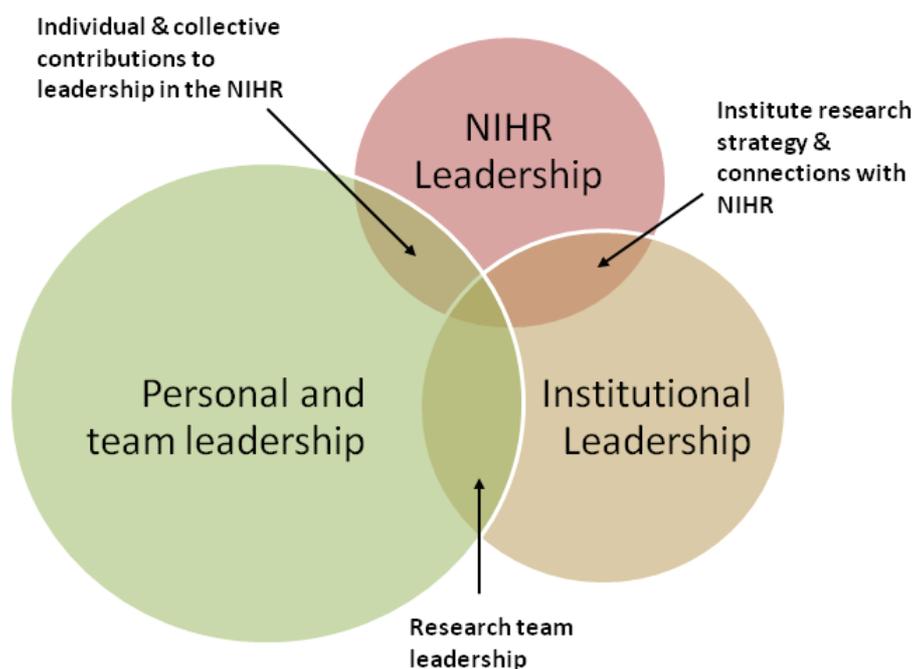
Figure i: Integrated leadership in the National Institute for Health Research Leadership Programme

Here, each core objective of the leadership programme is represented as a circle, with the overlaps between them reflecting how the objectives mutually support each other and how each overlap has a corresponding set of outcomes. For example, overlaps between activities which support personal and team leadership and those which aim at the objective of fostering wider NIHR leadership might be expected to reflect individual and collective contributions to the leadership of research in the NIHR. Equally, overlaps between institutional and NIHR leadership might lead to outcomes that foster connections between institutional research strategy and the wider NIHR research strategy. It should be asked whether this model of leadership is the right model for NIHR, and whether this will allow it to achieve its long-term aims of transforming biomedical and health research in the UK.

Evaluation recommendations

- *We recommend that Ashridge needs to take a holistic look at the programme that it has developed and re-evaluate whether it is fit for purpose across each leadership cohort; also, whether it is aligned and balanced with overarching NIHR objectives.*

In light of the findings about the usefulness and integration of learning activities in particular, we believe that the structure of the programme for each leadership cohort needs to be critically examined in order to ensure that the activities are delivered in an integrated and coordinated fashion that clearly supports wider learning objectives. It seems that there is a particular need to address integration of programme interventions for senior leaders, as opposed to the current model where they are able to choose individual interventions in which they are interested, or for which they have time. For example, by requiring more structured participation in the programme, as opposed to the current '*à la carte*' model, there might be more opportunities to ensure that programme learning objectives are

coordinated and achieved more readily. In addition, action learning groups, or a similar method whereby integration of programme learning occurs, should be more firmly established in the higher programme levels and steps taken to ensure that they are playing the role that they need to be in the wider programme architecture.

In order to help participants make the link between research performance and leadership, we recommend that Ashridge reconsiders the team of coaches and facilitators that deliver the programme and bring in specific experience of academic, biomedical or health research leadership expertise at key stages in participants' development over the course of the programme. This will enable participants to learn and connect leadership concepts to research challenges from people who are familiar with the research environment and contexts in which the participants function. In addition, Ashridge might consider alternate structures to the programme, where more active steps are taken to encourage both the horizontal and vertical integration of researchers and leadership levels, so that individuals learn from those facing similar disciplinary challenges but perhaps different management or institutional challenges. To this end, Ashridge might look to other leadership programme models, for example the United States National Institutes of Health (NIH), which aims to foster vertical and horizontal integration across individual research institutions through careful selection of programme participants for each leadership course.

- *We recommend that Ashridge addresses the 'end' of leadership and how individuals leave the active programme, yet remain integrated in a wider leadership community.*

We note in our evaluation that currently there is no formal system in place for 'rolling off' the programme if one is a senior or development leader. While the trainee leader programme has a formal graduation ceremony at the end of the 18-month programme, the endpoint for the other two programmes is not as clearly defined. We found little evidence that this aspect had been appropriately addressed for these higher levels, and a more holistic consideration of the beginning, middle and end of each programme is needed.

Without a clear beginning and end for the programme, it can be difficult for participants to fully understand and appreciate the wider context in which the leadership programme is aiming to achieve change. Moreover, it can be difficult to discuss the continuity, future skills development and continued learning needed to sustain a leadership community. It is difficult to see how a wider leadership community is being established without this aspect being addressed, and in fact many participants felt that this was actively discouraged. Therefore, there is a missed opportunity in developing a wider community of leaders within the NIHR. This would contribute to individuals taking more responsibility for their position in the wider research community, and would be likely to contribute to better achievement of the third objective of the programme. In addition, it would help to ensure that the objectives of the programme as a whole are met and are contributing to wider NIHR objectives.

- *We believe that there is an issue in the way that the leadership programme connects to a wider theory of change for the NIHR. We suggest that if the DH would like to see the NIHR Leadership Programme as a science policy intervention, there needs to be a shift towards better integration and more equal balance across the three leadership objectives, and greater attention to the specific outcomes that are desired from the overlap of each.*

We believe that this is an issue for the DH and senior leadership of NIHR to consider and work through with Ashridge. There is an opportunity to understand better how an NIHR theory of change in the biomedical and health research sector can be achieved through delivery of the leadership programme.

- *We suggest that senior leadership within the DH might consider a rebalancing in the programme in the context of the following proposition: leadership should be at the core of NIHR science policy.*

This would not only require continued and ongoing investment in the leadership programme, but concentrated efforts to embed leadership development and awareness throughout the biomedical and health research landscape. This might be achieved, for example, by requiring all grant applications to have a 'leadership and development' section. It might involve more concentrated efforts at enabling a group of NIHR leaders to work within their research communities to lead on particular research issues, public health challenges or shared academic concerns, such as the opportunities and challenges provided by the Research Excellence Framework. Ashridge could facilitate and support these community-driven initiatives through the leadership programme and provide individuals with the leadership guidance and skills to do this.

On the basis of all the above, we conclude that Ashridge has built up a suitable foundational knowledge of the NIHR and has an awareness of the individual leadership needs of researchers. After three years, we believe that it has achieved an acceptable level of success in delivering strongly on the first objective, and is beginning to deliver on the second objective. The third objective will require more time to be met, but could be more readily achieved through consideration of our recommendations.

Acknowledgements

Introduction

1.1 Background

The National Institute for Health Research (NIHR) Leadership Programme was commissioned in September 2008 and began delivering to researchers in January 2009. It was commissioned against a backdrop of an increasing emphasis on high-quality clinical research in the National Health Service (NHS) in the wake of *Best Research for Best Health* (Department of Health, 2006) and the Cooksey Report (Department of Health and Davies, 2006), and a need to deliver high-quality research within the NHS. Delivery of this will be enhanced by an effective research base and system of leadership supporting it. However, often research leaders are neither given the opportunity, nor do they perceive that they have the time, to attend formal leadership or management training programmes. Leadership training can have a hugely beneficial effect on an organisation, no matter whether its setting is in research, the public sector or private industry (Grindle and Hildebrand, 2006).

Therefore, there was a real opportunity to develop the skills and capabilities of NIHR leaders and enable them to make a real difference to the health research environments in which they work. In this context, the programme can be thought of as a 'science policy intervention': in other words, it was thought that investment in the leadership skills of high-level senior staff within NIHR could help to improve the ability of the research base to deliver the high-quality research that was and is needed to ensure a strong, robust and globally competitive health research base in the UK.

Against this broader context, the ideas for the NIHR Leadership Programme were born. The Ashridge Business School was selected through an open tender competition to develop and deliver the leadership programme, which represents a significant investment of £3.1m in an innovative leadership and policy intervention tool. The specific objectives of the programme are as follows.

1. *To develop individual research leaders' leadership style, impact, and 'self preservation'* – reflected in enhanced personal effectiveness, self-awareness, career satisfaction, flexibility to move between 'expert' and 'leader' roles, and greater influence on the research agenda.

2. *To build research team leadership capability*: team and project leadership, group dynamics, performance management, collaborative working, recruiting and retaining staff – reflected in greater success in research bids, clearer team expectations and a stable but actively managed environment.

3. *To foster leadership in the wider research community, networking, mentoring future leaders, virtual working, strategic integration* – reflected in better idea cross-fertilisation, more effective teams, greater international competitiveness, nurturing new projects and stronger application of research.

Broadly speaking, the NIHR is widely considered to have succeeded in enhancing clinical and applied health research in the UK. The extent to which this success is attributable to the leadership programme is an important question, but one that is difficult to answer. Although it is tempting to resort to quantitative indicators of success which can be definitively attributed to one intervention over another, this can be misleading (Ling and Van Dijk, 2009). Moreover, many indicators of success will be much longer term in nature than any three-year programme could be expected to provide. Therefore, rather than attempting to provide a definitive answer to this question, this evaluation will aim to provide sound qualitative and quantitative data about the contribution that the programme has made to the NIHR overall, and provide suggestions for how it might continue to be strengthened going forward.

This report presents the findings of an evaluation of the NIHR Leadership Programme conducted by RAND Europe. The aim of the evaluation is to evaluate the extent to which the NIHR Leadership Programme has delivered on its three core objectives. Such an evaluation will enable the DH to account for the expenditure of public funds and extract lessons for the future, as well as develop plans for the next phase of the leadership programme. Moreover, it can provide an additional opportunity for learning and development for those individuals involved in the programme. The focus and methodology of the evaluation will recognise and reflect all of these considerations.

The remainder of this chapter provides additional background on the leadership programme, including a full description of the programme structure and activities at each level, and the methodological approach that we took to our evaluation.

1.2 The National Institute for Health Research Leadership Programme

There are three levels of participant in the programme:

1) *senior leaders* – those who are deemed to be the most senior researchers in NIHR. These individuals might include directors of major research centres, topic-specific networks, clinical research facilities, programmes and programme grants.
2) *development leaders* – individuals who are on course to reach the most senior positions in NIHR, but have not yet reached that point. They have significant research responsibilities, but are not running full research centres or schools.
3) *trainee leaders* – individuals who are making the transition to being independent researchers and are taking on their first significant management and leadership roles.

The primary requirement for participation in the programme is that the researcher has NIHR funding, either through a grant or through holding a research administrative or management position for NIHR-funded clinical research programmes, trials, etc.

The leadership programme comprises four main streams of activity, and each activity stream is tailored to the type of leader being supported, although there are some common features shared across all leadership groups. For example, all leaders enrolled at any level receive some form of one-to-one support, participate in action learning groups and attend annual conferences that bring together all individuals in a group. However, the focus of each leadership group does vary with, for example, senior leaders receiving greater one-to-one accompanying or coaching support, and trainees participating in more group learning activities. Overall, and across the leadership levels, the programme emphasises:

- development in the work setting (as opposed to classroom learning);
- leadership practice (rather than theory);
- a combination of one-to-one work and support, especially for senior leaders, and groupwork and support, especially for development leaders and trainees; and
- provision of focused skills relevant to leadership in a research setting.

The sections below discuss each leadership group in more detail and the activities offered to the leaders. The final section provides a timeline of the entire programme and major activities, conferences, etc. which have taken place.

1.2.1 Overview of programme content

Leadership support and development within the programme varies across the leadership levels. However, although the structure of each programme varies, the activities which make up the core of the programme are similar. In other words, it is the delivery and structure of the programme that varies between senior, development and trainee leaders, not necessarily the nature of the activities themselves. Each activity is described at a generic level below, then the following sections focus on how delivery of the activities changes depending on the programme structure.

- **Accompanying (one-to-one)** – this is offered as an *in situ* and real-time coaching opportunity. It provides individualised attention in the leaders' actual research and working environment.
- **Biannual learning conferences** – these bring together leaders within a cohort, and each conference has a different core theme and objective. All conferences take place at Ashridge Business School over a 24-hour period (arrival in the late afternoon and adjourning the end of the following day).
- **Virtual or 'Themed' workshops** – these workshops are short courses on topics relevant to leadership and management. As of February 2011, the workshop topics included 'Personality types and implications for self and teams', 'Engaging with the NHS', 'Thinking differently about change', 'Strategy that makes a difference', 'Making sense of and animating groups', 'Developing coaching skills', 'Difficult conversations' and 'Running effective meetings'.
- **Tailored learning guides** – like the virtual workshops, these guides are developed for specific topics. To date we have seen guides on the following topics: *Managing Meetings* and *Email Mini-Guide*.
- **Periodic phone conversations on emerging issues** – phone conferences were held, especially in the early days of programme development, to facilitate connections between participants and to discuss collaboration and other collective approaches to leadership issues in health research.

- **Bespoke 360-degree feedback** – this process involves the individual identifying 10–14 people who will provide feedback on their performance. This is solicited from people both above and below the individual in the organisation, as well as colleagues who may work in different institutions but are the leader's research collaborators. The reviewers are asked a series of open-ended questions that fall broadly under the following categories: 'What do you most appreciate about the person?', 'What should they do differently?' and 'What should they be doing in future?' The feedback is received anonymously by the leader's Ashridge coach and fed back to the individual in a one-on-one meeting.
- **Biomedical research units (BRUs) strategy workshops** – the need for strategic leadership within BRUs emerged as a development need for senior leaders early on, and so a workshop was developed from which all leaders could benefit. These workshops involve bringing a few leaders together with their respective BRUs to discuss strategy and teamworking. One recent workshop stated its three-fold purpose as follows: (1) to support the development and implementation of effective strategy for each of the BRUs involved; (2) to support the engaging of the wider leadership team in that process; (3) to explore the individual and collective leadership implications of the strategy.
- **Action learning** – this involves groups of about five individuals who meet face-to-face every two and a half months and employ the action learning approach (a description of this from Ashridge is available) to a 'leadership project'. Overall there are five meetings in total, each lasting one day. Each individual in the group identifies their own leadership project that they will work on for the duration. This is also referred to as 'peer project supervision' groups. The action learning groups are meant to be the main vehicle for participant learning during the programme. According to Ashridge's material on action learning:

  > The key to the group's effectiveness is this capacity to convert any insights and learning into action, and the subsequent readiness to be held to account by colleagues for the pursuit of that action agenda.[2]

1.2.2 Senior leaders

Senior leaders are nominated for participation in the NIHR Leadership Programme by the DH's Director General of Research and Development, and the criteria for consideration include the extent of responsibilities in people and patient-based research and in NIHR, the intensity of implementation challenges and commitment to developing as a leader within NIHR.

To date, the Ashridge team of consultants delivering the leadership programme (hereafter, the Ashridge team) estimate that up to 90 percent of all individuals who would qualify as a senior leader have participated in the programme. This amounts to about 120 individuals across three 'cohorts': 2009, 2010 and 2011.

At the time when we spoke to Ashridge there was no official length of programme for senior leaders. They are able to pick from a range of activities and, in theory, can choose to engage with any aspect of the programme at any time.[3]

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[2] Ashridge Business School (2011) *Action Learning*. Private document provided by Ashridge Business School.

The senior leaders' programme is the most unstructured of any of the levels. Senior leaders are able to participate in any of the programme activities described above in section 1.2.1 and they are offered '*à la carte*' – that is, they can pick and choose the activities in which to participate. The majority of senior leaders participate in the accompanying and coaching sessions and the learning conferences. The findings presented later in this report provide a more detailed breakdown of the types of activities in which senior leaders participate.

1.2.3   Development leaders

They have significant research responsibilities but are not running full research centres or schools. Development leaders must be nominated by a senior leader in order to participate in the programme. They are then invited to fill out an application and are considered for inclusion in the programme through open competition.

The development leader programme began in Autumn 2009 and was the last to come online out of the three leadership groups. There have been four cohorts enrolled in the programme, with plans for a total of about 120 individuals taking part over the three-year period. The cohort numbers across the years break down as follows:

- Autumn 2009 (pilot) – 17 individuals

- Spring 2010 – 28 individuals

- Autumn 2010 – 30 individuals

- Early Spring 2011 – 25 individuals

- Late Spring 2011 – planned 20 individuals.

There does not appear to be a formal length of time for the development leader programme, although there is more of a structure to the delivery of their programme. Development leaders are offered a suite of leadership activities that proceed in the following order.

1) A conversation between development leaders and the senior leader as to how the programme can best serve the leadership and development needs of the development leaders and their laboratory team.
2) Delivery of 360-degree feedback in a focused one-to-one session to see what the development leaders want to achieve in the future.
3) One-to-one leadership support and on-the-job development.
4) Leadership projects supported by a peer supervision group (the action learning approach is employed, as discussed above).
5) Virtual mini-workshops and electives (topics similar to those offered to senior leaders).
6) Biannual group meetings at Ashridge.

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[3] However, in some cases there was a limit placed on how much one-to-one coaching the participants could receive. Caveats such as these about the nature of support that could be received are discussed in more detail in the evaluation findings below.

Since these activities are offered as a 'suite' to development leaders, this gives more structure to the programme, and development leaders are expected to proceed through the activities in the order listed above.

1.2.4 Trainee leaders

Trainee leaders are selected through an open competitive application process. This involves a phone call, a reflective self-assessment exercise, a second phone call and then selection by the NIHR/Ashridge team.

The Ashridge team anticipates working with five cohorts of 20 trainees over the course of the programme. The trainee programmes run for 18 months. To date there have been the following cohorts of trainee leaders:

- Pilot group – 19 individuals, graduated in January 2011

- 1.1 group – 16 individuals

- 1.2 group – 17 individuals

- 2.1 group – 17 individuals

- 2.2 group – approximately 20 individuals.

In contrast with the other two programme designs, the trainee programme is much more structured and has a clear 18-month duration which ends with a formal graduation ceremony. The trainee programme also has a more group-based focus, as opposed to the slightly more individually tailored approach of the senior leader and development leader programmes.

The trainee leader programme has four main components:

1) Themed residential workshops at Ashridge:
   a) Workshop 1: 'From Expert to Expert and Leader' (transition workshop)
   b) Workshop 2: 'Effective Collaborative Relationships'
   c) Workshop 3: 'Managing Relationships'
   d) Workshop 4: 'Leading Strategy and Change'
2) Annual, one-day conferences at Ashridge for all active cohorts
3) Participation in action learning groups, meeting at least four times during the programme
4) One-to-one accompanying of the trainee for half a day, and two phone conversations to review progress and development.

As with development leaders, the trainee leaders are expected to take part in all aspects of the programme in the order identified above. This is designed so that they can experience the four thematic aspects of guided personal reflection and development, core workshops and conference, action learning and web-enabled activities.

1.3 Evaluation methodology

As discussed previously, the primary aim of the evaluation is to evaluate the extent to which the NIHR leadership programme has delivered on its three core objectives. Therefore, the main objectives of the evaluation will cover the following four areas:

1) to evaluate the programme's activities against its stated objectives, including whether the methods of the leadership programme map against the objectives;
2) to determine the impact of the programme in relation to two related aspects – the participants' leadership skills and the participants' impact on immediate staff and colleagues;
3) to evaluate the extent to which leadership skills and capabilities are becoming embedded within NIHR as a result of the programme; and
4) to determine the programme's contribution to NIHR and health research in general, and begin to understand the feasibility of evaluating the impacts of the programme going forward.

In order to deliver an evaluation that was fit for purpose and addressed these four objectives, the RAND Europe team used robust and replicable methodologies which were grounded in the literature. The evaluation had five primary workstreams:

1) desk-based research;
2) survey of programme participants;
3) semi-structured interviews;
4) case study-based national benchmarking; and
5) analysis and reporting.

The main activities of each workstream are discussed in turn below. However, before we discuss them, a word of caution is merited. In any evaluation of an intervention such as the leadership programme, there will be a problem of attribution and contribution. In other words, while the leadership programme may contribute to wider outcomes, we may not be able to attribute these outcomes solely to the leadership programme. This problem becomes more complex the further up the four levels of the evaluation model that we progress; however, we can be reasonably confident that aspects to which the leadership programme has contributed are sufficiently evident in our findings and analysis. Direct attribution is difficult in any evaluation, and we are particularly limited in our ability to make such direct links here as there was not sufficient time or resource to conduct a wider audit and validation of participant views of the programme's impacts. In other words, the findings of this evaluation are based largely on the participants' views on the programme, and we were limited in our ability to externally validate participant perceptions as to the broader impacts of the programme on their working practices and individual development. While we have taken steps to link outputs and outcomes to specific inputs and processes (through careful design of survey and interview tools, and through triangulation of evidence), we recognise that there are caveats to this approach and have highlighted them throughout the report.

1.3.1 Desk-based research

The primary aim of this workstream was to understand the activities of the leadership programme, the approach and underpinning philosophy of the Ashridge team, and to review the findings of any internal evaluations and reviews conducted over the course of the programme. The second aim was to understand the perspectives in the literature on how leadership is evaluated and what theories of leadership are most appropriate for biomedical researchers.

We began by reviewing the activity measures of the leadership programme itself, including the participants enrolled in the programme, meetings, hours of interaction, performance review data of participants, etc. We also examined the findings of the internal evaluations conducted by Ashridge over the course of the programme in order to see whether there were emerging issues or areas that would be important to explore in our full evaluation. The research of the programme itself also involved an intensive series of initial meetings with the co-leaders of the Ashridge programme and officials in the DH, in order to understand better the background and delivery context of the programme.

Alongside these activities, we searched the wider literature on leadership, including literature on the underpinning theories of leadership in the biomedical research and academic sectors, as these are the sectors most relevant to leaders in the NIHR. We sought to keep this literature review as tightly defined as possible, and so focused around two key questions: 'Is leadership for biomedical researchers fundamentally different from leadership in other sectors?' and 'What tools and techniques are most appropriate evaluating leadership programmes and outcomes?' A summary of the literature review can be found in Chapter 2, and our findings from the review of Ashridge documents and conversations with Ashridge officials are integrated throughout the report.

Overall, the activities from this workstream were used to inform the development of initial criteria and indicators for evaluating the programme based on the activity measures. While a more detailed description of the evaluation framework that we used for this project will be presented in Chapter 2, we will introduce the Kirkpatrick Model[4] very briefly, as it was used to inform the other workstreams presented below.

The Kirkpatrick Model is an evaluation model for assessing the impacts of a training programme of any type, including leadership. It involves evaluating the impact of the programme at four different levels: (1) reactions; (2) learning; (3) behaviour change; and (4) results. At each level, the focus is on how learning was received and the impact it had on the participant. A Level 1 evaluation identifies how participants reacted to the programme, the learning environment and the conditions of programme delivery. A Level 2 evaluation seeks to understand the degree to which participants acquired the intended knowledge, skills and attitudes which the programme aimed to impart upon them. A Level 3 evaluation focuses on behaviour change and the degree to which participants applied what they have learned in their regular routines and work environment. Finally, A Level 4 evaluation seeks to understand whether and how broader outcomes which extend beyond the individual and into their wider organisational environment are occurring. In addition, the Level 4 evaluation looks for differences in attribution and contribution; in other words, to what extent the outcome is a result of the leadership programme.

1.3.2 Survey of programme participants

In this workstream we conducted a survey to solicit as large a range of views as possible about the impact of the programme. The survey was sent to all individuals who have participated in the programme, a total of 331 individuals. The survey was largely quantitative in nature, with some qualitative and open-ended questions used to draw out further information. We had a response rate of 65.5 percent to the survey, with 217

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[4] http://www.kirkpatrickpartners.com/ourphilosophy/tabid/66/default.aspx

respondents completing the survey questions. The breakdown of these respondents is fairly even across the three leadership cohorts, and can be seen in Figure 1.
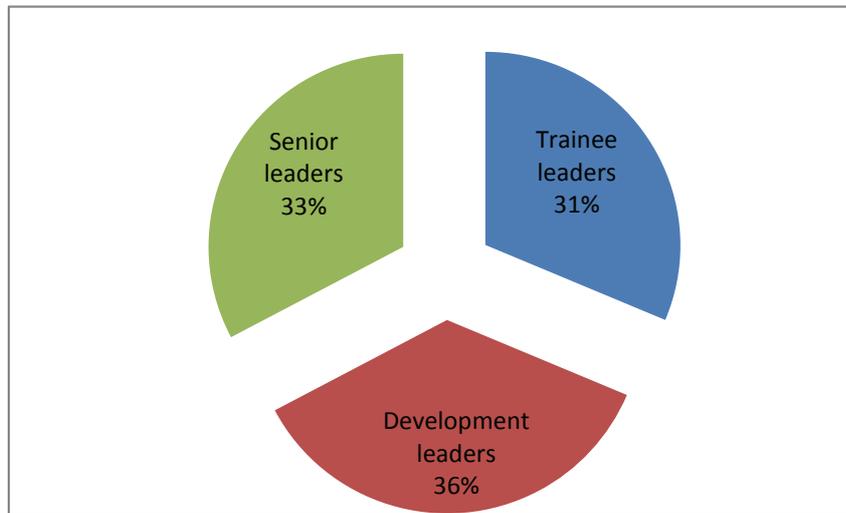
Figure 1: Distribution of survey respondents across the leadership cohorts

We assessed the extent to which the respondents considered that the programme offered activities, skills, capabilities and perspectives that otherwise may not have been accessible. The Kirkpatrick Model evaluation framework was the basis for the survey and analysis. A full set of the questions asked in the survey is provided in Appendix A and a summary of the types of questions asked in each section is given below.

In the 'General Profile' section, akin to Level 1: 'Reactions', participants were asked about their motivations for joining the NIHR Leadership Programme, previous participation in other leadership programmes, programme organisation and delivery, and their views on the quality of the programme, including the relevance of the different interventions (eg action learning), coordination and flexibility of delivery. In the 'Acquired learning and behaviour change' sections of the survey (akin to Levels 2 and 3), the participants were asked whether the right needs were being addressed, the nature of the new skills they had gained and whether links were being strengthened across disciplines and leadership categories. The final section addressed the wider impacts of the leadership programme (akin to Level 4 learning). It asked questions about the added value of the programme, its impact on participants' institutional and organisational environments, and its contributions to NIHR and health research. The results of the survey were analysed according to the three objectives of the programme and are presented throughout the report.

1.3.3 Semi-structured interviews

The interview workstream was intended to develop a deeper understanding of the specific impacts and areas of learning on the programme. In other words, it was a chance to explore in greater depth the reactions, learning, behaviour changes and wider impacts of the programme with a selected group of leaders and other individuals involved with the programme.

In total, 20 interviews were carried out with programme participants, the staff of leaders, Ashridge coaches and DH policy leads with responsibility for the programme. A further set of interviews were conducted for some of the benchmarking case studies, which are

discussed in section 1.3.4. A more detailed breakdown of the interviews about the NIHR programme is as follows.

- Nine interviews were conducted with leaders on the programme, three from each leadership cohort. These interviews were 45–60 minutes in length. Leaders were selected at random from the full list of programme participants.
- Six interviews were conducted with the colleagues of leaders on the programme, including both managees and managers. These were done across the cohorts and were about 30 minutes in length. Staff members were selected by asking earlier interviewees to nominate two to three people that we might be able to speak with in further detail.
- Two interviews were conducted with Ashridge coaches on the programme, and a further series of meetings were held with the co-leaders of the programme in order to understand the perspective, experiences and goals of the Ashridge coaches delivering the programme across the cohorts. These interviews and discussions ranged from 90 minutes to four hours. Aside from the two leaders, the Ashridge coaches we spoke with were selected in one case on the basis that the individual was the only one to work across all three leadership cohorts, and in the other case the individual played a significant role in leading the development and delivery of the trainee leadership programme.
- Two senior DH officials were contacted to discuss the purposes of the programme and the experiences of the DH in its delivery and impacts.

As with the survey, the interview protocol was structured using the four Kirkpatrick levels of evaluation and learning. Although a detailed protocol was developed for the interviews, they were semi-structured in nature and specific areas of interest and individual experiences were explored in further detail when relevant and appropriate. A full interview protocol is provided in Appendix B.

1.3.4 Case study-based national benchmarking

The fourth workstream involved developing our understanding of other types of leadership programmes across a range of sectors and leadership levels. The key objectives of this workstream were twofold: to enable comparative analysis against programmes addressing similar challenges; and to allow us to make informed judgements about the effectiveness of the NIHR leadership programme in context.

In order to develop the background knowledge that we would need to conduct the benchmarking, we selected a range of programmes in the research, higher education and other public sectors in the UK and internationally. We not only sought to select programmes across sectors, but also programmes which were aimed at different levels of leadership akin to those of the NIHR Leadership Programme, and which might have been expected to promote a focus on one of the three objective areas of fostering either organisational, institutional or individual development. The programmes selected for the benchmarking and their place within the matrices are summarised in Table 1.

