Evaluation of the NHS R&D NW InRes: Introduction to Research online pilot programme

Executive Summary

This report presents the evaluation of the 'InRes: Introduction to Research' online pilot programme. Developed by NHS Research and Development North West (NHS R&D NW) in collaboration with the University of Liverpool (UoL), InRes was designed as an online alternative to the Early Career Researcher Development Pathway (ECRDP), in alignment with the health system's wider digital agenda.

The programme supported nurses, midwives and allied health professionals to explore their potential as researchers, build core skills and competencies, and begin engaging with future leadership roles. Learning outcomes centred on critical evaluation of research, leadership, reflective practice, networking, and early career research skills, and were aligned with the University of Liverpool's Level 7 requirements, although not formally accredited. Sixteen practitioners took part.

The InRes pilot ran from October 2024 to July 2025, comprising 10 online workshops structured around the Vitae Researcher Development Framework (RDF), 8 group coaching sessions, one-to-one mentoring, and a flipped learning model in which participants engaged with pre-learning materials in preparation for the online sessions. At the end of the programme, participants submitted a reflective