Table 1: Case study benchmarking matrix

NIHR programme level		Programmes in the research or higher education sector	Programmes in other sectors	'End to end'
Senior leaders				1. **Civil Service Progression** across all three levels – Fast Stream, Senior Civil Service 2. **Higher Education**: The Leadership Foundation for Higher Education
Learning level	*Organisational*	Top Managers Programme	Higher Command and Staff Course	
	Institutional			
	Personal/team			
Development leaders				
Learning level	*Organisational*			
	Institutional	NIH Senior Leadership Program	The King's Fund Leadership Programmes	
	Personal/team			
Trainee leaders				
Learning level	*Organisational*			
	Institutional			
	Personal/team	Research Team Leadership	Common Purpose Navigator	

In evaluating the programmes we took a simple case study-based approach to understanding the components of the programme and the way it was structured. In particular, we adopted an approach that allowed us to focus on the 'theory of change' of the programme. A theory of change-driven approach[5] examines the logic behind the activities chosen for a particular programme or intervention, in order to pursue desired individual, institutional benefits that may result from the intervention. This approach allowed us to examine the rationale behind each programme, and to understand better how the activities and pedagogical processes within it fitted with the objectives that the programme was trying to achieve. Questions were asked of each programme and captured in a common template, including overview and summary, cost and duration, level of leader targeted, theory of change and underpinning philosophy, main pedagogical processes and interesting themes to highlight. We then conducted an integrated leadership assessment at the individual, institutional and organisational levels across the programmes, the findings of which are woven into the analysis throughout this report. Full descriptions of each programme and the results of the integrated assessment for each are provided in Appendix C.

1.3.5 Analysis and reporting: a model of integrated leadership

This work package involved both analysing the findings from all the workstreams and holding a small workshop which tested a series of recommendations about how the programme might be taken forward. In an evaluation such as this there are many ways of presenting the analysis, and we wanted to ensure that it was presented in a way that captured the cross-cutting implications and findings across the multiple workstreams of the

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[5] See further explanations in Chapter 2.

evaluation, the overarching evaluation framework and the multifaceted nature of the Ashridge programme itself.

The purpose of the workshop, then, was to present findings and key themes from the evaluation of the NIHR Leadership Programme and explore with a select group of experts in health leadership the emerging issues and recommendations for the next phase of the programme. The workshop included participants from the DH, selected experts in the field of leadership and the RAND Europe team. The key issues discussed included:

- how to build on the emerging analysis;

- the high-level concepts that the recommendations from the evaluation would comment upon;

- the connections between leadership and policy;

- the need for integration and balance across different types of leadership;

- the necessary conceptual frameworks for understanding leadership challenges; and

- the tensions inherent in supplementary leadership approaches.

The recommendations from this workshop, as well as those emerging from the full evaluation, are captured in this report.

1.4 Structure of this report

The remainder of this report is structured as follows. Chapter 2 provides a short background on the concept of leadership and the way that it is evaluated in different sectors. There is a particular focus on the nature and role of leadership in the biomedical research sciences. Chapter 3 presents the findings of the evaluation according to Level 1 of the Kirkpatrick Model: basic reactions to the programme. Chapter 4 presents the findings of the evaluation in relation to the acquired learning and behaviour change that participants benefited from on the programme, while Chapter 5 addresses the potential wider impacts to which the programme might have contributed. Chapter 6 looks at the cross-cutting analysis and considers whether the objectives of the programme have been delivered upon, and lastly, Chapter 7 presents the final recommendations from the evaluation.

The bigger picture: leadership in the literature and beyond

2.1 Overview

This chapter sets out some background context to leadership and leadership evaluation. We give a brief overview of how leadership is defined in the wider literature and the link between leadership development and performance. We then discuss different approaches to evaluating leadership programmes across sectors, and conclude with a broader discussion about how we have analysed holistically the findings of this evaluation.

2.2 What is leadership?

There are many definitions of leadership. In a review from 2004, Bolden takes us on a sweeping tour of the many interpretations and conceptual theories surrounding leadership, drawing our attention to the work of Gaille, who points out that 'leadership appears to be, like power, an "essentially contested concept"' (Gaille, 1955, in Bolden 2004, p.4). Here we will give just a general overview of the field.

In his review of leadership theory, Northouse (2004) identified four common themes in the way that leadership can be conceived, positing that leadership is a process, involves influence, occurs in a group context and involves goal attainment. He thus defines leadership as 'a process whereby an individual influences a group of individuals to achieve a common goal' (Northouse, 2004, p.3, in Bolden, 2004, p.5). An Ernst & Young report proposes the same underpinning concept, but in a slightly different way: '[L]eadership is the capacity to release and engage human potential in the pursuit of a common cause' (Moore, 2000, p.2). The report goes on to further clarify leadership:

> [L]eadership, effectively exercised, will result in a team of people who enjoy clear purpose, shared values, who are empowered by knowing that their initiatives are aligned with and supported by team members that believe there is mutual benefit deriving from their individual commitments in turning their common vision into reality. (Moore, 2000, p.2)

Many people note that the difference between management and leadership is an important distinction, with John Kotter (1990), among others, concluding that 'management is about coping with complexity', while 'leadership, by contrast, is about coping with change' (Kotter, 1990, p.104).

As we are beginning to see, despite the fact that many different definitions and conceptions of leadership exist, common themes run throughout them. Bolden (2004) identifies several general themes within leadership theories and shows how these ideas have evolved over time. Thus, while initially leadership theories focused on leadership traits and behaviours, attributing the leader's success to certain personality traits or behavioural mannerisms, it soon became apparent that there was no ability to account for effective leadership within different situations. Therefore, situational leadership theories were developed to acknowledge the fact that different contexts call for different approaches to leadership. Other leadership theories include those focusing on transformational leadership, which emphasises the leader's role in creating the culture of an organisation, and power theories, which explain leadership in terms of the amount, type and use of power and influencing tactics. However, no matter which way it is viewed, it is clear that leadership can be a driving force within an organisation or culture, and today it is widely recognised that leadership is not just about individuals.

2.3 How is leadership development evaluated?

Evaluation of leadership can be difficult due to the complex interactions among different factors: the causal links between leadership and performance are difficult to establish. For example, as performance is affected by a number of factors other than leadership (such as contextual factors, other programmes and training going on, natural changes and progressions within an organisation), when assessing the impact of leadership and leadership development, there is generally agreement that it is important to take a more holistic, multidisciplinary approach (Bolden, 2004).

In doing so, and in order to determine the overall success of a particular intervention, it is important to assess the extent to which the desired objectives have been achieved, to assure the quality of learning and development initiatives, ensure accountability, ensure that external requirements are met, and to help identify areas for improvement. Thus, although difficult to design, evaluation of leadership interventions helps organisations to determine the return on an investment by ensuring that interventions are appropriate and aligned to the current and future needs of the organisation. The following section looks at the different types of evaluation measurements and processes which have been used to evaluation leadership programmes.

2.3.1 What methods are used to evaluate leadership?

Management or leadership development should have a ripple effect across all different stakeholders: individuals, groups, organisations and at a regional, national or international level. There are a number of methods used to evaluate leadership, and below we describe some commonly adopted approaches.

One method of looking across all stakeholder groups is the Five-Pillar Method (Yeo, 2010), which is employed by some universities and has elements of the Kirkpatrick Model embedded. It uses the analogy of different 'pillars' of learning and the evaluation is conducted at each pillar to assess the extent and depth of learning. So while for Pillars 1 and 2 simple metrics about access to and appreciation of learning might be evaluated, Pillar 3 examines the cost-effectiveness of management or leadership development efforts. Metrics used to evaluate this pillar could include how well learning resources are leveraged

across the enterprise. Pillar 4 concentrates on learning effectiveness, using indicators to measure the impact of learning on the strategic direction as well as the linkages made to innovation or speed to market. Finally, Pillar 5 looks at management satisfaction, using indicators such as learning budgets over time relative to a business performance indicator such as sales revenue.

The key in this method is to use good performance measurements so that the impacts of leadership development learning can be considered across the different levels. These measurements can be found at the individual, group and organisational levels, and might include measures of enhanced productivity, technical competence and knowledge, self-awareness, communication and strategic thinking at the individual level, or measures of leaders' behaviourial impacts upon colleagues, such as improved communication, motivation, morale and teamworking at the group level. At the wider organisational level, measures of impact can be improved profit, reduced wastage, customer satisfaction, organisational culture and innovation (Bolden, 2004).

The Dashboard Method is another way of examining the impact of leadership development activities, by identifying macro-learning constructs and then building up micro-learning indicators (Berk, 2007). This technique can be applied across any sector using the four macro-learning constructs – operational, financial, performance and cultural – and developing micro-learning indicators for each of these constructs. For example, operational indicators include the number of students trained or instructor use rate, while financial micro-learning indicators include costs per student day and learning and development cost as a percentage of payroll. Performance indicators cover satisfaction scores, time-to-job impact and business results such as improved sales. Finally, cultural indicators might measure management support and the external validation (articles, awards, etc.) that results. This approach shares common themes with the Five-Pillar Method in that there is a focus on establishing broad themes of learning and then developing indicators which can be used to evaluate the extent to which they are met.

Finally, mixed methods are used to gather quantitative and qualitative data in order to evaluate indicators on the impact of leadership development programmes. An evaluation (Sogunro, 1997) of the impact of training on leadership development in the Rural Education and Development Association in Canada was carried out using a data collection method mix of qualitative (interviews, document analysis, direct observations) and quantitative (questionnaires); similarly, the Centers for Disease Control and University of California Public Health Leadership Institute (Woltring, 2003) used a mixed-method approach including a retrospective evaluation questionnaire and in-depth interviews with former Public Health Leadership Initiative participants, faculty, staff, funders and leaders in the field of public health. An evaluation of the Leadership Foundation for Higher Education (LFHE) also used interviews and a web-based questionnaire to gather information from key stakeholders. This evaluation examined the impact of the Leadership Foundation on its stakeholder groups, the benefits that have accrued, its future business options, the likelihood of it becoming financially self-sufficient and the areas where continued public investment would be beneficial. The evaluation was carried out using both internal and external analysis. The internal analysis looked at Leadership Foundation operations in order to assess its efficiency and effectiveness and to develop options for its future operating and business model, while the external analysis used key stakeholder views

of the performance of the Foundation, as well as information on its position in the market in which it operates, and how its products and services compare to others in the market. Such a mixed-method approach can be useful for a complex evaluation with multiple stakeholders and audiences, such as the evaluation conducted here for the NIHR Leadership Programme.

2.3.2 Kirkpatrick Model of Leadership Evaluation

Building on all of the above, we have chosen to use an approach that includes mixed methods and employs an evaluation framework which identifies four levels of learning and sets out identifiable metrics at each level. The approach that we are using was introduced in Chapter 1 as the Kirkpatrick Model of Leadership Evaluation. In this model, learning is evaluated at four levels:[6]

- Level 1: Reaction – evaluating to what degree participants react favourably to the training;
- Level 2: Learning – evaluating the degree to which participants acquire the intended knowledge, skills, attitudes, confidence and commitment based on their participation in a training event;
- Level 3: Behaviour – evaluating the degree to which participants apply what they have learned during training when they are back on the job;
- Level 4: Results – evaluating the degree to which targeted outcomes occur as a result of the training event and subsequent reinforcement.

There are five foundational principles on which the Kirkpatrick Model is based.

1) The end is the beginning. Evaluation should start before the training begins. Ideally, learning at each of the four levels should be incorporated into the design, execution and measurement of the training.
2) Return on expectations is the ultimate indicator of value. Stakeholder expectations must be factored in early on, in order to develop an accurate measure of what the value of the training is.
3) Business partnership is necessary to bring about positive return on expectations. The people delivering the training need to partner with those in the institution so that there is an execution plan which can lead to behaviour change (Level 3) and results (Level 4). Otherwise, change will only be seen at Levels 1 and 2.
4) Value must be created before it can be demonstrated. Businesses need to invest in developing the capabilities of leadership executives and professionals so that they can add value to the organisation.
5) A compelling chain of evidence is needed to demonstrate achievement of bottom-line value. Collecting evidence at each stage gives a progressive account of leadership benefits.

The LFHE (Martinson Consulting, nd) also uses the Kirkpatrick Model in structuring internal evaluations of its work, and we loosely based our approach on this model as we felt that there were useful parallels between evaluating leadership for academics and the leaders

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[6] http://www.kirkpatrickpartners.com/OurPhilosophy/tabid/66/Default.aspx

on the NIHR programme. A guide to the evaluation approach outlines the first step as identifying evaluation needs. It is recommended that a training needs analysis is conducted to establish a baseline, enabling the evaluation to target individual needs and ensure that the results are useful to all stakeholders. The next step outline is a focus on the four levels in the Kirkpatrick Model, looking at key questions and issues to address at each learning level within the evaluation. A similar conceptual framework guided our analysis throughout each workstream, as identified in Chapter 1.

2.4 How can leadership in a wider community be evaluated and addressed?

2.4.1 What are the leadership challenges for academia and biomedical/health researchers and public health programmes?

While not all of the leadership programme participants work in academic environments, many of them do, and so the realities of academic challenges should be reflected in leadership training. A report by Ernst & Young has suggested that the main external challenge that universities face is due to rivalry among universities for both funding and top-quality students and faculty (Moore, 2000). This rivalry is framed by the increasing costs of suppliers, student pressure to decrease prices, funding sources, and the threat of new entrants to the market, including the threat of substitutes, as more internet courses and private research organisations enter the academic learning environment with non-traditional learning opportunities. In addition, the increase in the rate of accumulation of knowledge poses difficulties, increasing fragmentation and specialisation. Moreover, academic faculties tend to operate with an independent mindset, making collaborative leadership difficult. Therefore, there are particular challenges that academic research faculty face which should be recognised in any leadership programme in which they participate.

As well as these external difficulties that an academic leader may face, there are several internal difficulties to functional leadership in an academic research setting, and Tom Kennie (2009) explores the factors leading to a breakdown in academic leadership. Kennie has discussed academic leadership in terms of six dimensions: credibility, curiosity, collegiality, capabilities, character and confidence. When these factors are sub-optimal in an academic leader this can lead to dysfunction, and as these factors are unlikely to be independent of one another, it can be important to consider combinations of factors, leading to even further leadership dysfunction.

Although not all programme participants work in an academic environment, all of them work in challenging research environments. Many of the challenges and problems that confront our hospitals and academic medical centres today are complex and require more collaborative work. Collaboration often requires strong leadership and management skills to ensure successful working. There are some barriers to this within academic medical centres, but as medical centres begin to break down departmental barriers, people have to learn to work with others who are not like them. However, people at most academic medical centres are busier today, which works against spending the necessary time together to build a team, community or practice.

> Successful academic medical centres will make use of a broader repertoire of leadership strategies, and besides developing leaders they will develop leadership as a property of the

system, as an organisational capacity. The emphasis on leadership development is on social capital and building more productive relationships that enhance networking, collaboration and resource exchange. (Souba, 2004, p.177)

Thus, although the capability of leaders is seen as paramount within public health, challenges are faced, including the fact that many public health programme managers lack education in management and leadership skills (Boedigheimer and Gebbie, 1998). A recent report by The King's Fund recognises this:

[T]he bottom line is that an organisation as large and complex as the NHS cannot be run without high-quality management and leadership. This will happen only through a commitment of time and resources and a willingness to value the role of managers whatever their background. (The King's Fund, 2011, p.vi)

The NHS faces a number of leadership challenges at the moment, with a coalition government which announced reforms to the NHS in 2010, and efficiency-saving pressures increasing. The King's Fund report makes a series of recommendations for leadership development in the NHS, including advice against making management cuts with an enhanced national focus on leadership and management development. Like many others, an emphasis in this report is placed on the necessity of a collaborative, horizontal leadership effort, and for the old 'heroic' or top-down leadership to be replaced by a focus on developing organisations and teams rather than individuals.

Working within the constraints of this context, in addition to the challenges of academic institutional environments and clinical research, means that biomedical and health researchers and leaders in the NIHR face a wide and diverse range of issues. Clearly, leadership can help with this, but part of the challenge is identifying what kind of leadership is right for the NIHR, and in what context. The NIHR leadership programme is addressing this and is an important step, but there remains a broader question about how leadership is conceptualised within this broader NHS research and development context.

2.5 Framing the evaluation: a theory of change perspective

One of the main findings from the literature review is that there are many ways to think about and understand the role of leadership in the wider biomedical research space. However, for the purposes of this evaluation, we needed a way of thinking about leadership that would provide a means of translating the broader set of findings into a model that would be most useful for the DH. To this end, we returned to the three key leadership programme objectives, and considered what the DH was trying to achieve through the programme. In other words, we sought to identify what the relationships between and within the programme objectives were, and the wider goals of the NIHR as an organisation supporting biomedical research in the UK. This latter concept might be thought of as the 'theory of change' for the leadership programme.

A theory of change sets out the building blocks needed to deliver on a programme goal, through a pathway of interventions and based on a range of assumptions about the underlying logic and types of interventions which can lead to desired results (Connell and Kubish, 1998; Weiss, 1995). Theories of change tend to be valued in programme planning

and evaluation because they help create a shared view of what the programme vision and strategy is, how it will be pursued and what can be done to assist in identifying measures for capturing learning and reflecting on progress.

In addition, articulating a theory of change allows a thorough examination of expectations of an initiative from the perspectives of multiple stakeholders. It surfaces perceived causal mechanisms through which the initiative is intended to deliver benefits, and their underlying assumptions. It helps build a detailed understanding of both how and why a desired change is expected to occur in a specific context (Pawson and Tilley, 1997). Over time, an evaluation approach which uses theories of change allows us to understand the outputs and impacts from a project, and to test whether the underlying assumptions behind an intervention and strategy are valid.

Although the focus of our evaluation was not on articulating what a theory of change is for the NIHR Leadership Programme, such a concept does provide a useful starting point for framing our analysis. Starting with the objectives of the leadership programme (developing individual leaders, building research team capacity and fostering leadership in the wider research community), we are able to think about the types of outcomes which might be desired. We therefore propose that the NIHR Leadership Programme aims to help achieve change in the NIHR research environment by first enabling researchers to become leaders, then supporting them in achievement of institutional, organisational and national leadership goals. The interactions between these elements can be conceptualised as an integrated model of leadership (Figure 2).
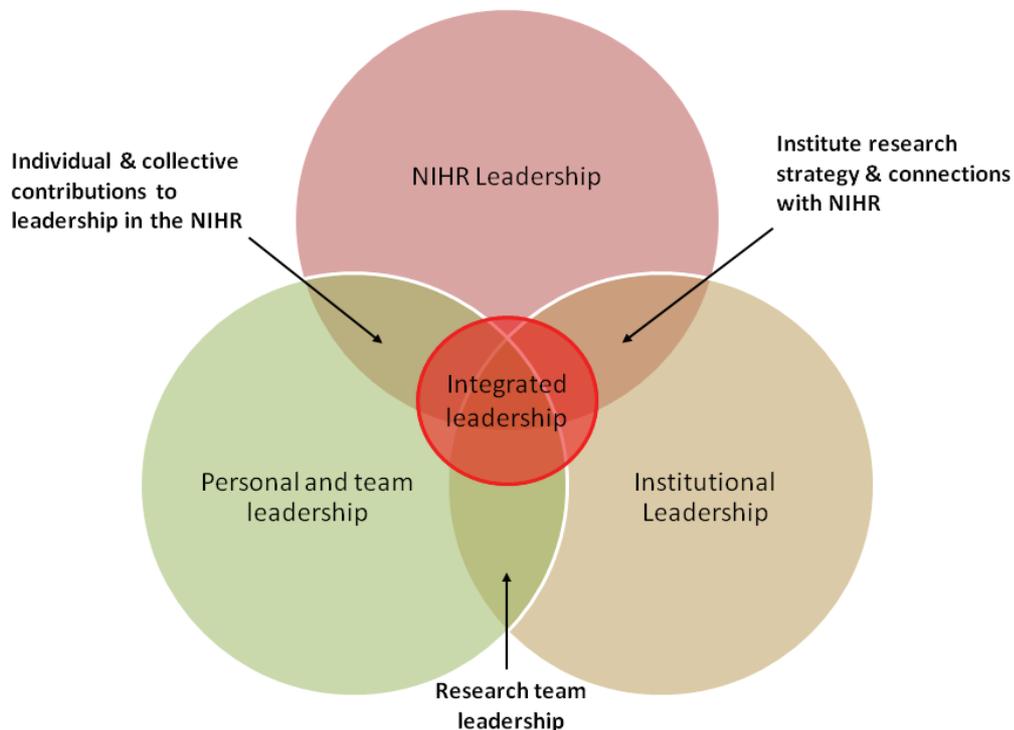
Figure 2: An integrated model of leadership

In Figure 2 each core objective of the leadership programme is represented as a circle, with the overlaps between them reflecting how the objectives mutually support each other and how each overlap has an expected group of outcomes. For example, overlaps between

activities that support personal and team leadership and those which aim at the objective of fostering wider NIHR leadership might be expected to reflect individual and collective contributions to the leadership of research in the NIHR. Equally, overlaps between institutional and NIHR leadership might lead to outcomes that foster connections between institutional research strategy and the wider NIHR research strategy. Finally, overlap between the objectives of personal and team leadership and institutional leadership foster research team leadership skills and capabilities.

While we will return to this conceptual means of considering the implications of the evaluation throughout the analysis, it is important to introduce the concept of integrated leadership here and its use in framing our findings throughout the rest of the report. Although Figure 2 is pictured with perfect overlap between each of the circles, this does not necessarily need to be the case, neither should it be the nature of integration that the NIHR leadership programme achieves. We believe what is more important is that there is a clearly articulated theory of change for the programme, and that the balance between the programme activities, different objectives and their intended outcomes is clearly aligned. In other words, there should be a clear logic of intervention from the NIHR goals to the activities of the leadership programme itself. We will return to this idea throughout the report, considering both where we believe the current balance in the programme lies and whether this is appropriate for the wider goals of the NIHR as a virtual research institution.

The remainder of this report considers each level of evaluation – response, learning, behaviour and results – both in light of the broader programme objectives and responses from each level of leader across the programme. We then consider all of the evaluation findings in a cross-cutting analysis, before offering final recommendations in the ultimate chapter.

CHAPTER 3 **Reactions and engagement with the programme**

3.1 Introduction

This chapter presents and discusses the findings of the evaluation according to the first level of impact of the leadership programme: reactions. Here we considered questions such as the following.

- To what degree do participants react favourably to the activities and interventions?
- What are the learning environments and conditions of the programme like?
- What are the participants' reactions to the specific components and tools of the programme?
- How do participants react to the overall delivery of the learning programme?

The findings presented will necessarily rely more heavily on the survey, as this was the means through which most participants were able to respond, but the findings from the interviews also will be drawn upon to illustrate or further explain key points.

3.2 Profile of participants

In our survey and interview questions we asked some basic background questions of all the participants, including the disciplines they belong to, their institutional affiliations and the time that they have been in the programme. We also asked them whether they had ever participated in a leadership programme before, as we felt that this was an important indicator of how they might perceive and react to the programme. Of the respondents, the majority had never participated in any other leadership programme, and the ratio of this was fairly consistent across the three leadership cohorts, as can be seen in Figure 3.
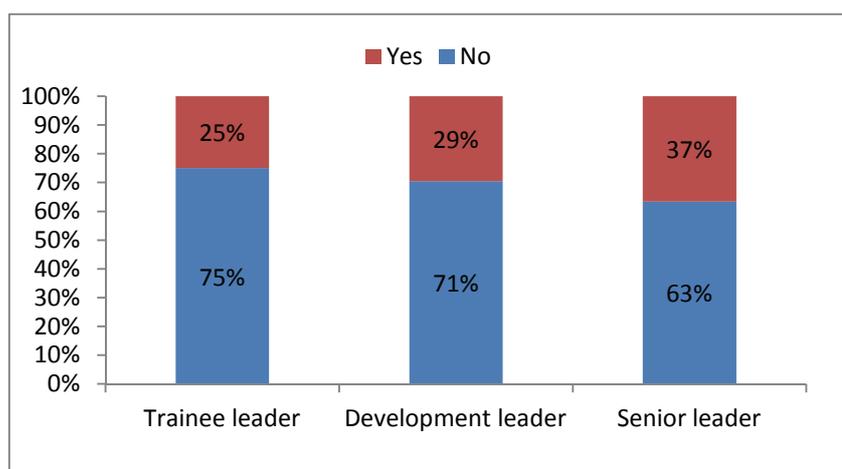
Figure 3: Participation in other leadership programmes by cohort

This is a useful baseline statistic on a few levels. First, it tells us that the leadership programme is potentially filling a void that otherwise is not available to the programme participants. Of those participants interviewed who did participate in the leadership programmes, many explained that these were one-off day or week-long courses, but nothing as holistic and comprehensive as the NIHR Leadership Programme. As one senior leader pointed out:

> Part of the reason university academics find the programme so positive is because they receive nothing like it in academia. So this is more of a reflection of this kind of thing in academia than it is a reflection of the NIHR programme. (Senior leader)[7]

Second, it tells us that there is not necessarily a comparator against which most participants can judge their participation on this programme, simply because many of them have never been exposed to this kind of learning. While the first observation leads us to conclude that the NIHR Leadership Programme is filling an important gap, the second observation indicates that we must exercise caution when interpreting reactions to the programme.

We also asked participants what their motivations were for joining the programme (see Figure 4). This was a qualitative question, but the responses could be grouped according to the categories of research excellence, competing demands, managing change and time management. For senior leaders, the main motivation in joining the programme was achieving research excellence. As one individual listed on the survey in articulating his motivations:

> Attracting high-quality clinical trials and achieving KPIs [key performance indicators] for research unit; running a high-profile academic institute with a clear vision and ambition; helping the make the UK a world-class place to undertake trials in [my disease area] and to oversee successful delivery of these. (Senior leader)

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[7] When provided throughout the report, anonymity is maintained in comments such as this one; they are paraphrased and may not reflect a direct quotation. This is to protect the confidentiality of the respondent and the reader should be assured that no paraphrased comments are taken out of context or amended so as to alter meaning.

For development leaders, two motivations stood out: research excellence and improving one's ability to manage competing demands on their time. One commented, in explaining her motivation, that there were difficulties in 'managing to coordinate different pieces of work, all with competing priorities and maintaining strategic direction while dealing with so many varied tasks and demands' (Development leader). For trainee leaders, the main motivations were about managing competing demands and improving their time management skills.
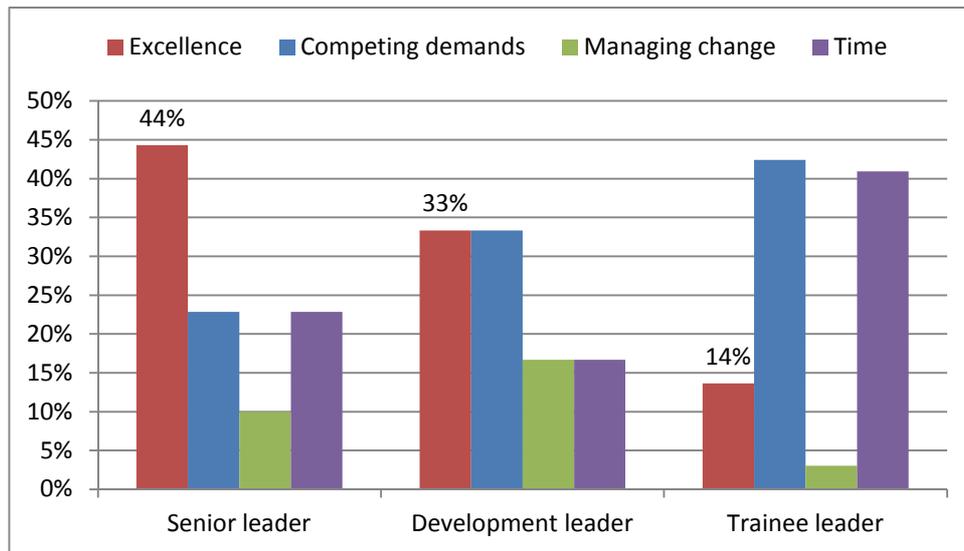
Figure 4: Motivation for joining the NIHR Leadership Programme

This breakdown across the different levels might be expected, based upon knowledge of the profile of participants in each group. Trainee leaders are at a point in their careers where they are holding their first leadership position, and so might experience pressures and competing demands for their time in a way they had not until that point. Senior leaders might still experience this, but presumably have had several years of managerial experience, and so think that other more strategic research issues are more critical. As one senior leader told us in an interview, he did not want to sound arrogant but he had proven leadership and management skills – it was why he was where he was today. However, this did not mean that he could not continue to learn in different ways.

Others we spoke with expressed a mix of expectations. Many felt that they did not have any specific expectations aside from learning more about themselves as individuals and leaders. One development leader explicitly hoped to bring learning from a business school setting to the public health sector. A senior leader shared views similar to that of the development leader, in that he had an interest in learning how one could develop leadership and management skills at any stage. However, he went on to comment that he felt that many of his colleagues did not have any idea of what to expect, and this might have been a problem for some of them in relation to their engagement with the programme:

> I feel like the initial tranche of leaders might have been a bit flummoxed by the whole idea. It was time-intensive, and many felt it was unlikely to be beneficial and was unnecessary. (Senior leader)

We also asked leadership programme participants in the survey and in the interviews about the relevance of the programme to their future career plans. Overall, 152 respondents, or 69 percent, said that the programme was very relevant to their future careers, while 28 percent said that it was relevant in part. However, when examined by leadership cohort (see Figure 5), we can see that fewer senior leaders found the programme to be very relevant, while just over 75 percent of trainee leaders thought the programme was very relevant to their future career plans.
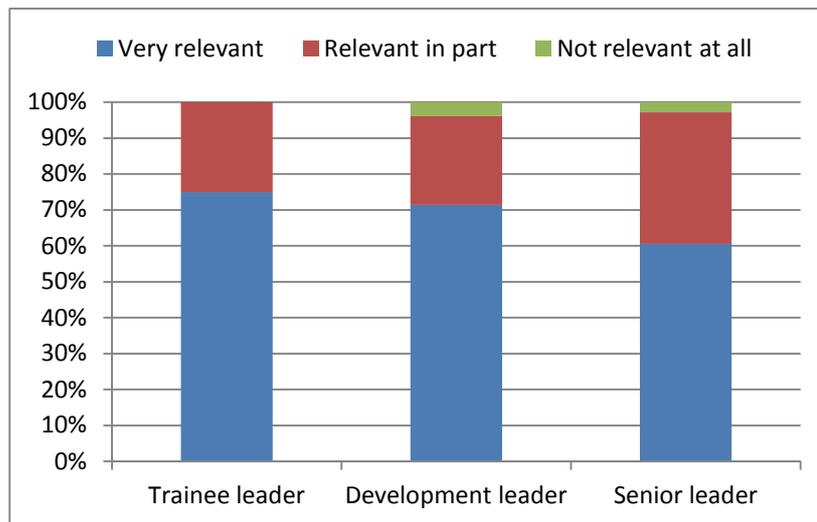
Figure 5: Relevance of programme to future career plans

When the interviewees were asked to explain how the programme was contributing to providing the skills that they needed to achieve their career goals, many development and trainee leaders commented that it was providing them with the confidence to realise what they can, and sometimes cannot, achieve in their roles:

> Being given support and different skills to do my role is very important. I'm being constantly asked to do more with less money in the NHS, and this takes a lot of skill and leadership and [to] be more creative about it. (Development leader)

> I have the confidence, knowledge and security to talk with people and express the desire to do something different. (Trainee leader)

> It is very liberating to be able to talk freely about your career path and say things like you want to take a non-traditional path. Ashridge is a safe environment to do this in. (Trainee leader)

Others valued the space that the Ashridge programme provided them with to reflect on themselves and their role within their organisations:

> If things aren't going well it makes you think and look at yourself, and see yourself as an individual or an institution. It makes me think about my place within the organisation, as opposed to a sole being within it. (Development leader)

> [It's made me] more clear about my goals and I have strengthened them, not altered them ... The programme has also given me the ability to reflect on what I am doing and why. I am more disciplined about what activities I am going to engage in. (Senior leader)

Based on the findings about participant profiles, initial expectations and relevance to future careers, the NIHR Leadership Programme does seem to be filling an important gap in the development needs of research leaders in the NIHR and is relevant to their career trajectories and expectations.

3.3   Programme coordination and delivery

We sought the participants' views on the overall management of the leadership programme, more specifically the various activities that were offered. This was aimed at assessing the extent to which participants thought the organisation programme was suitable to the nature of their work environment. When asked how they felt about the programme's coordination and flexibility in delivery, there were different responses from the participants across the three groups. Of the trainee leaders, 71 percent found the programme's coordination to be excellent, while only 37 percent of development and senior leaders found this (see Figure 6). This is interesting, given that it is the trainee leader programme which has the most structure built into the programme, while the senior leader programme is completely '*à la carte*' – leaders can choose which activities they engage with and when. However, when compared with the question about programme flexibility, there was relative similarity across the cohorts.
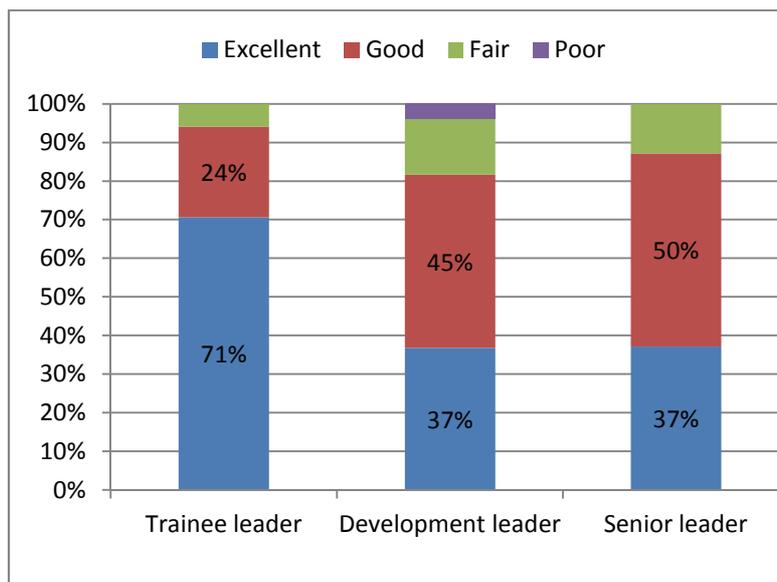
Figure 6: Programme coordination

The views on programme coordination ranged substantially, with some people having very good experiences and some having problems. There was a consistent theme of some people finding it difficult to confirm dates, and having trouble with workshops and other events being changed or cancelled at short notice:

> The admin surrounding course dates, etc. was poor and I found this frustrating … I also thought that when this was raised with the team by other participants, that there was a poor reception of the nuisance that short-notice and poor communication around details caused participants. I was surprised by this. (Development leader)

I have not been able to take up as many of the skills workshops as I would have liked because dates [were] not circulated early enough to obtain leave from clinical commitments. Have had to chase to confirm dates, eg first development leader group residential meeting dates were changed at very short notice. (Development leader)

However, others articulated exactly the opposite experience:

I've felt that the components of the programme have fitted very well together with a suitable degree of flexibility and (crucially) advance notice, so that they can be prioritised in a busy diary. All the meetings I've attended so far have been well run and it is a relief, for someone with NHS and academic backgrounds, to encounter professionalism in organisation. (Development leader)

Clearly there are challenges in working with such a diverse group of leaders, something that many people on the programme recognise. However, there did seem to be a consistent theme in the feedback from the development and senior leader groups, that programme administration could be improved.

Apart from administrative coordination difficulties, many senior leaders felt that the components of the programme were not always centrally coordinated in terms of how they supported leadership development:

The initial introduction to the leadership programme was lacking in clarity and explicit explanation of purpose. Also, were the programme to have been offered at the first conference by an outline of what was available and how the benefit depended on the utilisation of services by coaches and coordinators, it would have been easier and quicker to take advantage of the full range of benefits from the programme. (Senior leader)

Although a minority of participants found the programme very flexible, about 30 percent across all cohorts, the majority in each cohort found the programme to be flexible only at times, as shown in Figure 7.
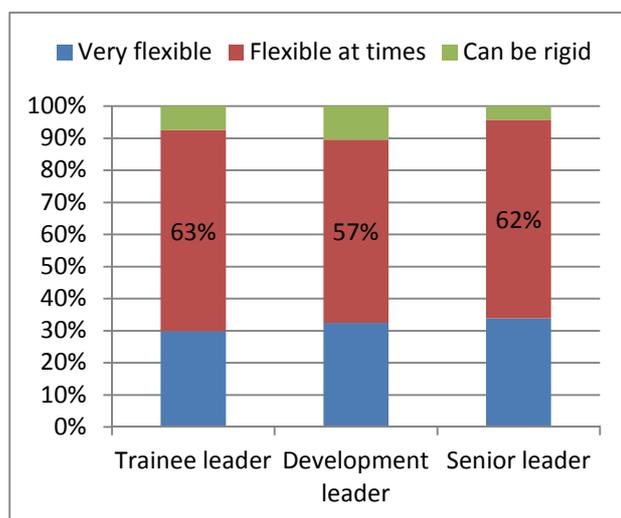
Figure 7: Programme flexibility

There seems to be a tension that might be present, then, when considering programme flexibility and coordination together. Thus, while one participant might feel that the programme is 'not particularly designed for someone with a very busy clinical and university job' (Senior leader), another felt that:

> To some extent one made these as good and connected as you wanted. The elements are separate but the way you use them and with your coach joined these up. For me, therefore, this worked well. (Senior leader)

While Ashridge has told us that flexibility in the programme is something that it strives for, particularly with senior leaders, this may be to the detriment of overall programme coordination and cohesiveness. As we will see later in the evaluation, the analysis of responses suggests that this could be lessening the impact of the programme on overall learning, behaviour change and the achievement of wider results.

3.4 Appropriateness of activities for research leaders

While overall programme coordination and flexibility is key to realising the programme objectives, it is the coordination, flexibility and, importantly, the usefulness of the different activities themselves which are paramount. We asked in both the survey and interviews about the usefulness of different programme activities, and the findings are presented below for each leadership cohort.

3.4.1 Senior leaders

Senior leaders found the one-to-one accompanying and coaching activities most useful, followed by the 360-degree feedback. Figure 8 shows this breakdown across the different activities.
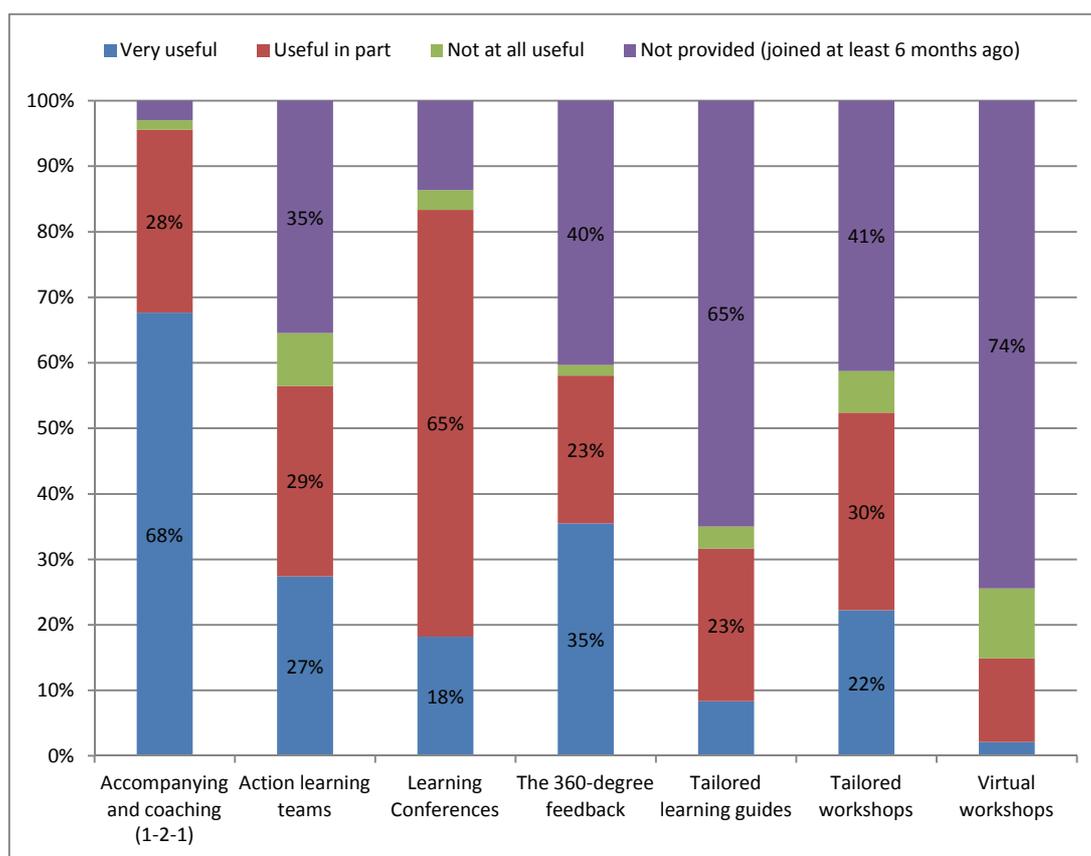
Figure 8: Senior leaders' views on the usefulness of programme activities

While this breakdown is self-explanatory to a certain extent, there are a few elements that we feel are important to draw out. First, Ashridge often highlighted to us in our discussions the importance of the learning conferences and the role that they play in bringing senior leaders together in a forum where they could get away from their day-to-day activities. Although many leaders seemed to appreciate the environment at Ashridge, the content of the conferences were mostly assessed to be useful only in part. Based on our interview responses, there were some mixed views on the conferences. Some leaders found them helpful in bringing colleagues together whom otherwise they would not have met, while others felt that the message being delivered was not at the right level:

> I think separating people out in hierarchies is not necessarily helpful and is a very academic thing. I found the May 2011 meeting, which brought all three groups of leaders together, one of the most useful experiences. It wasn't exclusive or hierarchical, and I felt that the younger generation are much more open-minded and understand the need for the bigger picture. (Senior leader)

> I welcomed activities where there was constructive discussion about where we could go as a group. (Senior leader)

> At the March conference [2011] we had the wrong people in the room and the wrong questions being asked. £1bn is not a gift and it's not a burden. There was no focus on outcomes and the expectation of a return on investment. (Senior leader)

> Conferences are useful in that they offer a broad sense of what other people are faced with. (Senior leader)

However, the coaching was most valued by many participants, and helped individuals deal with their self-reflections as a leader:

> Coaching helped me with [developing my] emotional intelligence. (Senior leader)

> [It was] useful to have an external view who knew how NIHR worked, to talk things through with. Also was helpful in talking about handling difficult people, the 'mavericks'. It was helpful to discuss issues and how to approach them. (Senior leader)

One person felt that the coaching was not necessarily something that was wholly unique to the NIHR Leadership Programme in and of itself: he commented that if it had not been offered, he would have gone out to find a similar thing for himself. This underscores the importance of delivering the leadership programme activities within the context of a holistic set of aims and objectives for participant learning and development. The leadership programme should be about the entire journey through all the activities, not just the experience one has with individual activities.

To this end, it is perhaps of slight concern that senior leaders did not find the action learning groups particularly useful. Though they are not intended to be the primary focus of the senior leader programme, the description of the groups provided to us by Ashridge suggests that these action learning groups could be potentially valuable forums where all of the programme learning can come together. Again, this underscores the importance of a holistic programme approach with a clear underpinning philosophy about the change that it intends to bring about, and the pedagogical processes that will deliver it.

3.4.2   Development leaders

Overall, and in comparison with the senior leaders, development leaders seemed to find a broader range of activities to be useful for them. These results are shown in Figure 9.
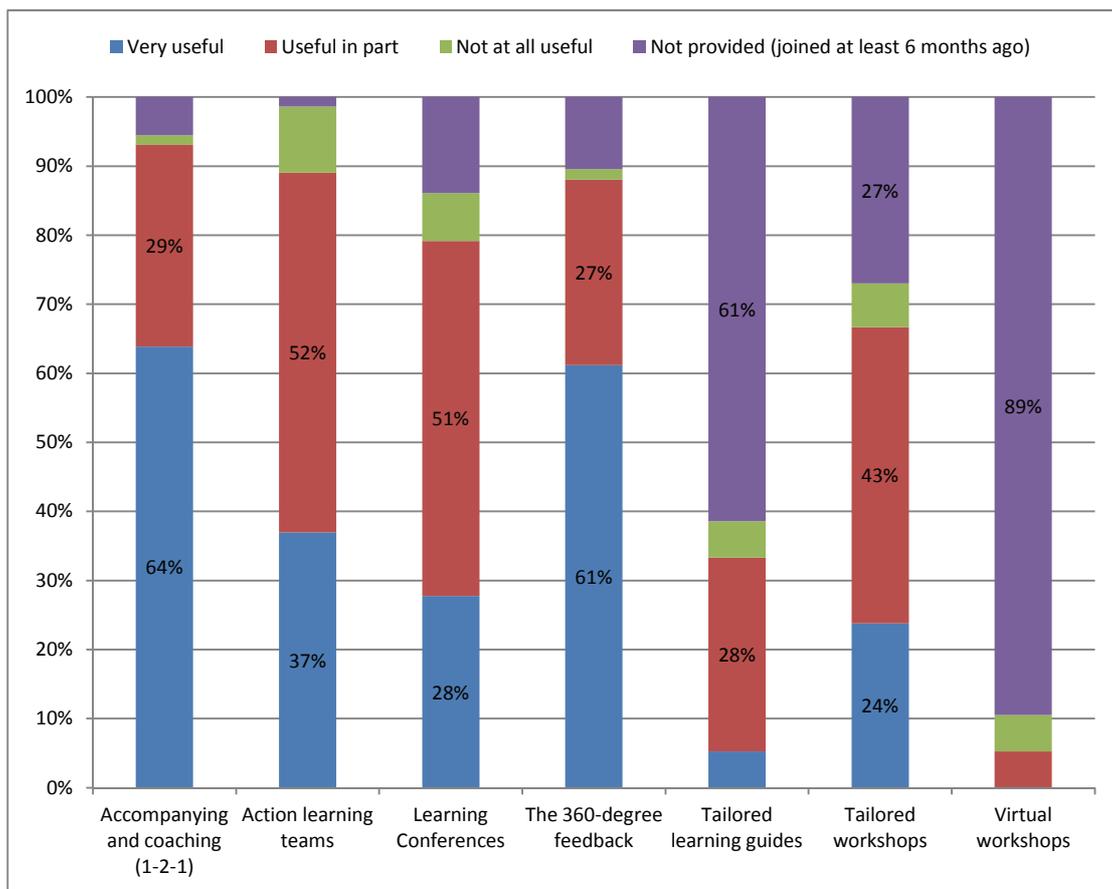
Figure 9: Development leaders' views on the usefulness of programme activities

Like senior leaders, development leaders found the one-to-one coaching to be one of the most useful activities, alongside the 360-degree feedback. As we understand it, often these two activities are done together for development leaders, and as one of the first things that they participate in during the programme. Thus the correlation between the two is a sign that this approach seems to work well and is valued by the participants. The interview responses echoed this from all three development leaders with whom we spoke:

> When allied to the 360, the one-to-one is a major highlight. The focus and depth of the interaction was really great. It really made you think and how to react to your environment, and how your environment reacts to you. (Development leader)

> Doing the 360 early on and the individual visit early on has enabled me to develop with the rest of the programme. (Development leader)

As with the senior leaders, we see primarily that the learning conferences and action learning groups were useful only in part:

> Action learning groups are really useful, but I have a feeling the usefulness probably depends on the people that are in your group. (Development leader)

> [With] some of the large group activities, at times I have felt it hard to understand the relevance, but when you look back you can see why it was helpful. (Development leader)

This suggests to us that there may be a need to re-evaluate the set of activities that comprise the programme and the way in which they are delivered to development leaders so as to fully support their learning and leadership development.

3.4.3 Trainee leaders

For trainee leaders there was a higher amount of individuals finding the activities to be very useful in comparison with the other groups. This may be attributable to the fact that the trainee leaders have one of the more structured programmes, and so the activities that they engage with are broader and have a wider scope of learning opportunities. Figure 10 shows the findings for the trainee leader group on the usefulness of the different programme activities.
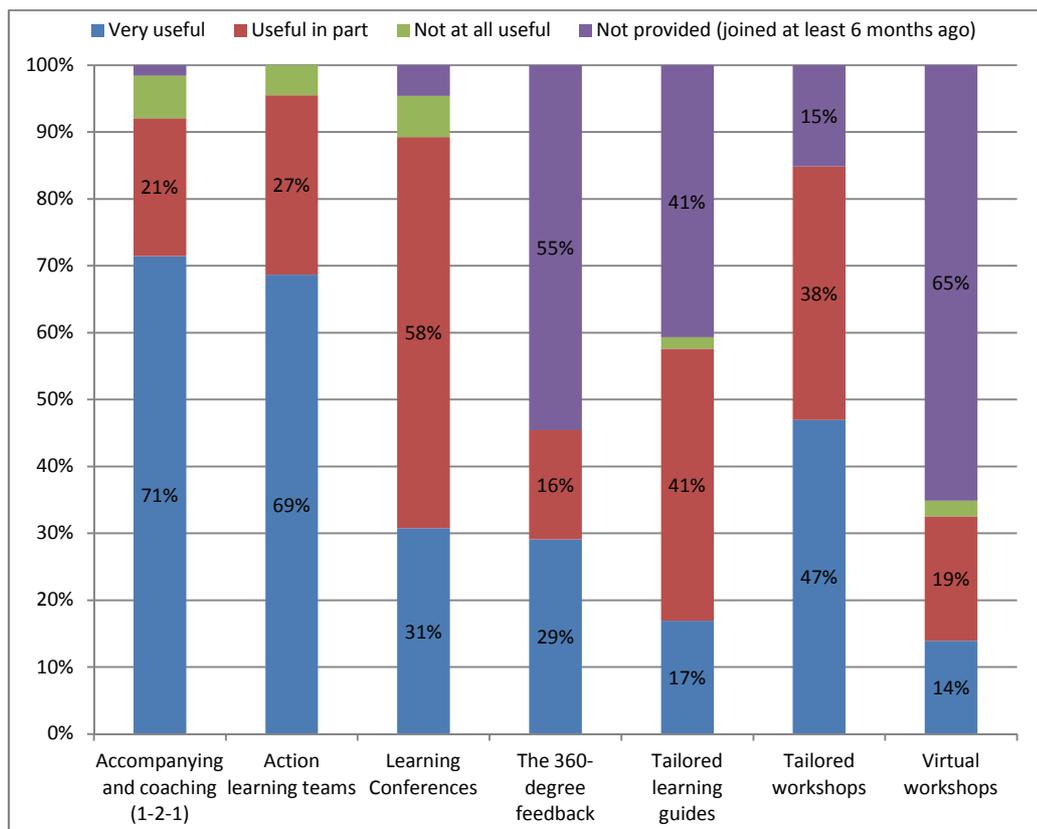
Figure 10: Trainee leaders' views on the usefulness of programme activities

One of the interesting things to emerge from our interviews with trainee leaders about the individual activities was that although they were very receptive to one-to-one coaching, there were mixed views on the extent of its usefulness. While one trainee leader commented that it had been 'most useful to have someone giving new insights into conduct', and that doing this on a more periodic basis would be more beneficial, another trainee leader said that it was helpful but certainly not the most useful.

Rather, trainee leaders found the action learning groups, and to a certain extent the tailored workshops, to be more in-depth and useful learning activity. All three trainee leaders we spoke with reflected this in some way:

> Action learning was the best because it is so rare to be able to take a time out with a group
> of people who also work in academia, have similar problems to you and face similar issues

and work environments, but just come at it completely unbiased and are not afraid to be frank and open with you. (Trainee leader)

I really enjoyed having a fresh pair of eyes on things in interacting with other people in my group. (Trainee leader)

The action learning concept is useful and very beneficial. [Talking with] a group of people with similar or disparate experiences, no axe to grind, can be very helpful and supportive. (Trainee leader)

Similarly, the trainee leaders found the small group workshops, particularly the role-plays, to be very helpful. They commented that they enjoyed them because they were 'challenging' and put you out of your 'comfort zone', but that they helped in managing difficult situations because 'practice makes perfect'.

3.5 Conclusions

Based upon the findings at this level of the evaluation on participants' reactions to the leadership programme, as summarised above, we have drawn the following conclusions and recommendations.

- The leadership programme fills an important gap in researchers' development that they otherwise might not receive through their own institutions. While overall this is a positive development, it should be a caveat to consider when evaluating the programme.
- Participants have different motivations for joining the programme, which seem to be consistent with how one might expect them to vary across the cohort levels. Senior leaders are motivated primarily by understanding how to achieve and lead research excellence in their institutions. Development leaders share this motivation for research excellence, but are equally motivated by a desire to manage competing demands on their time better. Trainee leaders are motivated both by needing to juggle competing demands and improve their time management.
- Programme coordination was viewed most positively by the trainee leaders, who receive the most structured programme, but was viewed less positively by the development and senior leaders. Although many people found the coordination to be good in these latter two groups, comments on this rating often expressed caveats which led us to believe that there may be a positive bias in this assessment.
- The usefulness of individual activities on the programme are viewed in different ways, for potentially different reasons, by the different leadership cohorts. While all cohorts found the one-to-one coaching activities very useful, the development and senior leaders did not find the action learning groups very useful, while the trainee leaders found these groups and the tailored workshops to be the most useful. The trainee leaders also found the widest range of activities to be useful, again perhaps reflecting the greater structure and coordination that is offered on their programme in comparison to other cohorts.

CHAPTER 4 **Acquired learning and behaviour change**

4.1 Introduction

This chapter presents the results of the evaluation of Level 2 (acquired learning) and Level 3 (behaviour change). Understanding the Level 2 impacts of the leadership programme involves understanding what learning and skills have been acquired through the individual's participation on the programme. Here, we sought to understand how the programme contributed to the following elements.

- To what degree do participants acquire the intended knowledge, skills and attitudes based on their participation in the learning event?
- What were the individual's expectations for knowledge, skills and attitudes?
- What specific new knowledge, skills and attitudes have been gained through the programme?
- How has learning occurred through the different *activities* of the programme?
- How learning occurred through *delivery* of the programme?

Level 3 impacts are closely related to this and often overlap with Level 2 impacts. In other words, acquired learning and skills often directly relate to behaviour change, and so we will address them both together in this chapter so that we do not create artificial distinctions between the two. In evaluating Level 3 impacts, we asked questions relating to the degree to which participants apply what they have learned when they are back on the job.

- What are the critical behaviours and skills of a leader?
- What are the key behaviours that they now apply because of the programme?
- How do they address organisational issues differently as a result of the programme?
- What are the different components or tools, and has delivery of the programme contributed to changed behaviours?

In the interviews we asked the participants to reflect on their expectations about the types of knowledge and skills that they might gain when joining the programme, and to consider whether they thought these expectations had been met. Although not all of them could recall specific expectations, those who could all reported that their expectations had been

met, with several people indicating that it had exceeded their expectations in the following ways: being more 'experiential' than they had expected; being more insightful about learning from business; and providing facilitators who had been excellent.

4.2 New knowledge and skills acquired

When asked about the new knowledge or skills acquired during the programme, the interview participants told us that they had gained knowledge or skills in at least one of the following areas: improved emotional intelligence, working with others, effective meeting management or strategy writing. 'Emotional intelligence', as one senior leader put it, or improved self-awareness, was the most frequently mentioned and most elaborated on area of learning on which the interviewees reflected. One development leader commented that the programme definitely had had an impact on how she thought about things, as she was more reflective in her daily work. Others shared similar views about the importance of the self-awareness skills that the programme had given them:

> Coaching helped me to probe why I was doing what I am doing and how. It drove me to be more reflective and understand the hierarchical environment of academia. (Senior leader)

> One can be a fantastic researcher, but a bad leader and vice versa. I now know I have to do both and I have the skills inherent to do both, like passion, bringing people on board, giving direction and team building ... It [the programme] highlights what makes you special and being aware of how to build on it – it's making you more attuned to what you've got. (Development leader)

The development leader paraphrased above went on to give an example of how, by being on the leadership programme, he is now more appreciative of how to use his enthusiastic personality as a strength, as enthusiasm can make people come with you on a journey.

Some interviewees expressed difficulty in identifying the specific new skills that they had gained, or said that it was too early in the programme to think about specific new skills. One development leader thought new skills were more of a 'work in progress', while a trainee leader reflected that she was 'building' on existing skills, not necessarily developing new ones.

When asked if they had identified any new learning needs since being on the programme, many said that they realised they needed to continue to become more self-aware, or they wanted to make their staff more self-aware and reflective. While the former is not unexpected, the latter could be a positive wider outcome for the programme, in that there could be positive impacts of the programme which extend beyond the individual participants. If widespread enough, we would expect some of these skills to be reflected in participants self-reporting about wider institutional impacts that they might be having, a topic discussed in section 5.3. However, as we will discuss below, only a few colleagues of leadership programme participants were able to identify specific skills that they had attained through direct interaction with the leaders on the programme. This leads us to conclude that there could be improvements in encouraging participants to spread learning and further embed leadership into their institutions and wider research contexts.

While the interviewees were asked more exploratory questions about new skills they may have gained, the survey questions asked all programme participants about specific skills, including the extent to which the programme had helped them to improve their ability to manage current institutional tasks. As Figure 11 shows, the majority of participants found the programme to be reasonably or extremely valuable in enabling them to improve in this skill.
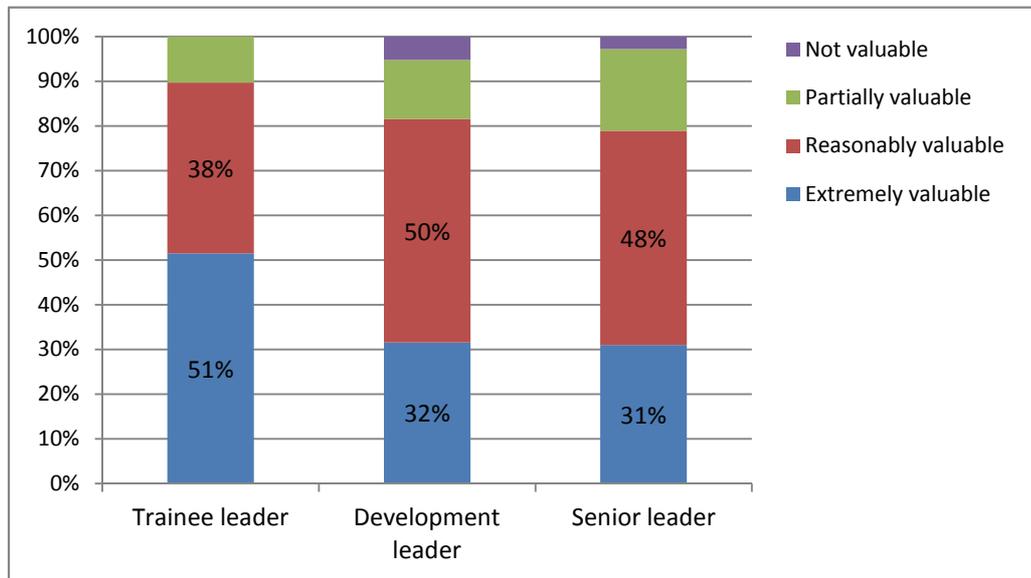
Figure 11: Value of the programme in improving ability to manage current institutional tasks

The improvements were most pronounced for the trainee leaders, with more than 50 percent finding the programme extremely valuable in improving their ability to manage current institutional tasks, while only about 30 percent of development leaders and senior leaders thought that it was extremely valuable. Analysis of some of the explanatory comments that people left seem to indicate that the majority of people who said it was only partially valuable have not really had time to take full advantage of the programme. Of those who found it valuable, many reflected on the improvements made to their personal development and awareness:

> Some of the workshops have been at a quite basic level, therefore covering topics I have already encountered. A number of areas, eg team roles, personality types, management structures, are covered in public health registrar training. However, the sessions have helped consolidate these tools and concepts within my current research leadership role. (Trainee leader)

> One-to-one and observations have been very insightful. Workshops have helped me develop my own insight and join things up. I thought the residential course really unhelpful (outdated concepts, sweeping generalisations) and the sets so far are not challenging, but it is early days as I have only been to two. (Development leader)

> Delivering my current tasks requires subject knowledge and skills which I can only acquire through experience and further training – the LTP [leadership training programme] did not address that (neither would I expect it to do so). However, to deliver these I have to manage myself and others, and it is that aspect that LTP has really helped with. (Trainee leader)

On the basis of our evaluation findings, we conclude that some new skills are being acquired through the programme, mostly with an emphasis on improved self-awareness and emotional intelligence. Other skills were being acquired in relation to how institutional tasks were managed, including meeting management and strategic thinking. The extent to which these skills translate into changes in leadership behaviours and research performance are covered in the rest of this chapter.

4.3 Improvements in leadership performance

One of the aims of the NIHR leadership programme which runs through all three objectives is to strengthen research performance through improved leadership. One area of primary interest, then, is to understand in what specific ways leadership traits and characteristics are being improved in the NIHR leaders. In the next chapter we will consider in what ways, if at all, research performance may be improving as a result of improvements in, or newly acquired, skills and behaviours.

4.3.1 Improved performance as a leader

In order to develop a baseline understanding of how the course was contributing to individual's personal approach to leadership, we asked survey participants the extent to which the programme was having an impact on personal approaches to leadership.
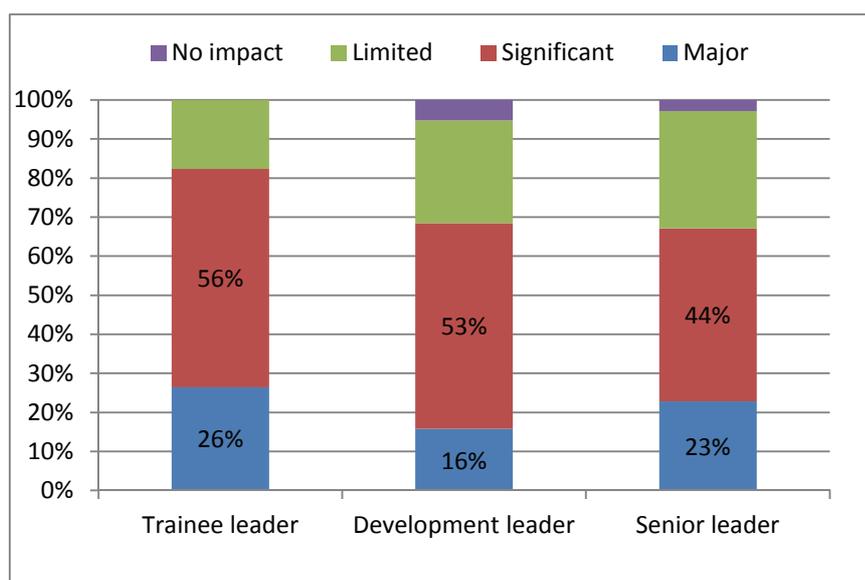
Figure 12: Impact of leadership programme on personal approach to leadership

As we can see in Figure 12, 82 percent of trainee leaders thought the programme had either a major or significant impact on their personal approach to leadership, while 69 percent of development leaders and 67 percent of senior leaders thought that there was a similar level of impact. This is consistent with what was discussed in the interviews, where participants reflected largely on the extent to which the programme had helped them to be more reflective on their personal leadership style, more aware of others and how to work with individuals, and more prepared for their interactions with colleagues.

Several people commented that in terms of specific behaviour change and their approach to leadership, they were more prepared for meetings and other interactions with colleagues. Others commented that they were more cognisant of giving themselves space to 'think and reflect', and that this was a significant change from the way in which they had previously worked. One development leader said that as a result of the learning she had acquired on the leadership programme, she had come to realise that she did not need to do everything herself. By delegating tasks, it gave her time to step back and think about how best to be a leader in her own team. Many of the comments about behaviour changes and personal approach to leadership were made in relation to management issues, and less often referred to issues faced in the conduct of research. This is an important point, and one which we will reflect on further in the next section.

In order to understand more specifically how the participants' performance as a leader may be improving as a result of the course, we asked a series of questions in the survey which built on the six dimensions of academic leadership discussed in section 2.4. These dimensions are, in order of their 'foundational' nature: credibility, curiosity, collegiality, capabilities, character and confidence. Building on these, we asked leaders to rate the extent to which the leadership programme had strengthened their performance as a leader along the following dimensions.

- Helped you to build credibility among your colleagues and peers as an intellectual leader.
- Increased your ability to influence colleagues and peers.
- Enabled you to approach your role in more creative and innovative ways.
- Helped you to become more aware of how to instil and foster qualities of integrity in yourself and your team.
- Improved your ability and courage to overcome challenges individually and together with your team.
- Helped you to build confidence in yourself and your ideas.
- Helped you to demonstrate confidence through your external behaviours and actions.

The findings of these changes by group are presented in the remainder of this section.

4.3.2 Strengthened performance as a leader by group

As a group, senior leaders felt that the programme had been most beneficial (as indicated by a higher proportion of 'to a great extent' and 'significant responses') in strengthening their research performance by enabling them to approach their role more creatively, improving their ability to overcome challenges as an individual and as a team, and in building confidence in oneself and one's ideas. These results are shown in Figure 13.
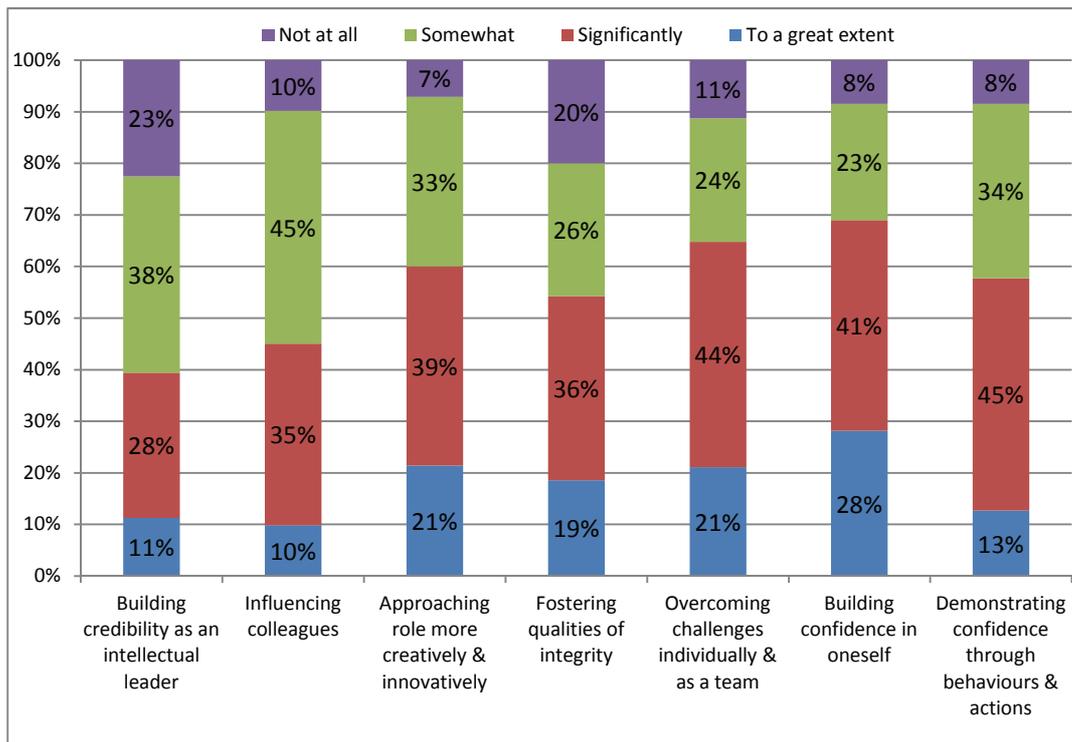
Figure 13: Strengthened performance as a leader – senior leaders

Development leaders, like senior leaders, thought that the greatest improvements in their leadership characteristics had come from building confidence in oneself and one's ideas, but following on from this there was improvement in demonstrating that confidence through one's actions. Development leaders also felt that their performance had been improved in that they were approaching their role more creatively and innovatively, and they were better able to overcome research challenges and make the most of opportunities. The findings from the survey for development leaders' improvements in leadership performance are shown in Figure 14.
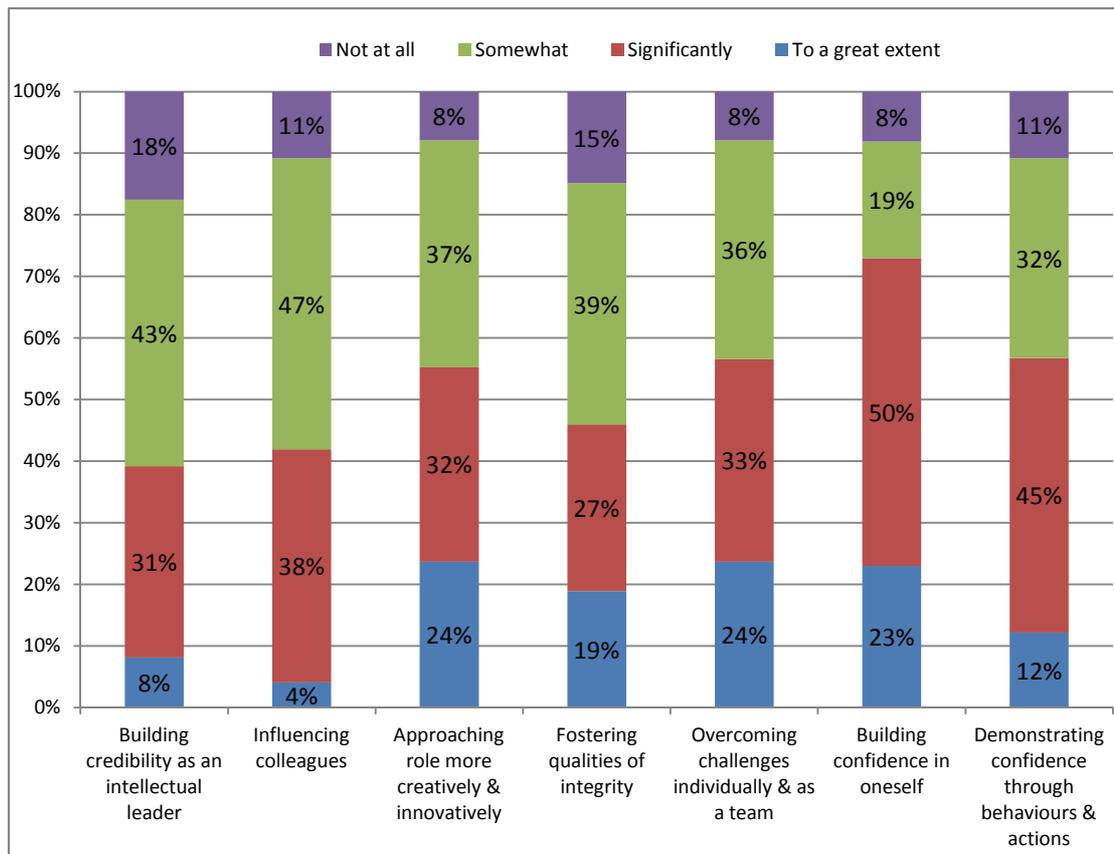
Figure 14: Strengthened performance as a leader – development leaders

As shown in Figure 15, trainee leaders were more likely to report improvements in their performance as a leader across all categories. With the exception of improving credibility as intellectual leaders, at least 60 percent of the trainee leaders indicated that the programme had helped them to strengthen an aspect of their leadership performance either significantly or to a great extent.
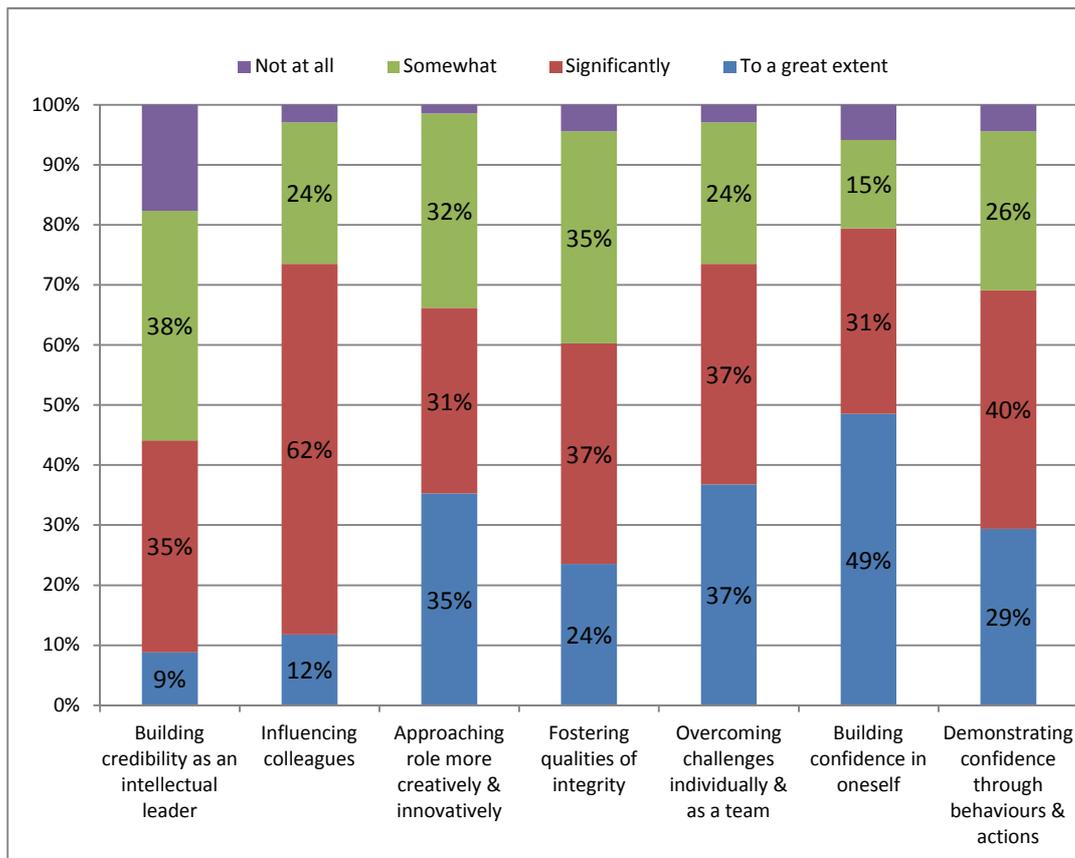
Figure 15: Strengthened performance as a leader – trainee leaders

One area in which trainee leaders indicated that they had improved significantly, and which is much higher than that reported for development and senior leaders, is in their ability to influence colleagues. This is perhaps reflective of the earlier point in their careers in which trainee leaders are positioned, and as such is a skill that they are just beginning to develop. Leaders further on in their careers may benefit less from this aspect of leadership training because they already have a sense of good influencing skills.

We can see from the findings presented in this section that leaders across all three areas felt that the programme was important to strengthening their performance as a leader primarily in building confidence in oneself and one's ideas, demonstrating this confidence through one's actions and in overcoming challenges individually and as a team. However, the extent to which the different leadership cohorts felt this contribution had been made to their performance varied, and additional insights gained from the interviews seem to indicate that the importance of leadership, as it relates to research performance and research output, is understood by some individuals but not by all.

4.4 Action learning

The final area of evaluation we will present in this chapter is related to the action learning groups. These are small groups from within each leadership cohort that meet to discuss important organisational issues that members are facing. Early on, the group decides on a core task to focus on, then they help each other to learn and work through the project in

an active way. Learning occurs through the groups' collective attempt to make change happen and solve the problem at hand. According to Ashridge comments and documentation, the action learning groups are meant to sit at the heart of the leadership programme at every level, as they are the mechanism through which new skills and learning come together and individuals begin to see how to apply their newly-acquired insights in 'real-world' settings.

Therefore, we found it surprising to note that the action learning was not seen as very useful for many of the senior leaders, and moreover, that many of them had not participated in action learning groups at all.
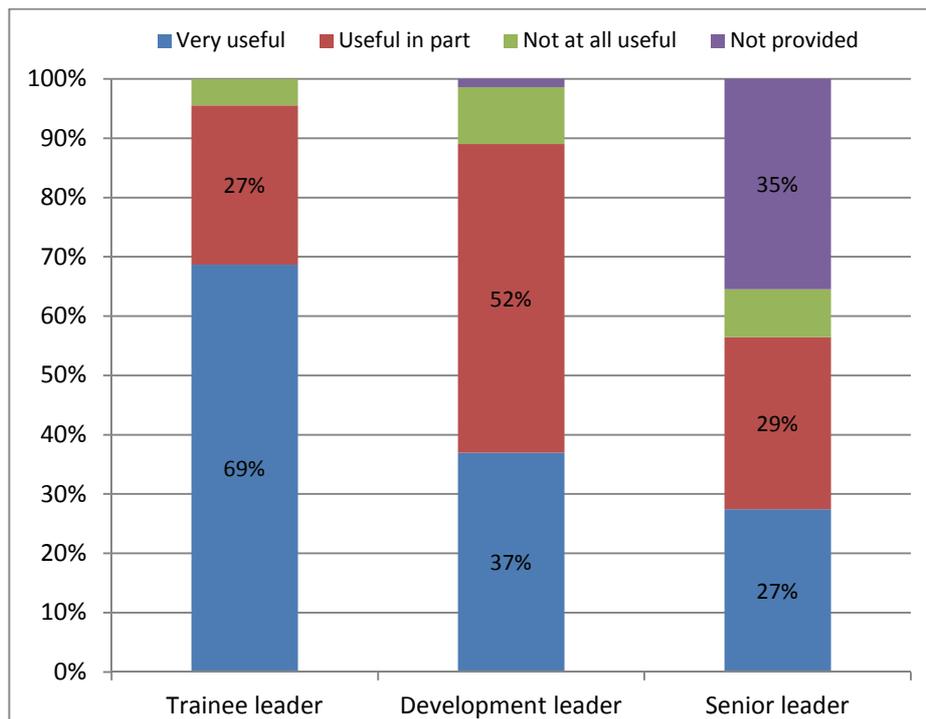
Figure 16: Usefulness of action learning groups by leadership level

As we can see in Figure 16, the trainee leaders found the action learning to be most useful out of all the leadership levels, with 69 percent finding it very useful. The views of development leaders about the usefulness of action learning groups are less favourable. Of the development leaders, 52 percent thought that action learning was only partly useful, while 10 percent thought that it was not useful at all. Of the senior leaders, 35 percent said that they had not taken part in an action learning group and only 27 percent found it to be very useful. If the action learning groups are meant to sit at the heart of the NIHR Leadership Programme's learning process, then it is of concern that so few people in the higher leadership groups find them to be useful, or have participated in them.

Moreover, we have noted in our evaluation that at the time we conducted our main information-gathering about the programme, approximately one year before the contract was due to terminate, we found that apart from a graduation ceremony for trainee leaders, there was no formal mechanism through which development and senior leaders 'rolled off' the programme, or when it came to an end. While Ashridge did tell us that some senior leaders had been told that they could not continue to receive unlimited one-to-one

coaching, for the most part it seemed that little thought had been given to how participants left the active programme, and into what sort of leadership community they would move. Similar to our concerns about the lack of integration of the action learning component with the wider programme activities, we believe that although leadership learning itself never ends, there does need to be a form of closure for the programme at all levels which helps participants to draw all the learning processes together. As we will see in the following chapters, this may be one reason why we continued to find evidence that links were not being made by the majority of participants between their individual learning and the wider context in which the programme was being delivered as a particular 'science policy' intervention. (We will comment on the implications of this for our findings in our recommendations.)

4.5 Conclusions

The findings presented in this chapter discussed the ways in which the activities of the leadership programme were contributing to participants' acquisition of new skills and learning and the impacts of the programme on changing behaviours. Based on the findings presented above, we have drawn the following conclusions.

- New skills and learning are being acquired, but evidence for the impact of these is largely at the individual level and on personal approaches to leadership.
- Individuals are reporting strengthened leadership characteristics and individual leadership performance, with the greatest range of improvements and impacts being reported by trainee leaders.
- Participants across all leadership cohorts indicated that the programme had helped them to significantly improve their performance as a leader by building their confidence, but it had not been as significant in building their credibility as an intellectual leader or helping them to influence colleagues. Insights from the in-depth interviews suggest that leadership improvements were more about interpersonal relationships and self-awareness rather than overcoming research challenges.
- Aside from a small number of individuals, there is little evidence to suggest that the colleagues of leadership programme participants noticed significant differences in behaviour or leadership styles. In addition, we found little evidence that participants' colleagues had experienced any additional learning and development benefits. Participants could be encouraged to be more aware of these potential spillover benefits to colleagues (a point which is taken up further in Chapter 5).
- The action learning groups are meant to be one of the main vehicles of the NIHR Leadership Programme learning process, particularly at development and trainee levels, however it is of concern that many people at the senior leader levels did not find them to be very useful, and did not engage with the groups at all.
- We have concerns about the lack of a formal 'end' to the programme across all leadership levels which ties learning processes and programme objectives together, and believe that this is a possible explanation for the lack of integrated links being made across programme objectives (which we will see evidence of in the following chapters).

Wider impacts and results

5.1 Overview

Thus far, much of the discussion has focused on individual development as a leader and the way that the programme has contributed to the individual acquiring new skills, learning and changes in behaviour. This chapter of the report brings us to the fourth, and highest, level of impacts within the evaluation framework: results. Evaluating the results of the programme requires understanding the extent to which the learning that took place on the leadership programme results in wider outcomes. These outcomes might include research collaborations, improved awareness of one's institutional context and the NIHR, greater awareness of the users or potential applications of one's research, or the contributions that the leadership programme may have made to new product development or improvements in patient care and health. The findings of these questions are presented below and grouped according to outcomes which may affect research, outcomes on the institution and wider outcomes outside the institution.

In addition, in this chapter we will begin to move towards evaluating the extent to which the programme is delivering on its second and third objectives of developing research team, institutional and wider community leadership. Thus far in the report, our discussions have focused largely on only one aspect of the three objectives of the leadership programme, about personal development as a leader. The other objectives are certainly more difficult to measure, especially in the space of less than three years, but there are some indicators that we might expect to be present at this point. Therefore, we asked the participants in the survey and the interviewees about the extent to which the leadership programme contributed to strengthening links across the leadership cohorts, across disciplines and about the effect that the leadership programme has had on their ability to have an impact both within and outside their institutions.

5.2 Research impacts

One of the core aims of the leadership programme was to improve research performance by investing in leaders. While indicators of improved research performance such as new drug approvals, more research grants, improvements on patient health and so on will only become apparent over the long term, we can ask some simple questions to give us a sense of whether wider impacts on research are beginning to occur, or could occur.

One such indicator is the extent of new collaborations or improved links across different research groups, both within an institution and between them. As one way of measuring

this, the survey asked how researchers might be strengthening their links across research disciplines as a result of the leadership programme. As shown in Figure 17, development leaders felt that the programme had made the strongest contribution to strengthening links across disciplines, with 76 percent responding that it had contributed 'reasonably' or 'very much'. However, about 25 percent of the participants in each leadership cohort felt that the programme had not made any contribution to strengthening links across disciplines.
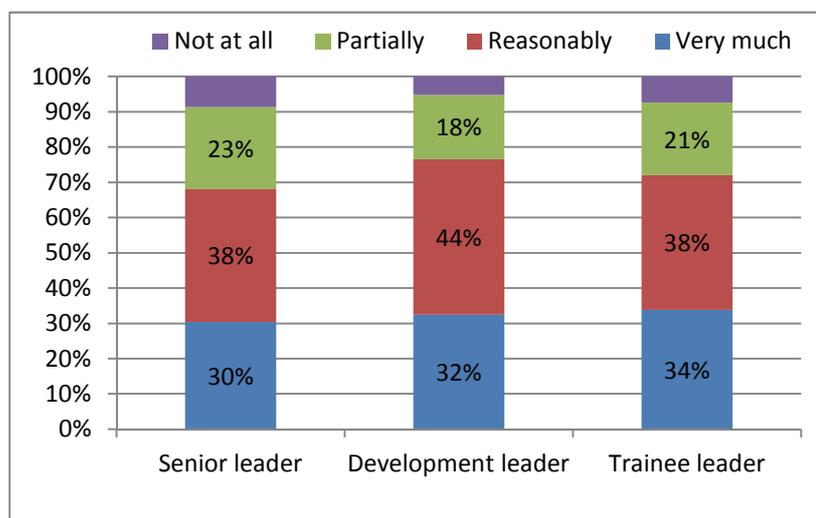
Figure 17: Contribution of the leadership programme activities to strengthening research links across disciplines

When asked in the interviews whether the programme had led to any new research collaborations, all of the respondents indicated that while they felt that there were new possibilities for collaborations which had arisen from the people they had met on the programme, none had materialised yet. Many felt that the programme had added value in widening their network of contacts, and this was expressed most strongly by the trainee leaders. One trainee leader did say that although there were no new collaborations, her action learning group had decided that they would invite each other to give seminars at their respective institutions, and this had resulted in positive interactions and exchange of ideas which otherwise might not have occurred. Another trainee leader indicated that he thought he had enough collaborations already, but that the leadership programme had given him the ability to better manage the situations that arose through these collaborations. Thus, the collaborations may be more effective in the long run.

Overall, then, the interview participants felt that although in the long run the leadership programme could contribute to increased research collaboration, because it was a way of exposing one to a wider network of individuals, at the moment they struggled to directly attribute new collaborations to the programme – however, they all acknowledged that it may contribute in the future.

Another way of assessing whether the leadership programme has had an impact on leadership within a research community is to look at the extent to which participants on the programme are engaging with each other. This could indicate that there is a shared sense of leadership which, over time, may foster a community of leaders and a sense of shared responsibility for NIHR and wider research agendas.

However, here the findings were not as positive as those for strengthening links across disciplines. As can be seen in Figure 18, more than half of the trainee leaders said the programme had not contributed at all to strengthening links across the leadership cohorts and almost 75 percent of participants in all cohorts said the programme had contributed 'not at all' or only 'partially' to strengthening links. The individuals responding to the survey commented:

> The programme itself is great, but the NIHR could have brought everyone together more in order to maximise the impact of the investment. (Development leader)

> I think that some sort of conscious effort to mingle the younger and senior programmes might have yielded some interesting insights. (Trainee leader)

> There should be more focus on specific areas of research vertically as opposed to building connections horizontally. I think this was a missed opportunity. (Senior leader)

Although these are individual comments, they are representative of a wider trend in the responses. In relation to the final comment in particular, it strikes us that if a central objective is to foster a wider group of research leaders in the NIHR, then the leadership programme itself provides a readily available forum to begin this process of building interconnections across and within different leadership groups.
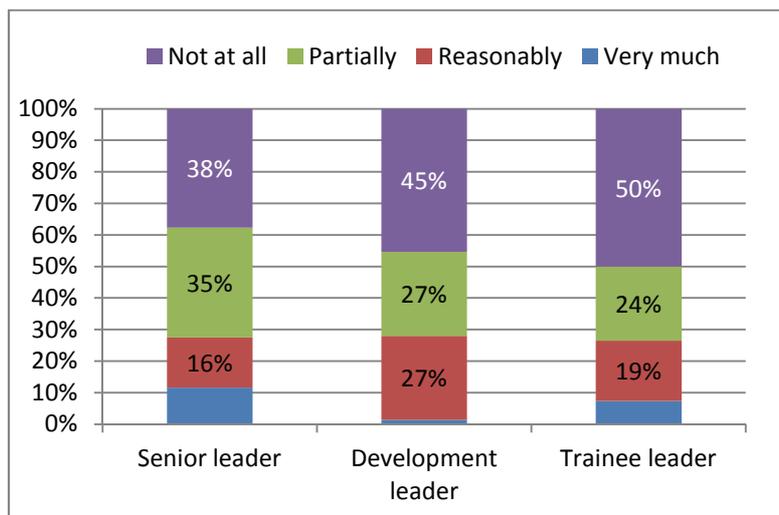
Figure 18: Programme contribution to strengthening links across leadership groups

Another area in which one might be able to get a sense of the research impacts of the programme is in the development of new products, or changes in the way that research users are engaged in the research process. However, when we asked the interview respondents whether they felt that the leadership programme had had any impact on these aspects, they all responded that they were either already very aware of their stakeholders and the programme had not added value here, or that perhaps they had created a few more links with people in other areas of NIHR apart from their own institutions, but this had not meant that they were having wider impacts. A few interviewees commented that insofar as the leadership programme was helping them to present themselves and understand others better, this may be having some sort of effect on the way that they interact with stakeholders or potential commercialisation partners. One trainee leader commented that the learning from the leadership programme may have helped him to

manage new products better, but this would be in an indirect way. Notably, one senior leader commented that he did not see the programme in the context of helping him to do his research better, and so he did not see the relevance of the question.

As mentioned previously, at such an early point in the programme we cannot necessarily expect that the leadership programme would be having a measurable impact upon research outcomes. Therefore, it is not necessarily surprising that we do not see extensive evidence of improved research collaboration, but perhaps we would expect to see more efforts and linking across groups at this stage in the programme and fostering a community of leaders. In addition, we would certainly hope to see more awareness of the wider goals of the programme in improving research excellence, and this is an issue we address in the final recommendations.

5.2.1 Research performance

As we have seen, although the majority of participants indicated that the leadership programme was contributing to their individual performance as a leader, this does not necessarily mean their performance as a researcher was improving. In other words, the objectives of the leadership programme are not only to improve the performance of individuals as leaders in the way that they manage people, institutional tasks and their responsibilities, but also to improve the ways in which individuals conduct their research, manage collaboration, network in the community, win proposals and grants and more generally contribute to the UK becoming a place of international excellence in research. Thus, this section addresses these wider improvements in leadership which may be directly linked to improved research performance and outputs. In order to evaluate whether improvements in the participants' leadership abilities were occurring, we also considered the extent to which we might be expecting changes in, or changed behaviours towards, research performance.

When the interview respondents were asked about the extent to which the leadership programme was contributing to their ability to approach research problems or challenges differently, senior leaders gave a mix of responses. One individual commented that he did not see the programme as being about improving research outputs, rather about improving leadership and management roles and how to deal with people. Another senior leader commented that he did not think that the requirements of being in a research environment merited a different approach to leadership from any other management position, as it was all about engaging people in the right way. The third senior leader gave a slightly similar response in that he thought any role involving working with people would require leadership, but he felt that in research in particular this was even more important:

> Anyone who has anything to do with others benefits from leadership training; if you lead, your leverage within research is increased exponentially. This is particularly the case in translational research and medicine. It's a very new area of research and the nature of research is for patients and with patients, involves persuading and engaging scientists and so on, none of which is easy. Being a leader helps this immensely. (Senior leader)

Thus, it seems to us that there are different understandings of what the leadership programme is meant to be accomplishing in regard to the links between leadership and research outputs. It is our understanding that the DH would favour understanding akin to

that of the final leader quoted, and we will reflect later in this report on how this might be achieved.

Of the development leaders with whom we spoke, there was general agreement and realisation that leadership was key to delivering successful research, although there was some apparent difficulty in attributing this view to the leadership programme. One commented that in the short term he believed that he had changed his attitude about the importance of leadership for research performance, but real change in performance would only be something he could judge in the longer term. Another commented that although she had always believed that without leadership nothing happened, and the programme has not changed that, she has observed other people on the programme beginning to realise that they have leadership responsibility. She commented that when one is a researcher it can be hard to see beyond winning your next research grant to the wider picture.

Trainee leaders did not think that they were approaching research challenges differently or that research performance was affected, except to the extent that one said that research involves people and if they are managed better, the research might improve. However, one trainee leader commented that research challenges were really quite technical, and he did not see how the leadership programme could help him with that.

Thus, within the interviews we saw some, but not substantial, evidence for improvements on research performance for leaders participating in the programme. However, as discussed above, we have evidence from the survey which indicates that in fact there may be additional indicators of improved research performance. This raises a question as to whether participants are able to make the links between leadership and research performance, and whether this aspect of the programme needs to be strengthened.

5.3   Institutional impacts

The second objective of the leadership programme is to improve research team leadership within one's institution and to contribute to aspects such as group dynamics, performance management and other issues which are 'local' to one's institutional environment. In order to understand what these institutional impacts might be, we asked participants in the survey and the interviews to evaluate the extent to which the programme might have enabled them to have an impact on their own institution, and to explain why. While we saw earlier in Chapter 4 that the participants felt that they were better able to manage institutional tasks, here the question was asking participants to focus more on ways in which they felt they had effected change in their institution.

As can be seen in Figure 19, the majority of trainee and development leaders felt that the programme had limited or no effect on their ability to have an impact in their own institution, but for senior leaders just over a majority said that they were able to have a significant or major impact.
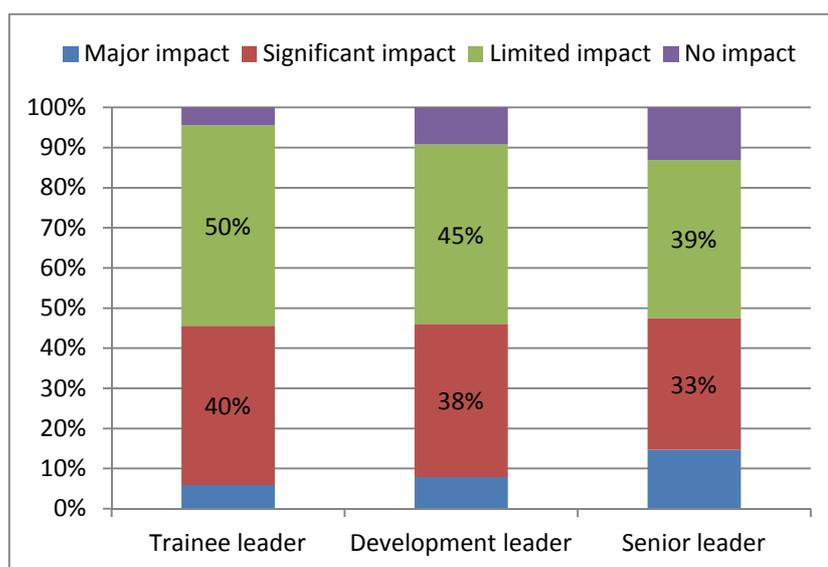
Figure 19: Extent to which the programme enabled participants to have an impact on their own institution

When asked to comment on specific examples of how they were having an impact, the interview respondents primarily stated that they were more aware of themselves and their role within their institution, which they felt was enabling them to have an impact. One commented that by having a greater impact on individual researchers she might be having an institutional impact, but she could not be more specific about what this might be. A senior leader commented that he had a better sense of the senior management networks within his institution, and this helped him to understand the institution better and how to work within it. Both a development leader and a senior leader thought that they might have had an impact through improved handling of the reapplication for Biomedical Research Unit/Biomedical Research Centre funding, which required delicate people management and strategic thinking, but they found it difficult to state whether this could be directly attributable to the programme.

However, there was one trainee leader and a development leader who told interesting stories about their institutional impact. The trainee leader said that in her institution there was a threat that a certain unit might be moved due to reorganisation. Using the learning gained on the leadership programme about how to argue one's case, the individual went in to speak with the head of the department. By being proactive in highlighting the opportunities of keeping the unit in the department, she was able to throw the department head off guard and make her case. Another development leader highlighted how, by using the learning on the programme, she has been able to bring about positive changes in the way that her clinical research network is managed: she has changed meeting practices to give nurses a more central role, and has delegated responsibility throughout the network so there is shared ownership of goals. All of this has enabled her to do more with less and have a very successful network.

Interestingly, when we spoke with the colleagues of the leadership programme participants, all of them struggled to identify specific behavioural or managerial changes which they had noticed since the participant had joined the leadership programme. A few were able to identify meeting management as having improved, but outside of this there were no wider

impacts identified. In addition, none of them had been aware of any conversations that the leader might have had with colleagues to discuss their participation on the leadership programme, and what the expected changes and impacts on the team might be. It strikes us that if a central objective of the programme is the building of research team leadership capacity, then the research teams themselves should be brought into this development journey through greater efforts to encourage leadership programme participants to engage and share their experiences and learning with their colleagues and staffs.

Given these stories and the analysis of the survey responses, we find it interesting to note that although some people seem to make the link between their learning on the leadership programme and the ways that they are having an impact on their institutions, a majority of people do not seem to be linking the two. In other words, the evidence presented earlier in this report suggests that leaders are developing new skills, and that this is translating into changed behaviours and enhanced personal understandings and approaches to leadership. However, there is limited evidence that these changes are translating into institutional improvements, for example on institutional working practices and relationships. This suggests that the programme may be at a point where a renewed emphasis on the ways in which personal leadership development can enhance institutional leadership is needed.

5.4   Wider impacts

Following on from institutional impacts, our evaluation sought whether there was any evidence of wider research community impacts which may be emerging. Again, evidence of this at this stage in the programme is likely to be small, if present at all, but there were some questions we could ask to develop an understanding of the extent of these wider impacts, and how they might develop or be strengthened further in the future.

First, and perhaps at first glance at odds with the findings about research and institutional impact discussed above, the majority of participants did feel as though the leadership programme had contributed to their increased awareness of the external context in which they were working, as shown in Figure 20.
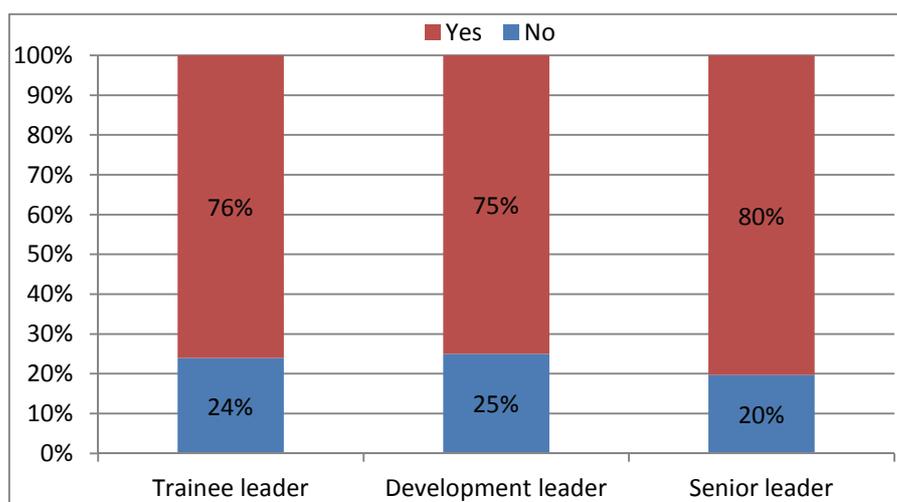
Figure 20: Contribution to awareness of external contexts

The comments that researchers provided to illustrate this ranged from simply having the opportunity to meet other leaders (senior leader), to being more aware of the multidisciplinary research base that one could draw on (trainee leader), to having a better understanding of the academic research context (development leader).

However, some commented that although they might have been made more aware of how they 'fit' within the NIHR agenda, they found the programme to be lacking in other ways:

> If the question is whether I am more aware of the relevance of my work to the overall purpose of the NIHR funding, the answer is 'yes'. The conferences made it possible for leaders of the various NIHR programmes to understand better what they do and what they need. I believe [the] time has come to see how those types of exchanges can be formalised within NIHR, by creating structures that enable strategic thinking to involve people [in] NIHR funded institutions. (Senior leader)

Others saw the programme as helping them to learn more about the NIHR infrastructure in and of itself:

> I can see the NIHR infrastructure more clearly and feel able to activate the network when I need to. This links back to the confidence, [the] self-efficacy that I believe have been the main outcomes for me from the NIHR Leadership Programme. (Development leader)

The interviewee respondents also had a mixed reaction to the question of whether the programme had made them more aware of the wider NIHR context in which they work. About half responded that they already had a good awareness because of the research position they held (for example, working with a research network), while the other half said they undoubtedly had a better understanding because the leadership programme enabled them to come into contact with so many diverse people. There was no clear trend in these views across the different leadership levels.

This variation in the ways in which individuals find the leadership programme to be helping them increase their awareness of the external context is worth reflecting upon. It seems to indicate, again, that although there is increased personal awareness of one's position, there are different understandings of what this means in terms of one's responsibility as a leader *within* the NIHR. That is, there seems to be some indication that

the wider aims and objectives of the programme need to be better grounded in an integrated theory of change for the NIHR and the leadership programme itself (we will return to this point in Chapter 6).

Finally, we asked the participants on the leadership programme to indicate the extent to which the programme had enabled them to have an impact outside their institution. As shown in Figure 21, fewer than 10 percent of the leaders in all groups felt that they had a major impact outside their own institution, but more than 30 percent thought that they had a significant impact. However, the majority of respondents felt that their impact had been limited or there was no effect.
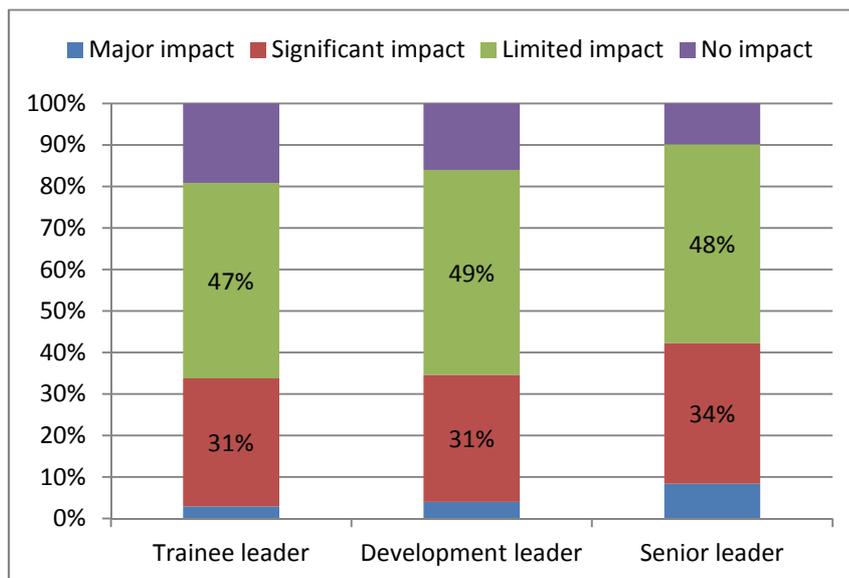
Figure 21: Extent to which the programme enabled participants to have an impact outside their own institution

While we would not expect there to be many major impacts so early into the programme, we do think the fact that there is some evidence is a good indication that some participants on the programme are linking the learning and objectives together. For example, one senior leader indicated that he had used the skills gained on the programme to initiate and chair a major international collaboration on transplantation research. Another individual felt that he had the confidence to apply for a promotion.

However, detailed qualitative analysis of the responses about what major or significant impacts were occurring revealed that there were few specific examples of major impact. Moreover, some participants indicated a significant impact because they had improved confidence, while others noted similar reasoning but only indicated a limited impact. So there did seem to be different interpretations of the question itself. In addition, the qualitative analysis of explanatory responses again indicated improvements in the participants' perception of their personal leadership skills and confidence, but little evidence of specifically how this was translating into wider research community impacts. One individual commented that the leadership programme seemed to lack 'specific strategic direction' (Senior leader), while others stated:

More time could be spent on conveying why the course is being held and what it is designed to achieve. This needs to be put in medical/professional terminology, as doctors do not easily understand 'management speak' or management methods. (Senior leader)

Another senior leader was more blunt about the expectation of wider impact and the strategic intent of the programme:

There has throughout been a deep tension, whether by implication or stated explicitly: within a highly competitive environment, is the objective of the leadership programme to better enable my group to benefit [at the cost of others], or are we [as a group of leaders] to work together for the bigger ambition of the activity as a whole? It may be that the ambition is both – in which case, there needs to be more careful consideration as to what that means and how it might best be achieved. (Senior leader)

5.5 Conclusions

Based on the findings presented in this chapter, we have drawn the following conclusions.

- There has been a particularly strong contribution to individual leadership development, personal awareness-raising and confidence-building as a result of the programme. There is some evidence of the programme contributing to the objective of building research team and institutional leadership, although this seems to be very mixed, depending on the individual.

- Strengthened leadership characteristics do not necessarily mean that research outputs and research performance are also improving, and the ways in which the links between these two aspects are made may need to be strengthened by those delivering the leadership programme.

- Although individuals in fact may be learning and adopting new behaviours that could have institutional impacts, they may not always be aware of the link between the two. We recall from Chapter 4 that more than 75 percent of respondents across all groups indicate that they are better able to manage their current institutional tasks and are more aware of the external context in which they operate. However, we have seen in this chapter that fewer than 50 percent of development and trainee leaders think that the programme has helped them to have a major or significant impact on their own institution, and only 53 percent of senior leaders felt that this level of impact had been achieved. The respondents indicated that the impacts they felt they were having related to being more reflective and confident as a leader, raising questions as to how higher-level objectives were being met.

- Simply by being more aware of their individual position within their institution, and from there the institution's position within the wider NIHR landscape, participants are likely to be having an impact in some way. The problem is that their awareness of the specific impacts they had, or could have, was not apparent. For example, more than 60 percent of all participants, including more than 75 percent of senior leaders, report that they believe the programme has helped them to strengthen links across research disciplines.

- There is weaker evidence for wider impacts on leadership within the NIHR (ie the virtual NIHR faculty across different institutions and initiatives), or more broadly

within the biomedical research sector. In particular, there is a missed opportunity to foster links across the leadership levels and thereby foster a wider community of leaders.

- When asked about the extent to which individuals felt the programme was enabling them to have an impact, many commented on self-awareness and being more effective within their institutions; however, few mentioned improved ways of doing research which otherwise might be suggested by the previous finding. This suggests that the link is not being made yet between leadership and research performance, and the individual's leadership role in the wider community.

Cross-cutting analysis

6.1 Overview

Up until now this report has focused on presenting the findings of the evaluation in relation to the first three workstreams: desk-based research, interviews and survey. In this final analysis chapter, we will triangulate these findings and present a cross-cutting analysis that will allow us to conclude whether and how the objectives of the leadership programme currently are being met, and what suggestions might be made for improvements going forward. However, before doing this, we will present the findings of the benchmarking workstream where similar programmes to the NIHR programme were reviewed and compared, so as to enable more robust conclusions to be made in the final analysis.

6.2 The National Institute for Health Research Leadership Programme in comparison

As part of the evaluation we undertook a small benchmarking exercise. This workstream involved developing small, structured case studies of other leadership programmes in other sectors so as to enable comparative analysis of the NIHR Leadership Programme against other leadership programmes addressing similar challenges. This would allow us to make informed judgements about the effectiveness of the NIHR Leadership Programme in context.

Table 1, presented in Chapter 1, presented our matrix-based approach to selecting the leadership programmes for the benchmarking case studies. In order to refresh our memory, these programmes and the relevant sectors and leadership levels they corresponded to were as follows:

- Top Managers Programme – higher education (HE), equivalent to senior leaders;
- Higher Command and Staff Course – UK military, equivalent to senior leaders;
- NIH Senior Leadership Program – biomedical research, equivalent to development leaders;
- The King's Fund Top Managers Programme – health sector, equivalent to development leaders;
- Research Team Leadership – HE, equivalent to trainee leaders; and
- Common Purpose Navigator – broad public/private sector, equivalent to trainee leaders.

The Civil Service leadership progression across the Fast Stream and the Senior Civil Service, and the programmes run by the Leadership Foundation for Higher Education (LFHE), were considered to be holistic programmes which covered all levels of leadership.

While the full details of each case study are not presented here (they can be found in Appendix C), it is important to highlight the cross-cutting issues that emerged from our analysis. We found that a variety of programmes existed, with a range of pedagogical processes employed in each. These included experiential learning, taught courses, psychologically and philosophically grounded theories of self-discovery and action learning on the battlefield. While each course had its own structure and process of providing leadership training, what was of interest to us was the way in which the learning processes aligned with the underpinning philosophy, or theory of change, of the entire programme. In other words, we looked for the extent to which the programme activities were structured so as to enable its aims and objectives to be met.

While a full analysis of the objectives and theory of change for each programme was outside the scope of this evaluation, we sought a way to enable a simple comparative analysis with the NIHR Leadership Programme that could inform our evaluation. If we recall Figure 2, the integrated model of leadership which we proposed would be useful to structure our thinking, we found that each leadership programme from our case studies could be modelled in such a way to reflect its own integration according to the balance that it was seeking between personal, institutional and wider leadership goals. Thus each programme was analysed based on our basic understanding of it in order to see what the differences in integration might be across the programme, and to draw out any lessons that could be learned for our evaluation of the NIHR Leadership Programme.

We found that an array of integrated leadership models existed across the different programmes and, moreover, that these models seemed to share some common features depending on what level of leader at which they were aimed. Thus, as can be seen in Figure 22 and Figure 23, the programmes aimed at senior-level leaders had highly integrated approaches aimed at maximising the overlaps between the three leadership objectives (personal, institutional and wider sectoral/national). There was a strong emphasis on both the role that the individual could have on wider sectoral or national leadership and on their own institutions. The institutional leadership component is smaller for the Higher Command and Staff Course because military (or institutional) leadership is much more ingrained in individuals from the moment they enlist, and so leadership development as one progresses through the ranks is much more about personal effectiveness as a leader, as opposed to fostering institutional leadership awareness.
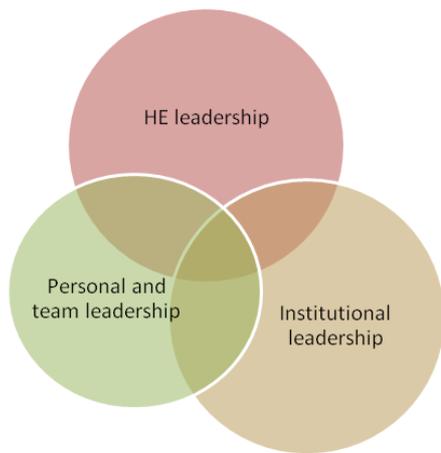
Figure 22: Integrated leadership in the Top Management Programme
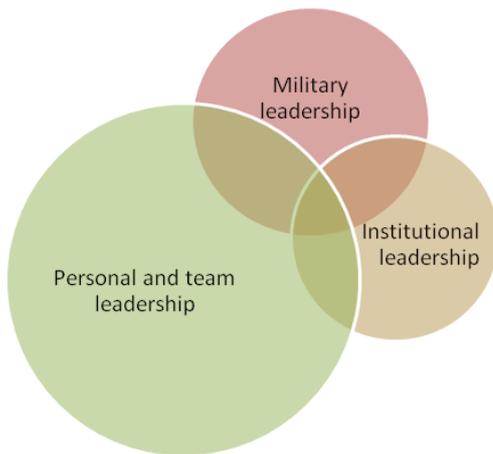
Figure 23: Integrated leadership in the Higher Command and Staff Course

Looking to the two programmes aimed at development leaders, there is a greater emphasis in both the NIH and The King's Fund programmes on how to develop institutional awareness and use it to effect wider change. While each programme takes a different approach – The King's Fund programme focuses on development of the individual and the NIH programme moves from the personal to the institutional – the end result remains aligned with each programme's aim of making leaders more aware of their individual role in their institutional context, and connecting this to sectoral and national leadership. The integration of each programme across the three levels of leadership as we interpret it is depicted in Figure 24 and Figure 25.

Figure 24: Integrated leadership in the NIH Senior Leadership Program

Figure 25: Integrated leadership in The King's Fund Leadership Programme

Finally, both trainee leader programmes had a strong emphasis on building a foundation of personal leadership skills, as can be seen in Figure 26 and Figure 27. On the one hand, the Research Team Leadership programme has an emphasis on integrating personal leadership development and institutional leadership, so that one begins to have more of an impact within one's own departmental and university settings. On the other hand, the Common Purpose Navigator programme has an underpinning philosophy that seeks to change the way that individuals view the world around them, so that they can appreciate the different contexts and scenarios in which leadership approaches and challenges vary. In this sense, integrating the programme seeks to connect the individual to their wider context, and there is a stronger overlap on this part of the integrated model, as seen below.
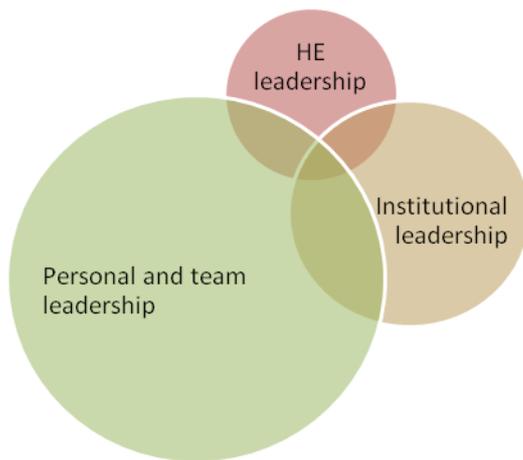
Figure 26: Integrated leadership in the Research Team Leadership programme
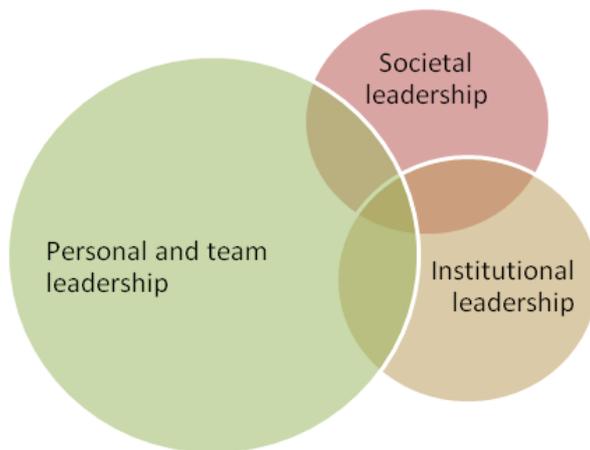
Figure 27: Integrated leadership in the Common Purpose Navigator

Finally, cross-cutting analysis of the different leadership programmes was used to confirm that within an overarching programme, it is important to be aware of the different needs of leaders at each level. The LFHE runs several programmes, of which the Top Managers Programme and Research Team Leadership programmes are just two. We can see here that they have very different models of integration across different leadership objectives which are appropriate to the type of leaders being taught. A similar finding was made through a study of progression in the Civil Service. Each individual case study is provided in Appendix C, and although we did not go into great detail here, those programmes which had particularly relevant processes to the NIHR Leadership Programme are identified later in this chapter in relation to specific recommendations for the Ashridge team to consider in future development of the programme.

Although it was outside the scope of our study, we did collect rough information on the cost of each programme and collated it in a table which can be found in Appendix D. Our conclusions from this were that there is a wide range of costs associated with leadership programmes, but at face value there does not appear to be a huge difference between the costs of the NIHR Leadership Programme and that of the other leadership programmes we examined. However, a full and robust value-for-money analysis would need to factor in

more than straight monetary costs, and also require a more robust assessment of the time spent per participant on each level of the programme. In addition, such a value-for-money cost analysis would need to consider the theory of change for the leadership programme and calculate cost–benefit scenarios regarding the added value of the programme based upon the intended theory of change. This level of understanding could provide important information for the future structure and prioritisation of the programme's activities, and we suggest that the DH considers commissioning such an analysis.

The remainder of this chapter focuses specifically on our findings and assessment of the extent to which the three objectives of the leadership programme have been met by the progress of the programme to date.

6.3 Room for improvement: views from leadership programme participants

The final piece of overarching information that informs our cross-cutting analysis is participant views on the potential room for improvement in the leadership programme. While the overwhelming majority of participants across all leadership levels would recommend the programme to others, as shown in Figure 28, many did provide feedback on specific improvements that they would like to see on the programme.
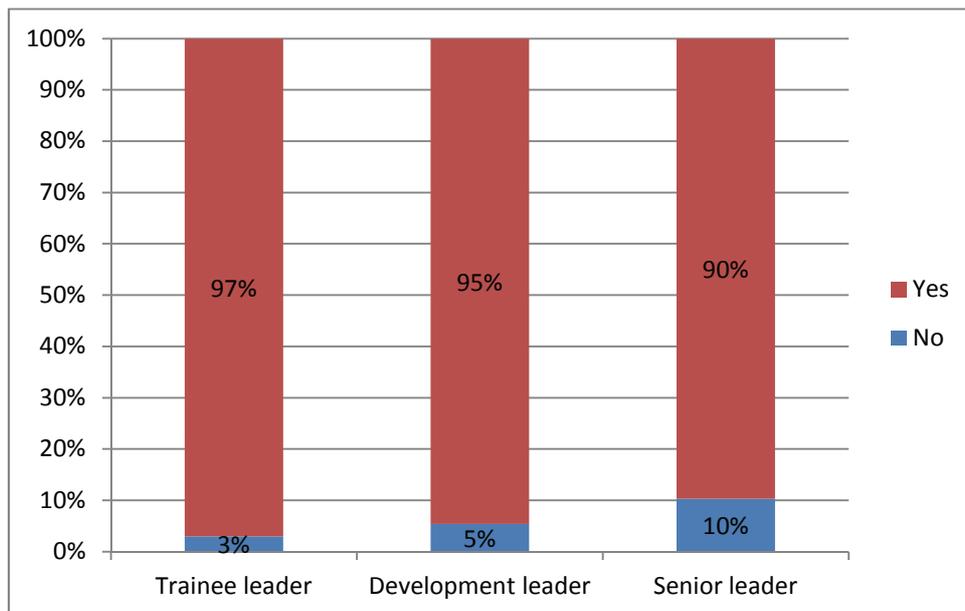
Figure 28: Responses to the question: 'Would you recommend the programme to others?'

The feedback that the participants gave about why they would recommend the programme to others can be grouped into three main categories.

1) The leadership programme was a unique opportunity that afforded participants the ability to reflect on themselves and their work environments:

> As someone who has come from NHS management where the opportunities are few and far between for middle to senior managers for any kind of personal development, this has been manna from heaven and water in the desert. (Development leader)

2) The leadership programme provided a 'refuge' from their busy day-to-day environments and allowed them to take a 'step back':

> Ashridge is a wonderful safe refuge! (Senior leader)

> It was very important to have time to escape from [my] main work and meet others in a similar position. Also helps foster new work relationships. (Development leader)

3) The leadership programme allowed participants to meet with their peers, particularly those with whom they may not otherwise have come into contact, and to exchange views:

> One key success of the programme from my perspective is the opportunity to meet people from the wider NIHR, share ideas and strategies for dealing with particular challenges and issues, and to consider how to move things forward – this opportunity may be better provided by a series of NIHR conferences or events rather than from involvement in the leadership training programmes. (Development leader)

However, there were many participants who thought that there were specific improvements that could be made to the programme to improve its added value. These reflected concerns about the programme's value for money and the need to increase the time spent on core value-added activities, such as coaching and action learning:

> I didn't find the programme of much value apart from the one-to-one. The group activities were too generic in their focus to be of real value to me – and other fora have proved more valuable for exchanging knowledge with peers. (Senior leader)

> Much more consideration needs to be given to the needs of an individual rather than producing a generic programme. (Senior leader)

> I am really grateful for this opportunity and support and feel the course has had some beneficial effect. However, I think I would have benefited more from more practical one-to-one support and coaching, more support to maintain or sustain the action learning groups and more direct facilitation of the group. I know this type of support costs more, but [I] would have valued it more [...] (Senior leader)

Trainee leaders also commented on the value of the role-playing workshops and thought that more of these would be useful. Leaders across all levels, but in particular the development and senior leaders, would have appreciated more clarity at the beginning about the aims of the programme and its expected achievements. A more explicit discussion of expectations in terms of engagement with different interventions and a road map of the 'life-cycle' of the programme would have enabled individuals to benefit from it in a more holistic fashion. Additional, specific improvements, suggested in the survey responses and the interviews, included:

- the need for Ashridge to have a dedicated individual to help with coordinating and scheduling activities for senior leaders;
- the desire to work more across leadership levels;
- more varied and geographically diverse meeting locations for those not based in London;
- better coordination and engagement with action learning groups from other participants; and
- more engagement with the NIHR senior management team and discussions about expectations.

Finally, two senior leaders that we interviewed made interesting and interrelated points about the expectations of going on the programme. One commented that a more explicit statement from the DH about what it wanted from its leaders, and consequently from the NIHR Leadership Programme, would be appreciated. Another stated that he would have liked to have had more discussions about how to sustain the group of leaders that the programme brought together and to address wider research community challenges:

> There is a sense in which people in that position could sustain one another, and this might be something that the Ashridge group might consider taking forward. (Senior leader)

On this basis, we conclude that the overall positive impression that leaders had of the programme mainly refers to personal development. The comments supporting institutional and wider impacts of the programme were mixed, further supporting our analysis that this area of the programme needs to be strengthened.

6.4 Developing individual research leaders

The first objective of the leadership programme is about developing individual research leaders:

> *Develop individual research leaders: their leadership style, impact and 'self-preservation' – reflected in enhanced personal effectiveness, self-awareness, career satisfaction, flexibility to move between 'expert' and 'leader' roles, and greater influence of the research agenda.*

The results of our evaluation suggest that this objective is being met. The leadership programme fills an important gap in academic and clinical researchers' professional development that they might not otherwise be able to fill through their own institutions. This is a positive contribution of the programme, but also should be a caveat to consider when reviewing the findings, as individuals have little against which to compare the programme.

The majority of participants across all levels indicated that the programme had either a 'major' or 'significant' impact on their personal approach to leadership. Participants indicated that they were acquiring new skills and these were translating into changed behaviours to varying extents. However, the evidence for the impact of these changed behaviours and new skills is largely at the individual level, and there is weaker evidence for wider impacts on fostering a leadership community within the NIHR, or more broadly within the biomedical research sector, as will be discussed below.

6.5 Building research team leadership capability

The second objective of the NIHR Leadership Programme relates to research team and institutional leadership capabilities:

> *Build research team leadership capability: team and project leadership, group dynamics, performance management, collaborative working, recruiting and retaining staff – reflected in greater success in research bids, clearer team expectations and a stable but actively managed environment.*

The results of our evaluation suggest that this objective is being met, but there are gaps in linking research team leadership to institutional leadership, and moreover, to research performance.

Although there is clear evidence of individual leadership being developed through the programme, the extent to which this is building research team leadership capability is mixed. For example, the participants across all leadership cohorts indicated that the programme had helped to improve their performance as a leader significantly by building their confidence, but it had not been as significant in building their credibility as an intellectual leader or helping them to influence colleagues.

A slight majority indicated that the programme had helped them to overcome challenges as an individual and as a team, but we do not know the kind of challenges to which participants might be referring. Moreover, the colleagues of programme participants who were interviewed struggled to identify specific examples, apart from things such as better meeting management, where they felt that the individual had improved significantly after joining the leadership programme. Insights from the in-depth interviews with programme participants also suggest that the areas where they felt the most improvement were in relation to interpersonal relationships, self-awareness and self-confidence, rather than improvements in institutional or research team leadership and the ability to overcome research challenges more effectively.

However, there were indications that links across research disciplines were being made by participants, which is an initial indication that the foundations for improved collaborative working relationships are forming. Some leaders who already worked in highly collaborative research environments commented that the leadership programme was helping them to reinforce their networks and ways of working, but it was not adding significant new value to this aspect. All the leaders we interviewed did acknowledge that the leadership programme was helping them to improve the way that they worked with people in some way, so to this end we would expect to see some improvements in research team leadership. However, as mentioned previously, the issue is that individuals do not always seem to be making the link between their leadership programme learning and their role as NIHR researchers.

This leads us to tentatively conclude that although individuals are reporting strengthened leadership characteristics and performance, this does not necessarily mean that research outputs and performance are also improving at a team or institutional level, and the links between these two aspects could be strengthened in the future.

6.6 Fostering leadership in the wider research community

The third and final objective of the programme is related to leadership in the wider research community:

> *Foster leadership in the wider research community: networking, mentoring future leaders, virtual working, strategic integration – reflected in better idea cross-fertilisation, more effective teams, greater international competitiveness, nurturing new projects and the stronger application of research.*

The results of our evaluation suggest that this objective is not being met to the extent that it could be, and more focused attention on this aspect needs to be made.

Although we are careful to include a caveat in our findings regarding the extent to which this objective could be met, as higher-level impacts are of a more long-term nature, we do think that there are some areas where we would have expected to see greater impact, but also some indications of potentially important impacts emerging which should be nurtured and supported.

We noted above that individuals report being more aware of their individual positions within their institution and the role that they can play in effecting change. In addition, individuals report a greater awareness of the context in which their research is taking place, particularly a greater awareness of the NIHR landscape and the (virtual) institutions, research networks, research centres and individuals that comprise it. By gaining these insights, participants are more likely to be in a position to have more of an impact as a leader in the research community; however, it seems that they are not always aware of how or why they are doing so. Moreover, in many cases they are unable to link this back to the learning which takes place on the NIHR Leadership Programme. For example, we recall from earlier chapters that more than 60 percent of all participants, including more than 75 percent of senior leaders, report that they believe the programme has helped them to strengthen links across research disciplines. However, when asked about the extent to which individuals felt the programme was enabling them to have an impact, many commented on self-awareness and being more effective within their institutions; few mentioned improved ways of doing research which otherwise might be suggested by the previous finding.

Moreover, when asked about the extent to which the programme is strengthening links across leadership groups, more than half of all the participants reported that there were very few links made. We see this as a significant missed opportunity to create a community of leaders which can help achieve the objective's aims of improved international competitiveness, cross-fertilisation of ideas and stronger application of research.

6.7   Integrated leadership in the National Institute for Health Research

As discussed earlier in this report, we have sought throughout this evaluation to identify what the relationships between and within the programme objectives were, and the wider goals of the NIHR as an organisation supporting biomedical research in the UK. As with the case studies presented earlier in this chapter, we have attempted to use our evaluation and understanding of what the programme would like to be and is achieving in order to develop a model of integrated leadership as it currently appears within the NIHR leadership and development programme.

As has just been discussed above under each objective, although the programme is delivered in a way that clearly seems to meet the objective of developing individuals as leaders, there may be a breakdown in the way that the other two objectives of developing team, institutional and wider research leadership are delivered. This seems to suggest that there is a wider breakdown in the way that the programme interventions are linked to wider objectives and aims of how the NIHR would like to foster and support its leaders.

That is, as the model in Figure 29 shows, we conclude that there is limited integration of leadership objectives within the programme as it currently stands, and overall a greater focus on personal, and to some extent team, leadership development with a lesser focus on institutional and wider NIHR and research community leadership.
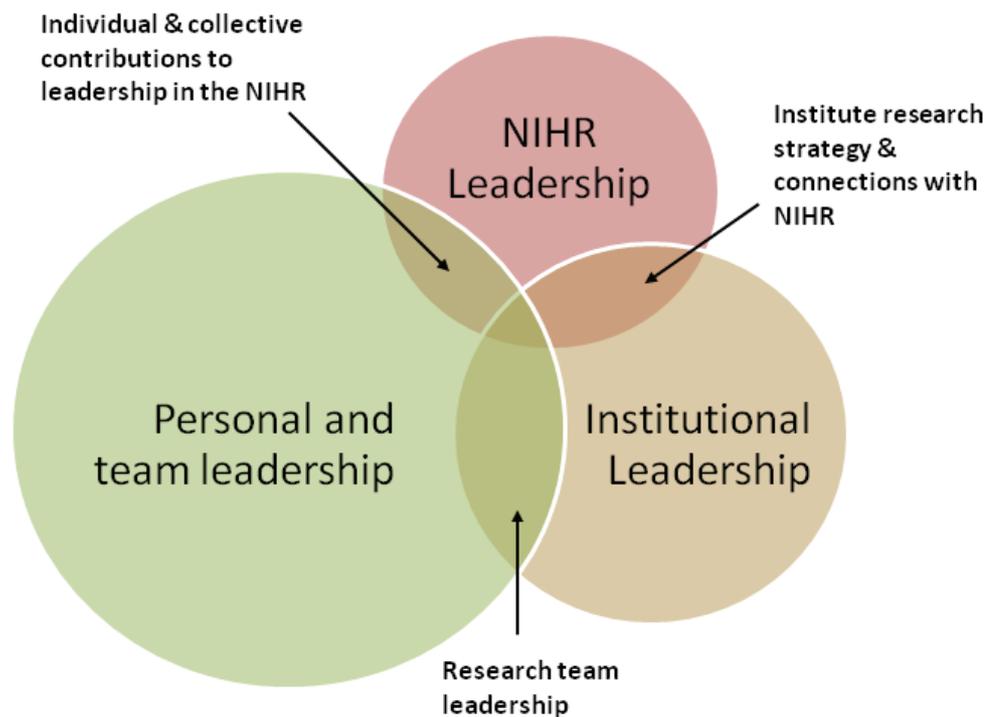
Figure 29: Integrated leadership in the NIHR Leadership and Development Programme

We offer this model of the current integration of leadership in the NIHR Leadership Programme to prompt thinking about whether this is the preferred balance for NIHR. Earlier in this report we introduced the concept of a theory of change as one way to consider whether a given intervention is achieving its intended goals in the right way. As a reminder, a theory of change sets out the building blocks needed to deliver on programme goals and objectives. In articulating a theory of change, one can examine the expectations from an initiative and build a detailed understanding of both how and why a desired change is expected to occur in a specific context.

Considering the balance articulated above, we propose that the following questions should be considered.

- Is this model of integrated leadership the right model for NIHR today, and will this allow it to achieve its long-term aims of transforming biomedical research in the UK?
- Is there an 'imbalance' in the programme or was the balance right two years ago, and does it need to be shifted today, given the progress of NIHR and the initial successes in the NIHR Leadership Programme?

- What is the theory of change for the NIHR Leadership Programme, and how does this relate to the wider NIHR strategic objectives, or indeed an NIHR theory of change?
- Is the NIHR Leadership Programme as it currently is delivered aligned with the wider NIHR theory of change and, if not, how can it be brought back?

While we can only offer these thoughts about the NIHR theory of change, as it is neither our place nor within the scope of our evaluation to address the wider NIHR picture, we do think that these are important issues to consider. We tentatively suggest that if the DH would like to see the NIHR Leadership Programme as a science policy intervention, then there needs to be a shift towards better integration and balance across the three leadership objectives and, in particular, this should be done with greater attention to the specific outcomes that are desired from the overlap of each. For example, the NIH Senior Leadership Program aims to increase the ability of NIH scientific and administrative leaders to execute the scientific goals of the organisation. It is specifically designed with the aim of bringing together leaders in a way that supports both vertical and horizontal integration within research institutes and across strategically aligned research disciplines, so that translational research opportunities are maximised. Therefore, the programme is directly aligned with supporting the complex structure of the NIH, and participants are exposed to leadership training which better enables them to work within and be leaders throughout this organisational structure.

We feel it is important that a similar articulation of goals and objectives is threaded through the NIHR Leadership Programme. To this end, the following specific actions regarding the structure, balance, delivery and integration of the leadership programme might be considered.

- The structure of the programme for each leadership cohort needs to be critically examined in order to ensure that the activities are delivered in an integrated and coordinated fashion that clearly supports wider learning objectives.
- It seems there is a particular need to address programme integration for senior leaders, for example, by requiring more structured participation in the programme as opposed to the current '*à la carte*' model.
- Action learning groups, or a similar method whereby integration of programme learning occurs, should be more firmly established in the higher programme levels, and steps taken to ensure that they are playing the role they need to be in the wider programme architecture.
- Ashridge should consider the 'end' of leadership and the ways in which participants formally enter and exit the programme, also what wider community of leadership they then enter into and how it is supported.
- To help participants make the link between research performance and leadership, we recommend that Ashridge reconsiders the team of coaches and facilitators that deliver the programme and brings in the specific experience of academic, biomedical or health research leadership expertise at key stages in participants' development over the course of the programme. The interventions that might enable this to be taken forward include:

- o the opportunity to involve key leaders from the research community as guest speakers;
- o the opportunity for participants to visit each others' centres to discuss leadership issues and meet the leadership teams in these units;
- o providing more detailed readings and research on leadership in an academic and research context;
- o reflection on whether there is merit in creating a more structured framework which could act as a model of research leadership and, in so doing, act as the glue connecting the various interventions;
- o a dedicated workshop module that focuses on the processes used to provide research leadership and how to foster and lead creativity and innovation; and
- o exploration of some of the work already done by other bodies such as the LFHE and The King's Fund on academic and health leadership.
- Exploring the preconditions for the successful development of high-performing research centres, as at present this is not well researched and would be worth considering as part of a science policy intervention.
- Taking more active steps to encourage both horizontal and vertical integration of research leadership, so that links are made across and between disciplines and research areas.
- If the DH would like to see the NIHR Leadership Programme as a science policy intervention, then there needs to be a shift towards better integration and more equal balance across the three leadership objectives, and greater attention to the specific outcomes that are desired from the overlap of each. There is an opportunity to better understand how an NIHR theory of change in the biomedical and health research sector can be achieved through delivery of the leadership programme.

In all of this, we propose that the DH might consider a rebalancing in the programme in the context of the following proposition: *leadership should be at the core of NIHR science policy*. In order to do this, the DH could take steps not only to continue to support the leadership programme, but could also examine the ways in which leadership is embedded throughout the NIHR. This might be achieved, for example, by requiring all grant applications to have a 'leadership and development' section. It might involve more concentrated efforts at enabling a group of NIHR leaders to work within their research communities to lead on particular research issues, public health challenges or shared academic concerns, such as the opportunities and challenges provided by the Research Excellence Framework. Ashridge, with the support of additional biomedical and health research expertise, could facilitate and support these community-led initiatives through the leadership programme by providing individuals with the leadership guidance and skills to achieve their goals.

The final chapter of this evaluation summarises these recommendations and others made throughout the report.

CHAPTER 7   **Final recommendations**

7.1   Overview

This final chapter summarises the recommendations made throughout the report. It is divided into two main sections: specific recommendations about the delivery of the NIHR Leadership Programme, and options for the DH in taking forward the leadership agenda.

7.2   Specific recommendations about the leadership programme

The overall impression of the participants on the leadership programme is favourable. The majority of interventions are of use to the participants and they would recommend the programme to others.

On this basis we conclude that Ashridge has built up a good foundational knowledge of the NIHR and has a strong awareness of the individual leadership needs of researchers. Ashridge should be commended on its contribution to individual leadership development, personal awareness and confidence-building as a result of the programme. The majority of participants report that the programme has made a significant impact on their personal approach to leadership. This aspect of the programme should be maintained. After three years of building this leadership programme, we believe that it has achieved an acceptable level of success overall, and we would not recommend that the programme be closed or re-tendered to another organisation.

However, we do make the following specific recommendations to the team at Ashridge delivering the leadership programme.

- Ashridge needs to take a holistic look at the programme that it has developed to date, re-evaluating whether it is fit for purpose across each leadership cohort and whether it is aligned and balanced with overarching NIHR objectives.
- In particular, we believe that the structure of the programme for each leadership cohort needs to be critically examined in order to ensure that the activities are delivered in an integrated and coordinated fashion that clearly supports wider learning objectives.
- In addition, Ashridge should carefully examine the findings of the survey and interviews in order to identify which activities are most useful for participants at each level, and why.
- Ashridge needs to address the 'end' of leadership and how individuals leave the active programme, yet remain integrated in a wider leadership community. We

found little evidence that this aspect had been appropriately addressed for all cohorts, and a more holistic consideration of the beginning, middle and end of each programme is needed to ensure that the objectives of the programme are met and are contributing to wider NIHR objectives.

- The overlap between individual leadership and institutional leadership has made some contributions to the objective of building research team and institutional leadership. However, overall, the focus is on the personal level; there is far less attention on leadership development at the institutional level.

- Further, while it is clear that the programme has had a positive impact on the participants' personal development, there does not yet appear to be a link between this outcome and research performance. Ashridge could do more to enable individuals to understand how their individual research skills and behaviours contribute to research performance and improved research outputs.

- In order to achieve this, we further recommend that Ashridge reconsiders the team of coaches and facilitators that deliver the programme and bring specific biomedical and health research expertise into their team. We believe that this may help enable participants to make the links between personal leadership development and research performance if, at key stages in their leadership development, they are exposed to individuals who are familiar with the demands and challenges of biomedical research environments yet effective leaders in their own right, both at the institutional and wider community levels. If done well, a component of the programme that encourages a more strategic perspective would give participants, individually and collectively, a sense of their role in the institutional landscape in addition to immediate research and organisational environments.

- While we leave the expertise as to when this intervention might be appropriate to Ashridge, as they are the experts in leadership, we suggest a specific set of interventions that should be considered at the end of Chapter 6. In addition, we suggest that the overarching objectives of the programme be strengthened so that participants have a clear understanding of the 'direction of travel'. To do this, the causal link between the set of interventions included in the leadership programme and the wider objectives should be more clearly articulated alongside other recommendations made here.

- There is some emerging evidence of some impacts on the higher level objectives of the programme, including strengthened links across research disciplines, some impacts on one's institution, and greater awareness of the wider context in which individuals' research takes place. However, we believe that the programme is now in a position to focus more strongly on these higher level objectives and rebalance the programme in the ways suggested in this report.

- Currently there are very limited impacts of the programme on strengthening links across different leadership categories (senior leaders, development leaders and trainee leaders). We recommend that the programme be critically reviewed to integrate activities that would enhance links across leadership categories.

- We recommend that more active steps are taken to encourage both horizontal and vertical integration of research leadership across disciplines within the delivery of programme activities where appropriate. To this end, Ashridge might look to

other research programme models, for example the NIH in the USA and its
approach to leadership training and development.

- Going forward, Ashridge, through the DH, should take steps to integrate a
monitoring and evaluation plan into the leadership programme, so as to enable it
to provide continued learning and flexibility and in turn, best deliver on its
objectives.

7.3   Taking forward the leadership agenda: there is no 'end' to leadership

This final set of reflections discuss how the DH, the senior leadership team of NIHR and
Ashridge can work together to take the leadership agenda forward to improve research
excellence. These thoughts are offered in the spirit that NIHR should put leadership at the
core of science policy.

- *We believe that there is reason to reconsider the integration of leadership programme
activities and the way in which they are, or are not, connected to a wider theory of change
for the NIHR.*

We consider this to be both an issue for the DH and senior leadership of NIHR to
consider, and this group should work with Ashridge to better understand how an NIHR
theory of change can be achieved through delivery of the leadership programme. We
suggest that if the DH would like to see the NIHR Leadership Programme as a science
policy intervention, there needs to be a shift towards better integration and more equal
balance across the three leadership objectives, and greater attention to the specific
outcomes that are desired from the overlap of each.

- *We believe that there is an opportunity in fostering a community of research leaders which
can take leadership out into the wider research landscape, and potentially effect profound
change.*

There is little evidence of contribution of the programme to fostering leadership in the
wider research community, and in fact many participants felt that this was actively
discouraged. Ashridge should work with the DH to encourage a community of leadership
among programme participants that would diffuse outwards and is aligned with the NIHR
theory of change. This would contribute to individuals taking more responsibility for their
position in the wider research community, and would be likely to contribute to better
achievement of the third objective of the programme.

- *In light of all of the above, we suggest that senior leadership within the DH might consider
a rebalancing in the programme in the context of the following proposition: leadership
should be at the core of NIHR science policy.*

This would not only require continued and ongoing investment in the leadership
programme, but concentrated efforts to embed leadership development and awareness
throughout the biomedical and health research landscape. This might be achieved, for
example, by requiring all grant applications to have a 'leadership and development' section.
It might involve more concentrated efforts at enabling a group of NIHR leaders to work
within their research communities to lead on particular research issues, public health
challenges or shared academic concerns, such as the opportunities and challenges provided

by the Research Excellence Framework. Ashridge could facilitate and support these community-driven initiatives through the leadership programme and provide individuals with the leadership guidance and skills to do this.

7.4   Final conclusion

On the basis of the findings presented throughout this report and the recommendations and reflections offered above, we conclude that Ashridge has built up a suitable foundational knowledge of the NIHR and has an awareness of the individual leadership needs of researchers. After three years, we believe that it has delivered strongly on the first objective of developing individual leaders, and is beginning to deliver on the second objective of developing team and institutional leadership. The third objective of developing wider research community leadership will require more time to be met, but could be achieved more readily through consideration of our recommendations.

REFERENCES

References

Bennis, W., 'The End of Leadership: Exemplary Leadership Is Impossible without Full Inclusion, Initiatives, and Cooperation of Followers'. *Organizational Dynamics*, Vol. 28, 1999, pp.71–80.

Berk, J., 'Delivering Dashboards'. *Chief Learning Officer*, 27 February 2007. As of 19 October 2011: http://clomedia.com/articles/view/designing_and_delivering_learning_analytics_dashboards

Boedigheimer S. and K. M. Gebbie, 'Currently Employed Public Health Administrators: Are They Prepared?*' Journal of Public Health Management and Practice*, Vol. 7, No. 2, 1998, pp.30–36.

Bolden, R., *What is Leadership?* Leadership South West research report, Exeter: Centre for Leadership Studies, University of Exeter, 2004.

Connell, J. P. and A. C. Kubish, *Applying a Theory of Change Approach to the Evaluation of Comprehensive Community Initiatives: Progress, Prospects, and Problems*, Washington, D.C.: Aspen Institute, 1998.

Department of Health (Research and Development Directorate), *Best Research for Best Health: A New National Health Research* Strategy, 2006. As of 12 October 2011: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4127127

Department of Health and S. C. Davies, *Sir David Cooksey's Review of UK Health Research*, 2006. As of 12 October 2011: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_062915

Gaille, W. B. (1955) 'Essentially Contested Concepts'. *Proceedings of the Aristotelian Society*, Vol. 56, 167–198.

Grindle, M. S. and M. E. Hilderbrand, 'Building Sustainable Capacity in the Public Sector: What Can Be Done?' *Public Administration and Development*, Vol. 15, No. 5, 2006, pp. 441–463.

Grint, K., 'What Is Leadership? From Hydra to Hybrid'. Working Paper, Said Business School and Templeton College, Oxford University, 2004.

Kennie, T., *Academic Leadership: Dimensions, Dysfunctions and Dynamics*, Ranmore Consulting, 2009. As of 19 October 2011: http://www.lfhe.ac.uk/publications/2010/kennie.pdf

Kotter, J., *A Force for Change: How Leadership Differs from Management*, New York: Free Press, 1990.

Ling, T. and L. V. Van Dijk, *Performance Audit Handbook*, TR-788-RE, Cambridge: RAND Europe, 2009.

Martinson Consulting, *A Guide to Impact Evaluation and Analysis*, Leadership Foundation for Higher Education, no date. Privately provided to authors.

Middlehurst, R., 'A Challenging Journey: From Leadership Courses to Leadership Foundation for Higher Education'. In Glickman, T. S. and S. C. White, eds, *Managing for Innovation*, No. 137, pp.45–57, San Francisco, Calif.: Jossey-Bass, 2007.

Moore, M. and M. Diamond, *Academic Leadership. Turning Vision into Reality*, Ernst & Young Foundation, 2000. As of 19 October 2011: http://www.academicla.net/documents/ AcademicLeadership.pdf

Northouse, P. G., *Leadership: Theory and Practice* (3rd ed.), London: Sage Publications, 2004.

Pawson., T., *Realistic Evaluation*, London: Sage Publications, 1997.

Sogunro, O. A., 'Impact of Training on Leadership Development: Lessons from a Leadership Training Program'. *Evaluation Review*, Vol. 21, No. 6, 1997, pp.713–737.

Souba, W., 'New Ways of Understanding and Accomplishing Leadership in Academic Medicine'. *Journal of Surgical Research*, Vol. 117, No. 2, 2004, pp.177–186.

The King's Fund Commission on Leadership and Management, *The Future of Leadership and Management in the NHS: No More Heroes*, London: The King's Fund, 2011.

Weiss, C., 'Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families'. In Connell, J., A. C. Kubisch, L. B Schorr and C. H. Weiss, eds, *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*, pp.66–67, Washington, D.C.: Aspen Institute, 1995.

Woltring, C., W. Constantine and L. Schwarte, 'Does Leadership Training Make a Difference: The CDC/UC Public Health Leadership Institute: 1991–1999'. *Journal of Public Health Management Practice*, Vol. 9, No. 2, 2003, pp.103–122.

Yeo, K. M., 'Measuring Organizational Learning: Going Beyond Training Programs', *Human Resources IQ*, 2009. As of 19 October 2011: http://www.humanresourcesiq.com/ metrics/columns/measuring-organizational-learning-going-beyond-mea/

APPENDICES

Appendix A: Survey questions

A.	GENERAL PROFILE

1. Please indicate your health research (specialty) area:
   _____

2. Please indicate your primary institutional affiliation (joint affiliations may be provided between NHS organisations, higher education institutions or other eg Addenbrooke's and University of Cambridge or Institute for Cancer Research and University of Bath): _____

3. Your current position (eg Professor of Respiratory Medicine): _____

4. What would you consider to be your main tasks (up to three) in your current position?
   _____

5. What would you consider to be the main challenge of undertaking the tasks mentioned in Question 6 above?
   _____

6. How long have you held an NIHR role/grant? _____

7. When did you join the NIHR Leadership Programme?
   _____

8. Please indicate what NIHR leadership group you have participated in:

   Trainee leader
   Development leader
   Senior leader

9. What was your main motivation for joining the NIHR Leadership Programme?

   _____

10. Have you participated in other leadership programmes?

    Yes   ☐   No ☐

11. Please briefly indicate which one(s), if your answer to the question is yes

    _____

B.	PROGRAMME DELIVERY

12. In terms of flexibility, how did you find the mode of delivery of NIHR Leadership Programme packages overall?

    Very flexible ☐   Flexible at times ☐   Can be rigid ☐

13. How useful were the different activities of the programme in relation to improving your ability to undertake your institutional role?

	Very useful	Useful in part	Not at all useful	Not provided/ participated in
Accompanying and coaching (1-2-1)	☐	☐	☐	☐
Action learning groups				
Learning conferences				
The 360-degree feedback				
Tailored learning guides				
Virtual workshops				
Other (please specify)				

14. How did you find the coordination of NIHR Leadership Programme components overall?

Excellent ☐   Good ☐   Fair ☐   Poor ☐   Very poor ☐

Please briefly explain your choice _____

15. In terms of relevance to your future career plans, how would you rate the NIHR Leadership Programe overall?

Very relevant ☐   Relevant in part ☐   Not at all relevant ☐

Please briefly explain your choice _____

C.   ACQUIRED LEARNING AND BEHAVIOUR CHANGE

16. To what extent has the programme been valuable in improving your ability to manage your current institutional tasks?

Extremely valuable☐ Reasonably valuable☐ Partially valuable ☐
Not valuable ☐

17. To what extent has the programme helped you establish new links or strengthen existing links with colleagues from other disciplines (either within your institution or externally)?

Very much ☐   Reasonably ☐   Partially ☐   Not at all ☐

18. Has the programme contributed to strengthening your links across the three different categories of participants (senior leaders, development leaders and trainees)?

Very much ☐   Reasonably ☐   Partially ☐   Not at all ☐

19. Has the programme made you more aware of the external context in which your work is relevant?

Yes   ☐   No   ☐

If your response to Question 20 above is yes, please give examples.
_____

20. Please rate the extent to which you think the NIHR Leadership Programme strengthened your performance as a leader according to the following dimensions:

	To a great extent	Significantly	Somewhat	Not at all
Helped you to build credibility among your colleagues and peers as an intellectual leader				
Increased your ability to influence colleagues and peers				
Enabled you to approach your role in more creative and innovative ways				
Helped you to become more aware of how to instil and foster qualities of integrity in yourself and your team				
Improved your ability and courage to overcome challenges individually and together with your team				
Helped you to build confidence in yourself and your ideas				
Helped you to demonstrate confidence through your external behaviours and actions				

D.   WIDER IMPACTS OF THE LEADERSHIP PROGRAMME

21. To what extent has the programme had an impact on your personal approach to leadership within your institutional role?

Major impact ☐   Significant impact ☐ Limited impact ☐   No impact ☐

Please briefly explain your choice _____

22. To what extent do you think the programe has had an impact on your ability to have an impact *on* your institution?

Major impact ☐   Significant impact ☐ Limited impact ☐   No impact ☐

Please briefly explain your choice _____

23. To what extent do you think the programe has had an impact on your ability to have an impact *outside* your institution (eg on policy, patient health, etc.)?

Major impact ☐   Significant impact ☐ Limited impact ☐   No impact ☐

Please briefly explain your choice _____

24. How do you think your collegues in your work environment would describe the impact of the NIHR Leadership Programme on you?

_____

25. Would you recommend the NIHR Leadership Programme to other colleagues?

Yes   ☐   No ☐

26. Thinking ahead three to five years, please explain the extent to which the programme has equipped you with leadership attributes for strategic change:
_____

27. Please comment on areas of the NIHR leadership programme where you feel improvement could be made_____

Appendix B: Interview protocol

Interview protocol for NIHR Leadership Programme participants

Scope of interview

The interview will cover five main areas.

1) General background.
2) Gauging reactions – getting basic information about the person and understanding their immediate reactions and responses to the content of the NIHR leadership programme.
3) Acquired learning – understanding what new pieces of knowledge, skills and attitudes leaders have developed and acquired as a result of the programme. Questions should get at the approach of the programme and whether it has facilitated this learning and in what ways.
4) New behaviours – determining what individual changes in leadership behaviours have resulted from the leader's engagement in the programme.
5) Measuring results – what additional spillovers, spin-offs and wider impacts or outcomes may have resulted from participation of the individual in the NIHR Leadership Programme and the resulting learning and behaviours. *[NB: Word these carefully so as not to imply or lead the respondent into attribution, but instead to try and get a sense of contribution.]*

The interviews will be semi-structured using this protocol as a guide. The important thing is to make sure that questions are discussed in all four areas, so we can get a sense of the breadth and depth of participants' evaluations of the programme.

We will aim for 45–60 minutes for the interview. Most interviews will be conducted by phone, unless circumstances facilitate easy travel for a face-to-face interview.

Questions are divided into main sections (in bold); sections are based on the Kirkpatrick Model and the four levels of learning. Text in italics and brackets is commentary for the interviewer to consider.

Interview background information to gather

Identify the area of research or clinical work of the individual. From this, identify where they 'sit' within the virtual NIHR landscape. *[For leadership programme participants this can*

be determined from the participant database. For the staff of participants, it is likely to be in the same field.]

Identify leadership programme activities in which they have taken part. *[For leadership programme participants this can be identified from the database, but is worth a 'verbal' check at the beginning of the interview. For staff of leaders, question needs to be asked via email or at beginning of interview, ie have they taken part in any 360-degree reviews?]*

Interview questions

Background

- Questions about where they work, discipline, NIHR initiatives they are a part of (time permitting).
- What stage of your career are you at and what do you see as your future career trajectory? *[Ask development/trainee leaders only]*
- Have you taken part in any other leadership programmes during your career? Which ones, and did they differ from this one?

Gauging reactions
We'd like to find out a bit about your general reactions to the programme.

- How would you characterise the different activities within the leadership programme you have participated in, or those that have been offered to you?
  - For example, would you say some were more strategically oriented than others? Some more focused on the individual? Are any geared towards helping you with your research?
- Which of the activities just described have you found most or least useful, and why?
- Is the balance, delivery and timing of the different activities within the programme appropriate for your leadership needs as a researcher/clinician/research manager? *[select the most appropriate, depending on the person]*
  - In other words, are there any activities which you may have found more useful if they happened at earlier or later stages in the programme than when they did? Would you have preferred more of some activities and less of others, or was the balance about right?
- Do you think the activities offered are appropriate for someone in a research leadership position (as opposed to a management leadership position)? Are the activities relevant for your day-to-day working context? Are they tailored to research leadership needs? Please explain.

Acquired learning
I'd now like to find out a bit about the learning you've done throughout the programme and the nature of this learning process.

- What were your expectations going into the programme about the types of knowledge and skills you would gain? What did you expect to learn about leadership?

- Have these expectations about what you would learn, or wanted to learn, about leadership been met? In what ways, and how?

- Have your views on the links between research (performance) and leadership changed in any way by virtue of taking part in the programme?

- In what aspects of your work have you gained new knowledge and skills, expected or unexpected? Are they relevant to your current role? In what way and can you give examples?

  [Keep in mind that the respondent may end up talking about behaviour change at this point, so be mindful not to repeat questions in the next section.]

- Has the leadership programme helped you to identify any new learning needs, either for yourself or for your research group (for example, skills or knowledge gaps) you weren't previously aware of? Which ones and how did the programme's activities make you realise that this was a gap?

- How important do you think the programme has been in giving you the needed skills to achieve your personal career goals? Can you elaborate in what ways? Have you re-evaluated these goals in any way as a result of the programme?

New behaviours

I'd like to ask you some questions now about new behaviours or changes to the way you work which might be a result of the leadership programme.

- To what extent do you think the leadership programme has had an impact on your personal approach to, and understanding of, leadership?

- Has your relationship with colleagues changed since starting the leadership programme? What about with people you supervise specifically?

- What specifically do you do differently now in your day-to-day work (leadership roles) that is a result of (either direct or partly related to) the leadership programme?
  - *[Only use for probing]* For example, are you more organised in going about your day? Do you set aside time to think? Are your relationships different? Please give examples and explain.

- Do you find yourself approaching or thinking about the wider organisational and/or institutional context differently? How is your behaviour and/or thinking different in this respect, and do you attribute this to elements of the leadership programme? Please give examples. What other influences (outside the leadership programme) affect this?

  [In this question we are trying to get at whether the leadership programme helps people to become better individual leaders (eg managers), or whether it is helping them

become better organisational leaders within NIHR (eg more aware of policy, navigating health systems, supporting research within the system, etc.), or both. If both, than to what extent is there a balance between the two?]

- Do you find yourself approaching research problems, challenges and opportunities differently as a result of new behaviours you've adopted through the programme?
  - *[Note that this question may have been addressed in earlier questions]* Can you give a recent example of how you dealt with a situation in a different way and had an explicit thought that it was the result of some type of behaviour change brought about as a result of the programme?
- Do you have any evidence of your staff identifying behavioural changes?

Measuring results
The last set of questions relate to the wider context in which you work.

- Has the leadership programme had any wider and unexpected benefits outside those areas we have already discussed? Do you think you can attribute this change to the leadership programme, or did it contribute in some way? What examples and evidence do you have for this?
- *[Impact on collaborative activities – ask for examples throughout]*
  - Has the leadership programme had any impact on how you might collaborate with partners? Can you give examples? *[Use questions below for probing only]*
    - Have collaborations increased since participating in the leadership programme?
    - Do you have any new collaborators as a direct result of the leadership programme – perhaps someone met through the leadership conference or a link made through networking? Or are your current collaborations different in how they function as a result?
    - To what extent was this linked to the leadership programme – in other words, would the collaboration happened at all or as quickly without it?
    - Can you give examples?
- *[Impact on policy engagement – ask for examples throughout]*
  - Has the leadership programme had any impact on your engagement with policy or policymakers? *[Use questions below for probing only]*:
    - Has the leadership programme introduced you to new policymakers, policy influencers or strategies of whom you were previously unaware?
    - Have you been able to influence policy in any way since joining the leadership programme?

- ▪ Is there a direct link between the two that you can provide evidence for?
- ▪ Can you provide examples for all or some of the above?

- *[Impact on strategic or institutional awareness]*
  - o Do you think you have been able to have an impact within your institution in a way that you wouldn't have been aware of, before participating in the leadership programme?
  - o Do you have a better awareness of NIHR after participating in the leadership programme? How has the leadership programme helped this, ie which activities have contributed to this greater understanding?

- *[Impact nationally and internationally]*
  - o How aware are you of the users of your research and those who might be impacted as a result of your research? Has this awareness been enhanced in any way as a result of the leadership programme, specifically? How?
  - o Have your negotiations or interactions with stakeholders interested in your research, or using your research, changed in any marked way as a result of a technique or skill that you acquired during your time in the leadership programme? Can you give examples?
  - o Have you brought any new health products to market or helped meet new targets since you began the leadership programme? Which ones? Is there anything you learned on the programme that helped you through these commercial or health system processes?
  - o *[Note to interviewer: Need to think carefully about what results or wider health system impacts we might be interested in and to distinguish clearly between attribution and contribution of the programme]*

Final question

If you were participating in the programme all over again, would there be any recommendations you would give for improving it, with hindsight?

Would you recommend the programme to colleagues?

Appendix C: Benchmarking case studies

The following programmes and the corresponding sectors were reviewed as part of the benchmarking workstream. The short case studies written for each leadership programme are presented in this Appendix.

- Top Management Programme for Higher Education – higher education (HE), equivalent to senior leaders;
- Higher Command and Staff Course – UK military, equivalent to senior leaders;
- NIH Senior Leadership Program – biomedical research, equivalent to development leaders;
- The King's Fund Top Managers Programme – health sector, equivalent to development leaders;
- Research Team Leadership – higher education, equivalent to trainee leaders; and
- Common Purpose Navigator – broad public/private sector, equivalent to trainee leaders.

Top Management Programme case study: strategic level leadership at the senior level[8]

Programme title	The Top Management Programme for Higher Education
Provider and brief history	The Leadership Foundation for Higher Education (LFHE), http://www.lfhe.ac.uk The programme has been operating for 12 years and is now run three times per year. The current cohort of 21 participants is the 25th such group. More than 500 alumni of the programme exist across the UK HE system and beyond (with a few international participants in recent years). Approximately 15 percent of the participants have taken up vice chancellor or chief executive roles in HE, or in other sectors internationally.
Level of participant (typically)	Senior strategic leaders in higher education institutions. Typically at deputy or pro-vice chancellor level, executive dean of a large faculty, chief operating officer/registrar or director of a professional service function and member of the senior management team.

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[8] Information for this case study was obtained through direct facilitator experience of one of the report's authors.

Duration and time commitment	The programme consists of an initial one-day orientation event, three week-long residential modules over a five to six-month period (15 days) plus action learning meetings (two days), 360-degree feedback and coaching (two sessions) and a further day on a 'system level leadership' challenge, equivalent to 19–20 days of group and facilitator contact.
Brief summary and key themes	The programme is designed to develop the personal, institutional and wider sector-level leadership capacities of a cohort of already successful leaders. The focus of the programme is to broaden the participants' horizons on five levels (personal, institutional, international, sector and about the wider political and economic context).

The residential workshops are designed to focus on three specific themes.

Workshop 1: 'Strategic Leadership'

Understanding the nature of:

- strategic thinking and the wider context for HE in the medium to long term;

- strategic leadership and governance and changing practices;

- oneself and the nature and role of a strategic leader;

- influencing and implementing organisational change; and

- 'system-level' leadership and leading 'beyond authority'.

Workshop 2: 'Power, Politics and the International Context'

Understanding the nature of:

- policymaking and the political context for HE;

- the different aspects of the external leadership role in HE;

- negotiating, influencing and building collaborative relationships;

- business–HE interactions;

- developments in transnational education and research; and

- another HE system and the cross-cultural nature of leadership (achieved by a visit to another country: this has ranged from Belgium, Denmark, The Netherlands; the USA (Washington, D.C.) and the United Arab Emirates to other parts of the Middle East)

Workshop 3: 'The Business of HE'

Understanding the nature of:

- funding and financial management (through the use of a

	computer-based simulation exercise); • top teamworking (in theory and in practice); • strategic people management; and • understanding oneself through exploring a range of leadership archetypes. The other aspects of the programme include the use of action learning sets to explore a major personal challenge, and one-to-one coaching using 360-degree feedback to inform the sessions.
Underpinning philosophy/theory of change	The current programme intentionally provides a range of models and frameworks and does not advocate *per se* a specific model of leadership. However, broadly speaking, the programme offers two modes of leadership support that will support leaders in effecting change in the HE sector: one mode is aimed at building strategic organisational leadership, and the other mode is aimed at building academic leadership. These modes are reflected through the participant's selection of a 360-degree feedback tool. As with other programmes, the choice of which 360-degree tool in itself introduces a view about the nature of leadership. For the past seven years (with various refinements along the way) two frameworks have been developed which are intended to reflect leadership in a HE context. The one used by most participants focuses on the strategic organisational leadership domains perceived to be of particular importance (the '5 Cs' framework, based on the themes of credibility, capability, character, collaborative management and culturally sensitive), and more recently a second framework has been offered for those who remain and wish to gain feedback on their academic leadership. This has a different set of components, although it shares several similar domains to the previously mentioned framework.
Interesting processes to highlight	Since its inception more than 12 years ago, the programme has created a highly influential and potentially powerful community of leaders in and of the HE sector. Very recently it was considered that this collective resource could be of even greater value to the HE sector. In order to do so, the programme designers have recently introduced a new learning experience built around a 'system level leadership challenge'. The objective of this process is not necessarily to 'solve' a problem, but to expose the participants to the challenges of operating 'beyond authority' at a higher and wider level than they might have had access to in the past. It is intended that the learning from such an experience would help strengthen their capacity to understand the

complexity of working at this level, how to simplify and communicate a complex agenda, how to navigate through the political, organisational and cultural demands of many conflicting priorities, and how to build alliances and work collaboratively to influence an agenda. As a side benefit it will demand that the group works as a collective community as well as working in three facilitated working groups. Each challenge also involves working with relevant national bodies such as Universities UK, the Higher Education Academy, national funding councils and officials within the Department for Business Innovation and Skills.

In order to be suitable as a system-level leadership challenge, the issue is characterised by the following features:

- it requires addressing across the whole spectrum of the HE system, transcending organisational boundaries;
- it is of strategic importance to many stakeholders over the short to medium term and possibly longer-term time horizon;
- it is characterised as being of the 'wicked' type, ie:
    - complex and often intractable
    - novel with no apparent solution
    - often generates more problems
    - often with no obvious right or wrong answer, just better or worse alternatives
    - subject to a high level of uncertainty.

Currently, the process is being piloted and the early indications are that it is adding a very important new dimension to the work of a strategic leader.

As mentioned earlier, the programme includes exposure to an international context: this has been recently offered as a flexible option (in the past it was integrated into the whole programme). In reality, currently more than 95 percent of participants are including the international aspect of the programme in their selection. This exposure to leaders and other contexts has proved to be a significant feature of the programme.

A final feature to highlight is the development of a self-organising and structured means to maintain the connections between individual participants after the end of the programme. More than 50 percent of the action learning sets continue to meet after the end of the programme (on a self-organising basis). In recent years about one-third of the cohorts also arrange annual or biannual workshop sessions (again on a self-organising and self-funded basis). To encourage links across cohorts, an annual fellows event takes place (over 24 hours), to which all alumni are invited. This typically

	attracts around 30–50 participants each year.
Approach to evaluation and impact	Evaluation takes place at three levels. In common with all programmes an end of workshop evaluation takes place (using an on-line questionnaire) about two weeks after the end of the relevant workshop. A second-level evaluation then takes place around four to five months after the end of the programme. This focuses more on the impact of the programme at the personal, unit and institutional levels. The third-level evaluation is through an independent review by a third party. These typically take place at three-year intervals and provide a similar level of external scrutiny to the programme's evaluation. Furthermore, a series of planning and innovation workshop events (two per year) are convened to bring together the delivery team with the funders to discuss the design and shape of the programme, and to review evaluation and impact evidence.
Cost and cost comparison	The cost of the programme varies according to whether the institution is a member of the LFHE. More than 95 percent of institutions are in this state. On this basis, and using the fee rate for the last integrated model (including the international week), the cost was £13,800. On the basis of 19.5 days of direct contact time this equates in round terms to £700 per day per person of delivery. This is inclusive of accommodation and meals, but exclusive of travel to venues outside Europe.

Higher Command and Staff Course case study: senior leadership in the UK military[9]

Programme title	Higher Command and Staff Course
Provider and brief description	Joint Service Command and Staff Course, Defence Academy, UK Ministry of Defence This is a course which directly influences students' likelihood of promotion to the highest of military ranks. The long-term aim of the course is to enable students to become excellent war-fighting commanders, able to return from the theatre where war is being fought to a staff job in the home country, all the while continuing to develop personally. In order to achieve this aim, the course has two objectives that it hopes to meet during its 15-week period. The first is to further students' knowledge and understanding of strategy in military operations. The second is to develop students' reflection and learning skills. An indirect long-term aim of the course is to develop such a self-learning and development culture in the military.
Level of	The course includes 33 students at 'senior management' level (a one-

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[9] Sources: interview with the course director.

participant (typically)	star[10] military rank, ready for promotion to two-star), which represent the top 3 percent of their peer group. Of these 33 students, 24 are British officers. Each service can send a number that is proportionate to the size of the service (the quota system), which means there are 11 Army, 7 Air Force and 6 Navy officers. The remaining nine students are included in the course to get cross-government and international representation: one civil servant each from the Ministry of Defence, Foreign and Commonwealth Office, Secret Intelligence Service (MI6 – international secret service), GCHQ (intelligence), and the Department for International Development; one US Marine; one US Army officer; one French Army officer who has attended the Royal College of Defence Studies leadership course (which is more focused on grand strategy – military and security policy – than military operational strategy); and one officer from an additional key partner country (Austria, Germany, etc.), selected through rotation and in consultation with the Ministry of Defence).
Duration and time commitment	The course lasts 15 weeks full-time and is residential. Prior to 2000 it was delivered individually by each service, but due to budget cuts it was decided these strategic courses would be delivered in a joint institution.
Brief summary and key themes	*Putting the senior course in context* It is important to understand that all military personnel receive a highly institutionalised education. Unlike health researchers, who may have studied in a range of universities and countries, military personnel have all been educated in the institution of their service (Army, Navy or Air Force). The residential and unit-based structure of the military also ensures that these graduates develop strong team spirit with others in their unit. Thus by the time that officers reach middle management, they are relatively weaker with respect to personal and joint service leadership than they are with respect to team and institutional leadership. The first course which provides officers with joint service and personal leadership training is the Advanced Command and Staff Course. Only the top 25 percent of officers are selected to do this residential one-year course when they reach the rank of, for example, lieutenant-colonel. This course focuses on operational skills and understanding, and will enable officers to be promoted to, for example, the rank of colonel.

[10] This is a way of designating a military rank without having to refer to the three different names used by the services: a one-star corresponds in the Army to the level just above colonel, and four-star is a general. In other words they are senior managers, but not yet the top senior managers who would be the generals.

	Of these officers in the top 25 percent, the top 3 percent will be selected after another promotion round (to one-star, which follows the rank of colonel) to do the course. This course, which is the topic of this case study, addresses strategic skills and understanding in operations. An alternative course available to officers of a one-star rank and above is the course provided by the Royal College of Defence Studies, which addresses grand strategy: military strategy in policy and politics. Officers may attend both senior courses or just one of them, depending on their main interest and ability. Attending these courses increases the likelihood of promotion into the highest of military ranks, so significantly it has been termed 'necessary for promotion'. *Description of the course* Weeks 1 to 5.5 of the course focus on introducing students to the strategic operational context (strategy, security and military thinking). This mainly involves developing students' theoretical knowledge. Weeks 5.5 to 10 introduce students to operational art and campaigning through a mix of theoretical knowledge and practice. Two of the five and a half weeks are spent specifically on multi-agency operations. Week 11 is intended to gain alternate views on operational warfare. Mentors play a leading role during this week in challenging student thinking, alongside guest speakers, by suggesting alternative ways of addressing operational issues. Weeks 12 and 13 are spent war-gaming a scenario. This same scenario will have been used throughout the course for students to apply their learning. This is to ensure that students do not spend time learning unnecessary scenarios. Weeks 14 and 15 are spent on a trip to Normandy during which they write their final essay, engage in small war exercises (explained in more detail in the next section), and provide and receive performance feedback.
Underpinning philosophy/theory of change	The long-term aim of the course is threefold, to enable students to: (1) become excellent war-fighting commanders; (2) be able to return from the theatre where war is being fought to a staff job in the home country; (3) continue to develop personally. The aim that is prioritised above all others is the first, that of forming an excellent war-fighting commander. In order to achieve these aims, the course has two objectives that it hopes to meet during its 15-week period. The first objective is to further students' knowledge and understanding of strategy in military operations. The second objective is to develop students' reflection and learning skills. Because of this, the course invests

	relatively strongly in the course's third aim, of promoting personal development, relatively to the second aim, to develop staff job skills.
	An indirect long-term aim of the course is to develop such a self-learning and development culture in the military.
	There are six key pedagogical processes used throughout the course to meet its two objectives. Although all processes contribute to both objectives, the processes that contribute mostly to the knowledge component of the course include:
	1) teaching that takes the form of lectures and aims to develop students' knowledge; and
	2) writing short papers at the end of weeks 1 and 7, and a long paper of 5,000 words at the end of week 14, which they present to fellow students. This is to enhance students' communication skills as well as assess their theoretical knowledge.
	Four other processes contribute mostly to the reflection and learning component of the course.
	3) The students work in small groups of 11 throughout the course to discuss teachings, engage in exercises, provide and receive feedback, etc. Smaller groups are thought to favour relationship and trust-building, and to strengthen reflection and learning among students. This group is changed once over the course of the 16-week period.
	4) Hands-on exercises are interspersed with classroom learning through specific exercise modules. These are also done in small groups. These exercises are thought to enhance learning on the job and clarify the students' ability to apply the teachings. One realistic scenario provides the basis for all exercises in order to reduce the time spent learning unnecessary facts.
	5) These exercises include a 10-day trip at the end of the course, typically in Normandy, during which students experience the 'emotion of warfare': they have to engage in exercises and live full-time alongside colleagues as well as having to evaluate them.
	6) The course makes extensive use of mentors that also act as role models. The ratio is one mentor to six students. The mentors include retired officers who have commanded cornerstone battles, and a civilian that would typically be a high-profile senior diplomat.
Interesting processes to highlight	The course is a 'career maker or breaker'. It is a necessary step to reach the highest echelons of the hierarchy, with very few exceptions (note that it is unclear whether this is due to selection bias, the cachet that course attendance provides or the actual skills and

	knowledge developed). Bad performance on the course can deteriorate prospects for the students – this guarantees student commitment. Performance assessment within the services can be mediated by subjective elements, such as one's standing among one's peers (ie patronage). This course takes students out of this context, providing an opportunity to make their performance assessment more objective and benchmarked across the services. Although the course does not have any follow-on, its coordinators have set up an alumni 'experts' group, which is invited to comment on security and defence policy as appropriate by writing letters to the UK Chief of Defence Staff, for example. There are two points at which the student receives feedback: • The first formal feedback is at the end of week 8. The student receives a debrief from their mentor. This usually serves the purpose of helping to steer the student towards better performance (eg engage more in a given aspect, address a given element more, adopt a different perspective, etc.). • At the end of the course, a report is sent back to the individual services and used to assess the officers' performance in their career. Methods to gather insight for feedback include psychometric testing, 360-degree feedback and knowledge-testing via written work.
Approach to evaluation and impact	The course is evaluated annually through a five-step process involving student feedback, sponsor feedback, expert analysis and executive decision-making. 1) Students provide feedback on their courses, teachers and mentors daily. 2) The team in charge of the course meets annually with the sponsors of the course (each service, plus some Civil Service units) to ask about outcomes and impacts for the staff they have sent. This happens within one month of the end of the course, but the feedback covers students from previous years as well. 3) An expert panel helps make sense of student and sponsor feedback. 4) Sponsors meet in Autumn as an executive board to formulate suggestions for change, based on the expert panel conclusions. 5) A report suggesting changes to the course structure is delivered to the Vice-Chief of Defence Staff. One of the challenges is that some of the feedback (eg from

	sponsors) can relate to previous years without this being made clear. As a result, changes to the course can be implemented based on a course structure that is not necessarily relevant to the comment.
Cost for comparison	The direct cost of the course is £6,500, and including indirect costs, its total cost is at £38,000. UK military and civilian staff are charged only the direct cost for participation. Last year, international students were charged £23,000 as opposed to the total cost of the course; the Academy will be increasing the cost of attending the course for international students yearly, until these students pay for the total cost of their course. The cost works out at £86 per person per day for UK military and civilian attendees, and £506 per person per day for overseas military attendees.

The King's Fund Leadership Programme case study: developing leaders in the health/public sector[11]

Programme title	Top Managers Programme The case study will focus more on this programme, as it is deemed to be most closely aligned with the development leaders level, but will highlight relevant features of the other two where appropriate.
Provider	The King's Fund (http://www.kingsfund.org) The King's Fund is a charity which seeks to understand how the health system in England can be improved. It works with individuals and organisations to help shape policy, transform services and bring about behaviour change. As part of its wider programme of activity, The King's Fund has been running leadership programmes for more than 30 years. A range of programmes are offered for all levels of leaders, or future leaders, within the NHS and the wider public health sector.
Level of participant (typically)	This programme is for those already holding senior positions in public organisations. Individuals are likely to be at director level, or about to move up from deputy director level or from clinical to managerial roles. Most participants come from the NHS, although individuals from other sectors are welcome.
Duration and time commitment	The programme begins with a 10-day module run at The King's Fund in London. The remaining three modules run for five days over a six-month period. In total, the programme is a 25-day commitment over six months.
Brief summary and key themes	The programme provides leaders with the time, space and support to reflect on their own leadership style and take stock of their impact

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[11] Source: http://www.kingsfund.org.uk/leadership/leadership_programmes and interview with the programme director.

	on others and their organisations. It assumes that all people on the programme are already effective leaders, so it does not focus on providing basic tools of leadership; rather, it allows participants to reflect on a range of multi-layered leadership and management issues. It moves from allowing participants to reflect on themselves and their impact on others, to the implications and application of national policy in their organisations. The core learning approach of the programme is group-based, in order to enable participants to experience how they are seen and interpreted by others. The scope of the programme is wide-ranging and draws on humanistic and psychodynamic theory. Personal resilience and the development and use of political and emotional intelligence are key themes. These are applied and analysed in the context of issues of power, authority, difference, change and transition.
Underpinning philosophy/theory of change	The programme aims to enhance an individual leader's capacity and capability to lead the public sector in an effective and committed way by enabling them to interact with other leaders outside their own 'goldfish bowl', and to see the world from different perspectives. The underpinning philosophy is heavily centred on the psychological development and strength of the individual. With psychological intelligence, one will have the capability needed to manage change, integrate effectively and be alert to new and innovative opportunities for partnering and delivering services. These are seen as crucial to success in the current economic and political climate. Leadership development in the programme is a multi-layered learning approach where groupwork is the core learning mode. In this way, participants can experience how they are seen and interpreted by others and apply this to their own leadership and management challenges. In the long term the programme aims to develop an individual's emotional and political intelligence, so they can become more effective at leading and managing change in their senior positions. In addition, by linking participants with key players in health service policy and other fields, participants are able to gain different perspectives and make career-long connections. Learning continues beyond the programme and is reinforced through annual events and networking opportunities.
Interesting processes to highlight	The alumni network is highlighted as a key feature of the programme in that it enables participants to continue learning and connecting with key leaders across the service sector. The application process includes a detailed set of questions about the type of role that they currently undertake, their personal and career development to date and in the future, and understanding of the

	challenges that one faces in one's career. An example question is: 'Human services organisations and health care are facing unprecedented changes. What do you think will help managers to better perform under these circumstances?'
Approach to evaluation and impact	Feedback from participants. Annual reviews every few years.
Cost comparison	The total cost is £9,000 for 25 days of programme time. The first 10-day module is non-residential and takes place at The King's Fund, but we can assume that the £9,000 includes some lodging and subsistence fees for the remaining three five-day modules. In total, the cost for comparison is £360 per person per day.

NIH Senior Leadership Program case study: development leaders in the biomedical research sector[12]

Programme title	NIH Senior Leadership Program
Provider and brief history	NIH and Office of Human Resources, together with the University of Maryland, USA The NIH Senior Leadership Program provides senior NIH scientific and administrative leaders with the opportunity to work as individuals and together with a select peer group to develop their leadership skills and capabilities. It has been a part of the core training services provided by NIH for the past 12 years. NIH stands out from other government departments in the USA in that it runs dedicated training and leadership programmes such as this for their staff. It believes the challenges of scientific leadership are such that tailored leadership programmes and approaches are needed to enable NIH to deliver its mission of delivering and supporting the highest quality medical research.
Level of participant (typically)	The programme is aimed at individuals who have organisational or programme-level responsibilities, but also have, or will have, cross-institutional leadership responsibilities which require them to think more strategically and horizontally across NIH. This includes the following range of individuals: • scientific, executive or division directors • extramural programme managers • senior administrative staff • executive committee members • Senior Executive Staff or US Civil Service grade 14/15 staff

[12] Source: http://trainingcenter.nih.gov/senior_leadership_program.html and interview with the programme director.

Duration and time commitment	The course runs over three months, during which 10 days of dedicated programme time are offered. This includes three days at a residential retreat and a half-day orientation session prior to the first full days of programme time. In addition, participants are offered a few hours of individual coaching time outside the programme sessions as part of the course fee. We have (generously) assumed that a half-day is spent with coaches.
Brief summary and key themes	The programme provides senior NIH scientific and administrative leaders who have responsibility for working both horizontally (across institutions) and vertically (within their institution) within NIH and across government. The programme focuses on individual and peer-group supported learning, as well as incorporating hands-on problem-solving and implementing practical outputs. The main learning modes of the programme include case study work, interactive discussions, work with executive coaches, experiential learning, assessment of performance data and individual development planning. The foundation of the programme is self-exploration as a leader. The programme builds on this foundation and participants experience a series of application-based learning activities on how to understand one's environment and be a more effective leader. Core themes include results-based accountability, organisational capacity, negotiation and leading organisational change, and the role of a leader within the NIH, particularly the 'leadership paradox'. The final phase of the programme is an integrated application of leadership principles to organisational challenges within NIH. All of the activities are designed around common public health and scientific challenges that the specific group of leaders in a given session face in their roles, so the discussions might change but the core principles remain the same. Specifically, the programme has the following objectives: - to support the assessment of individual leadership skills; - to design and implement a personal development plan; - to enhance capacity for scientific leadership; - to understand how to assess organisational capacities and issues; - to develop an approach to negotiation and cross-organisational change; and - to enhance capacity to analyse and operate effectively and efficiently. The programme aligns with the following leadership competencies necessary for qualifying for Senior Executive Service in the US Government: leading change, leading people, results driven and building coalitions/communications.

Underpinning philosophy/theory of change	The programme aims to increase the ability of NIH scientific and administrative leaders to execute the scientific goals of the organisation.
	Within NIH there are 27 different research institutes. Collaboration across and within them is key to scientific success and excellence. A philosophy of collaboration and integration underpins the entire organisation, and the programme is geared towards supporting this. NIH has always been very strong on leadership. Unlike other government departments in the US, NIH has always run its own leadership programme and does not outsource its programmes – it feels that its context and work environment is unique, and so its programmes need to reflect this.
Interesting processes to highlight	The nine to ten-day structure of the course is broken up as follows.
	Orientation (Day 0) – an orientation session starts the programme. Participants are asked to write a personal and professional biography prior to the session, so that the facilitator and coaches can get a sense of the individuals and the issues that they face. At the orientation, the group is asked to express their leadership challenges and these are discussed. The facilitator plays an active role in this process, and this is where their background in science and ability to speak the 'language' of science really comes into play. The orientation is really where personal exploration of oneself as a leader is encouraged. It lays the foundation for the rest of the programme.
	360-degree feedback (Day 0) – after orientation, the participants have about six weeks to organise their 360-degree feedback and reflect on the orientation.
	Individual exploration and development at the residential retreat (3 days) – the retreat provides an opportunity for the participants to get away from the office and really focus on their development. This is seen as the real core of the programme. Participants participate in a range of activities aimed at leadership growth and self-understanding, including a Myers-Briggs assessment, creating personal and executive development plans and role-playing, so that the coach can see areas where the individual needs to grow. The activities at the retreat are customised in order to reflect what would be of most use to the individuals present and the challenges that they face, areas in which they need to grow, etc.
	Results-based accountability (Days 4–5) – these sessions focus on participants learning how to handle accountability at NIH and how to implement strategies for managing decision-making, fostering accountability and how to use performance measures to one's advantage. They talk about accelerated decision-making, identifying strategic priorities and deriving action plans from them. They also

apply results-based accountability to individual development plans.

Assessing negotiation style and leading organisational change (Days 6–7) – these sessions focus on bi-party negotiation with coaching. Participants learn a framework for negotiation and apply this framework to a situation at NIH. They also focus on how to understand, lead and achieve organisational change.

Leaders and organisational dynamics (Days 8–9) – the final session is about tying everything together and applying leadership principles. These sessions try to cater directly to the teams of individuals and focus on the art of persuasion. They give the participants real case studies to work with, in order to apply leadership principles to NIH challenges. A strong focus of these closing sessions is around the concept of the 'leadership paradox'. Leaders need to be diplomatic but tough, and caring but firm, in order to get things done. The sessions encourage the participants to think about these issues and apply them to real situations without clear answers, pulling them apart and then finding a way forward.

The programme organisers report experiencing some resistance to leadership training initially, mostly out of delegate's reluctance to leave their labs or workplace and take time out. They address this by 'speaking the language of scientists' and making sure that the course is grounded in a very practical application of the principles that people are learning to the public health and scientific issues or challenges that they face. For example, the course facilitator is very well versed in scientific issues and keeps up with the literature and scientific press. He seeks out scientific issues that are going on, as well as soliciting input from participants, and then uses them as case studies during the programme to help everyone think about how leadership helps to address the challenges. The organisers feel that the programme really caters to 'leadership sceptics'.

The programme organisers were quick to point out that action learning is not used on the Senior Leadership Program and this was a deliberate decision. They feel that action learning projects can create artificial situations which are not really of use to individuals.

There is no open application for the programme across NIH: leaders are nominated by the executive officer of their institute. However, there may be an application process specific to each institute. The nominee's supervisor has to write an essay outlining why they think the person should go on the course, so there is real upfront buy-in from management about participation. Recruitment for the programme is application-based and done once a year. Over the course of a year four sessions of 28 leaders are run. These aim to include four to six people per institute on each course, although not necessarily people who work together. In this way networks can be

	built both within and across institutes.
Approach to evaluation and impact	The methods of evaluating the programme are not as extensive as the programme administrators would like them to be. The organisers do an end-of-programme and end-of-course session evaluation using 'happy sheets', but this is pretty basic.
	The programme administrators are thinking about how to do more robust evaluation, including a six-month follow-up with the individuals. They have not done an extensive evaluation of the whole programme or value for money.
Cost and cost comparison	The cost is $7,060 for 10 days' worth of programme time over a three-month period. This equates to about $706 per person per day of delivery. Three days of the course are spent in a retreat setting, and this is included in the cost of the course. It also includes an assumption of a half-day spent with one's coach outside the programme sessions.
	This cost does not include time that the participants spend organising their 360-degree feedback assessments.
	Costs are covered by each institution within NIH out of its core training funds. Over the course of a year 112 leaders participate in the programme.

Research Team Leadership case study: trainee and team level leadership[13]

Programme title	Research Team Leadership
Provider	Leadership Foundation for Higher Education (LFHE), www.lfhe.ac.uk
Level of participant (typically)	The participants are typically lecturers, senior lecturers or readers who have recently been appointed as principal investigators, or who are currently leading small research teams (up to six researchers), with responsibility for leading contract research staff and postgraduate research students as well as technical and administrative support staff.
Duration and time commitment:	Two days
Brief summary and key themes	*Pre-course*
	The course starts with the preparation of a personal research vision. Each delegate also completes a team leadership questionnaire that is used to produce a team leader report and profile for each delegate,

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[13] Information for this case study was obtained through direct facilitator experience of one of the report's authors.

	based on John Adair's 'action-centred leadership'.
	Day 1
	• Improving listening skills • Teamworking, team building, team roles and team dynamics • Understanding different approaches to leadership • The leader's role and responsibilities • What research leaders do • Thinking session on what research leaders do • Team and leadership exercises.
	Day 2
	• Running effective team meetings • Demonstration meeting on conflicting demands for academic researchers • Research Team Leadership case study • Personal vision and action planning • Mini-coaching session on leadership profiling report or other delegate-specific issues • Further team and leadership exercises.
	Post-course
	Ideas and output are generated during the plenary sessions on listening and what leadership is, along with output from the thinking sessions on what research leaders do and output from the demonstration meeting on conflicting demands for academic researchers. All of these are compiled and presented to the delegates in the form of a course-specific interactive PowerPoint presentation.
Underpinning philosophy/theory of change	The programme is based broadly around two well-established leadership principles: John Adair's 'action-centred leadership' and Nancy Kline's 'thinking environment', as well as drawing upon other ideas, particularly in teamworking. Case studies are used to illustrate parts of the programme. The programme advocates a pragmatic approach to research team leadership, encouraging delegates to develop and experiment with practical ideas and approaches.
Interesting processes to highlight	A leadership report and profile provides a basis for in-course discussion and a starting point for ongoing leadership development. Thinking pairs are used in a number of the activities to increase the depth of each delegate's reflections and comments. The demonstration meeting is a particularly well-received element of the programme, combining training in meeting processes with useful output for the delegates.

Approach to evaluation and impact	Post-course evaluation is through a delegate questionnaire.
Cost and cost comparison	The cost of the course varies according to whether it is delivered in-house or as an open programme. The cost per head is approximately £400–500 per person per day.

Common Purpose Navigator case study: trainee level (future leaders)[14]

Programme title	Common Purpose Navigator
Provider and brief history	Common Purpose is an international, not-for-profit organisation that has been running leadership courses and workshops for more than 20 years. Beginning in the UK and with charitable status it has expanded internationally since its inception and now has more than 30,000 alumni across the government, not-for-profit and private sectors. The mission of Common Purpose is to provide participants with the inspiration, knowledge and connections to help them develop leadership skills for their own organisations and to become more actively engaged in wider society. Common Purpose runs a range of leadership development programmes for young people, early career, established career and advanced career. All learning interventions are targeted at future leaders or established leaders but the scope is wide, drawing in participants from all sectors.
Level of participant (typically)	The focus of this case study is on the Navigator programme which is aimed at future leaders in their early careers. Typically these are graduate entrants with four to eight years' professional experience who have been identified as future leaders. These people may be on accelerated promotion schemes within large organisations, or already in management positions within smaller organisations.
Duration and time commitment	The programme consists of three 'core days' with the whole group (typically around 20 participants), plus additional modules that offer more experiential and/or practical learning opportunities. The total time commitment is between 50 and 60 hours, depending on the modules selected.
Brief summary and key themes	The 'core days' are designed to provide participants with the opportunity to explore the role that power, courage and resonance play in effective leadership. The core modules are delivered with the

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[14] Information for this case study was obtained from direct participant experience of one of the project team members and through the programme's website: http://www.commonpurpose.org.uk/

	whole group and comprise a mix of seminars (delivered by internal and guest speakers) and facilitated learning from other participants. This core component has both internally focused elements (which encourage participants to examine their personal values and reflect on their professional leadership skills), and more externally focused elements (which explore leadership challenges in various workplaces and communities). Speakers may be drawn from community action groups, large charitable organisations and blue chip companies. In addition to the core days, Navigator provides a number of modules from which participants are invited to select in order to design their own learning opportunities, although all participants are required to select some elements within the 'Raids and 'Forums' modules. The modules are summarised as follows. • 'Raids' – these involve a real-life change management challenge within a public, private or voluntary sector organisation. This is intended to provide practical experience to try out new ideas or frameworks and to broaden participants' scope to learn from practice in other organisations. • 'Forums' – these involve a more conceptual or reflective learning experience, in order to hear from experienced leaders about the failures and successes that they have experienced. It also facilitates group learning through sharing leadership challenges and peer-to- peer coaching, whereby participants explore and consider solutions to individual issues. • 'Quests' – these are an optional part of the course designed to explore social, economic, political and business leadership challenges in a different town, city or country. The range of 'quests' is very diverse and may involve visits to a prison, hospital, shopping precinct, manufacturing plant or transport hub. In addition participants are encouraged to join a virtual network (Net.Connect), which links up participants online to offer, share and ask for advice and opportunities, in order to gain exposure to each other's worlds.
Underpinning philosophy/theory of change	Navigator seeks to change the way that participants view themselves and the world around them through a range of challenging experiences. Participants are taken out of their familiar environment to examine why, when and how to lead. The Navigator vision of leadership is one that is adaptable, distributed and networked, rather than centralised command-and-control. The focus is on experiential learning and facilitated peer-to-peer learning. There is almost no taught component. The seminars that are delivered are primarily designed to expose participants to practical leadership in action, and to reflect on how these may

	change their own paradigm or resonate with their previous experiences. In the longer term, Common Purpose believes that by linking individuals together, it can create the right conditions for ongoing accountability to other participants and a network of potential coaches who can assist with future challenges.
Interesting processes to highlight	Navigator is one component of the Common Purpose portfolio of learning interventions, although the interventions are all discrete elements rather than a sequential package. The experience of participants (based on a sample drawn from the course attended by the author of this case study) can be an intense one through being confronted by a rapid succession of new information and challenging scenarios. For relatively inexperienced professionals the course is deliberately unsettling in order to expose participants to a wider context and the challenges of leadership. The focus on experiential learning requires participants to interpret and process the series of components described earlier in this case study. While there are facilitated sessions to assist participants to make sense of the information received, it relies on participants' ability to adapt what works in one situation to their own context.
Approach to evaluation and impact	Evaluation is primarily through an end-of-course evaluation. There is some accountability to implement the learning derived from the programme through the network to other participants, although as far as we know, there is no evaluation of this process. It is likely that many of the organisations that send people on the Navigator programme conduct three to six-month evaluations.
Cost and cost comparison	The cost of Navigator is £3,500, although a small number of places are discounted for particular organisations. On the basis of 7.5 to eight days of direct contact time, this equates in round terms to £450 per person per day of delivery. This includes some accommodation and meals.

Sector wide case study: leadership and management in the higher education sector

Background and context

Higher education is a major industry sector employing 372,455 people (2007/08), of which 174,945 are in academic roles and 197,515 are in related roles. Nearly 38,000 of these are classified as 'full-time researchers' in addition to more than 107,000 academics at professorial, reader, senior lecturer and lecturer grades. A UK-wide survey in 2000 (funded by the Higher Education Funding Council for England's (HEFCE) Good Management Practice Fund) revealed that up to 70 percent of institutions had no systematic

institutional approach to senior management development. Management qualifications among senior staff were not the norm. A follow-up survey of individual senior managers' experience and expectations of leadership and management development confirmed the general picture. A majority of respondents reported dissatisfaction with the status quo and supported the contention that formal management training was essential for the development of effective senior management in higher education.

In 2003 a dedicated not-for-profit, membership-based organisation was established to respond to a range of challenges facing the HE sector, combined with a history of under-investment in leadership and management development. The case for the establishment of this organisation, the Leadership Foundation for Higher Education (LFHE), rested on four key premises.

1) Higher education institutions are distinct and autonomous institutions with diverse missions and markets. A dedicated foundation was expected to be sensitive to different customer needs and market drivers, as well as to the specific HE context.

2) There was a need to respond to global competition and to collaborate with other sectors to achieve social and economic goals. It was recognised that HE has to work increasingly closely with business, health, other education sectors and international organisations. It was expected that a foundation would have access to multiple sources of expertise and information, and would provide a variety of high-quality products and services for the sector as well as creating new opportunities for institutions and individuals.

3) A foundation in itself would create a higher profile for the roles of leaders, governors and managers in HE, both within and outside the sector. It was expected that it would promote cross-sector dialogue about comparable strategic challenges and opportunities. It was expected that such promotion would generate better understanding across sectors, stimulate joint development opportunities and increase the confidence of stakeholders in the management capabilities of the sector.

4) A foundation could build on existing provision, expertise and commitment in the sector (such as the contribution of the then Higher Education Staff Development Agency, the Association of University Administrators and other professional associations). It could stimulate further demand for leadership, governance and management development by extending the volume, quality and variety of what is available to institutions and individuals.

Today, LFHE has established itself as a major force in transforming the perception of leadership and management in higher education. In its annual report for 2009/10 it highlights a number of the changes which have taken place in its seventh year of operation:

- an annual turnover of close to £6m;
- more than 80 percent of its income coming from fees and fees for services, with less than 20 percent from grant income from its core funders;
- 152 members representing more than 95 percent of HE institutions;

- more than 2,700 people participated in its in-house and open programmes;
- publication of a further nine major research studies to add to the 30 or so prior reports.

The core of its activities are a series of open programmes and services for those in leadership roles in higher education. These programmes cover a wide spectrum, from those in research leadership roles (research team leaders, the subject of a specific case study above) to those in strategic roles (the Top Management Programme, also the subject of a specific case study above). A more detailed review of the background and processes leading to the establishment of the LFHE can be found in Middlehurst (2007).

Interesting processes to highlight

Four areas of potential interest are suggested for consideration.

First, as with the NIHR, the LFHE approach to leadership development recognises the need and value of operating at a number of levels, from those in governance roles to those on the first rung of their leadership journey. The inclusion of work at the very senior roles involving vice chancellors and chairs of boards is an interesting and important level. In the first case, the programme for vice chancellors provides a confidential 24-hour residential opportunity for a small number of leaders to meet and explore transitions at a personal, institutional and sector or system level. This is followed by a similar format event with chief executive officers (CEOs) from other sectors. In the latter case a similar intensive 24-hour event is held, where pairs of vice-chancellors and board chairs meet with fellow pairs to explore the roles, relationships and results expected of governors in the changing context of HE.

Second, the inclusion of an active research and development strand to the LFHE's work has added considerable academic credibility to its work. The projects funded are highly focused on the reality of leadership in the context of HE with a mix of literature reviews, empirical studies of careers and succession planning, to more developmental projects concerned with the composition and challenges facing top teams in higher education institutions.

Third, LFHE has a growing and extensive network of links with partner organisations in other countries and an extensive suite of international activities. Some of these are integrated into existing open programmes, some are highly focused to support the international agenda for UK higher education, and others are separate open programmes (eg the International Leadership Development Programmes). In 2012, for example, two of these short four to five-day events will take a group of 14–16 people on a tailored visit to Chicago and the Mid-West states of the USA to explore business–research interactions, and to Hong Kong and mainland China to investigate the changes in HE provision in China and its influence on HE in Hong Kong.

Finally, one of the lessons of LFHE's experience relates to its influence as a policy intervention. The establishment of a foundation (or individual leadership intervention) in itself is insufficient to bring about a significant collective change in behaviour. It has a role to play, but unless a range of other systems and policy agenda are connected in a multi-layered and multi-level manner, then the impact of single policy intervention is significantly reduced.

Sector wide case study: leadership and management in the civil service[15]

Background and context

The UK employs 513,000 civil servants, of which nearly three-quarters are employed outside of London and South-East England. Women constitute more than half of the Civil Service workforce. Civil servants work in three types of organisations: departments, agencies which carry out some of the executive functions of department policy, and non-departmental government bodies that include watchdogs, tribunals, experts and organisations carrying out executive, administrative, regulatory or commercial functions.

The leadership training for civil servants is carried out by the National School for Government, which has been part of the Cabinet Office since 2011 (it was made independent for a period of time). The mission of the School is to build the overall capability and effectiveness of the Civil Service. Based at Sunningdale, the School also includes a research institute called the Sunningdale Institute.

The National School for Government provides courses on a range of topics, including policymaking and strategy, management development, business and financial management, etc. It provides two core streams of training for leadership development.

1) The first core training stream supports the government's Fast Stream programme. This recruits promising individuals to join the Civil Service in an accelerated promotion programme that allows them to put their leadership potential into practice quickly. It describes itself as a 'talent management' programme.
2) The second core training stream support civil servants' further development at the middle and senior management stages. It includes four programmes:
   a) leadership skills for middle and senior managers
   b) leadership skills for Grade 6/7
   c) leadership for senior civil servants
   d) board member development.

Some of the courses are residential at Sunningdale, while others are provided from London.

Overview of the training streams

The training streams are all built around equipping civil servants with the ability to build the required knowledge, learn core interpersonal skills and develop the ability to reflect and learn from practice.

At different stages, different objectives are relevant. For example, building the required knowledge is relevant when entering a new field. As such, it appears in the Fast Stream and board management training programmes only. The training programmes relating to middle and senior management do not have this knowledge-building element, as their students are not new to their field of work.

Similarly, at different stages, the emphasis of the programme can change: at the middle to senior management levels the emphasis is on building the ability to reflect and learn from

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[15] Sources: the Civil Service, http://www.civilservice.gov.uk/, and the National School for Government, http://www.nationalschool.gov.uk/

practice, while at the senior management level it is on helping individuals further their learning in areas which they find particularly challenging.

Key pedagogical processes
A number of pedagogical processes appear to be key.

- Interactive small groupwork: almost all courses revolve around this. It favours the development of an ability to self-reflect and learn. Arguably, it also enhances teamworking skills.
- The 360-degree feedback method appears to be one of the preferred methods of feedback.
- At the more senior stages, workshops help individuals work together to further the learning that they can derive from their experience.

Time commitment and cost
The preferred length for leadership courses for the Civil Service appears to be two to three days, for an estimated median cost of approximately £500. This cost is driven upwards significantly when guest speakers are invited.

Some programmes are lengthier, often involving a mix of on-the-job training and one-to-one mentoring. These programmes tend to be focused on the application of theory and reflection on practice, and in this way complement the rest of the courses which introduce students to issues and techniques to manage with these issues.

Brief summary of the training streams

The Fast Stream programme
Overview. The Fast Stream programme is an on-the-job training programme which aims to develop leaders for the Civil Service from their entry at junior level. The programme typically lasts four to five years, depending on individual performance. There are a range of Fast Stream programmes that seek to train leaders in analysis, human resources, technology, European policy, Northern Ireland policy, Whitehall, parliament, science and engineering and the Diplomatic Service.

Key pedagogical processes

1) An induction event introduces the individual to the organisation in which they are employed.
2) Individuals are encouraged to learn on the job.
3) This on-the-job learning is facilitated by formal teaching which aims to develop self-reflection and learning skills as well as general leadership skills (eg communication, organisation, etc.).
4) Annual performance reviews ensure timely feedback for continuous development.
5) Depending on the Fast Stream programme in which an individual is placed, individuals may be supported financially to acquire the relevant professional qualifications.

The formal teaching (key pedagogical process 3) covers the following topics:

1) Understanding parliament, government and the Civil Service
2) Personal productivity and effectiveness
3) Communicating with impact, with ministers and senior officials

4) Leadership and strategic thinking.

Each department also provides a course to help civil servants familiarise themselves with its work. In the Ministry of Defence, for example, this is a six-week residential course.

Time commitment and cost. The courses which support the formal learning part of the Fast Stream Programme typically last between one and three days, and their cost varies from approximately £100 to £1,500.

Programme for leadership skills for middle and senior managers
Overview. This programme introduces civil servants to core leadership and influencing skills. It also addresses the role of women in leadership specifically, offering two courses exclusively for and about women in the Senior Civil Service.

Key pedagogical processes

1) 360-degree feedback
2) Neuro-Linguistic Programming (NLP)
3) Formal teaching
4) Interactive small groupwork
5) Networking.

Time commitment and cost. The courses typically last three days and cost approximately £120.

Programme for leadership skills for grade 6/7 entrants
Overview. The courses that fall under this programme focus mainly on developing an awareness of styles and the ability to learn from reflection.

Key pedagogical processes

1) 360-degree feedback
2) Interactive small groupwork
3) Real-life experience sharing.

Time commitment and cost: Most courses last two to three days and cost approximately £100–£300. There are a few exceptions:

- the two-day Explorer programme, which includes guest speakers, costs just under £1,000;
- two six-day programmes, the Sunningdale Leadership Programme and the Northern Lights Leadership Programme, which cost approximately £3,000 each; and
- as part of the set there are also two 12-month programmes consisting of one-to-one personalised mentoring as well as peer feedback. These programmes involve up to 12 days of formal courses in addition to mentoring, and cost approximately £10,000.

Programme for leadership skills for senior civil servants
Overview. These courses in leadership for senior civil servants are an opportunity to combine some of the aspects addressed in the earlier programmes. For example, there are courses to enhance knowledge about leadership skills as well as to enhance personal

reflection and change. However, it aims to be more specific to individual needs, assuming that individuals are already equipped to identify their needs effectively.

Key pedagogical processes. New pedagogical processes are introduced in this programme alongside the ones used in earlier courses. This reflects the change in focus of the programme.

Some of the new processes include:

1) Presentation and other communication exercises
2) Workshops
3) Psychometric testing.

The pedagogical processes which are maintained from earlier programmes include in particular interactive small groupwork, networking and real-life experience-sharing.

Time commitment and cost: These courses vary from one to five days (averaging about three days) and cost from £300 to £5,000 when guest speakers and experts are brought in to address the group.

Programme for board member management
Overview. The board management programme is aimed at senior executives. The programme focuses on teaching core board management practice in, for example, accountability, auditing and regulations. The programme also introduces students to the role expected of executive and non-executive board members, and helps them develop relevant skills in the areas of influencing, effectiveness, evaluation and communication.

Key pedagogical processes. These include interactive small groupwork and workshops.

Time commitment and cost. The courses last a day, typically costing approximately £500.

Approach to evaluation and impact
The National School of Government has defined a scorecard with four main objectives, in conjunction with the Senior Civil Service. These objectives are specified with a list of targets, however it is unclear who determines whether the objectives have been met. There has been a recent strategic re-evaluation of the School since, as mentioned previously, it is only since 2011 that it has returned to being part of the Cabinet Office.

Appendix D: Monetary comparisons across the benchmarking case studies

Table 2: Monetary comparison across the benchmarking case studies

Programme	Duration	Cost	Caveats/comments
Top Management Programme	19–20 days	£13,800 course fee £700 per person per day	Inclusive of residential fees, exclusive of travel
Higher Command and Staff Course	15 weeks full time (75 days)	£6,500 course fee (UK); £38,000 course fee (overseas) £86 per person per day (UK) £506 per person per day (overseas)	Includes residential fees
NIH Senior Leadership Program	10 days over 3 months	£4,464[16] ($7,060) course fee £446 ($706) per person per day	Includes 3 days of residential fees
The King's Fund Leadership Programme	25 days over 6 months	£9,000 course fee £360 per person per day	Includes some residential fees
Research Team Leadership	2 days	£400–500 per person per day	
Common Purpose Navigator	7.5–8 days	£3,500 course fee £450 per person per day	Includes some residential fees
NIHR Leadership Programme	18 months[17]	£860,000 per year (cost to DH) £7,500 per person	Difficult to determine daily cost because of its bespoke nature

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[16] Exchange rate of 1.58 has been used.

[17] As noted earlier in the report, the trainee leader programme is the only one with a clear endpoint at the end of 18 months; the end points for development and senior leader programmes are not as clearly defined and some participants we spoke with felt they had been engaged in the programme for its entire duration of three years.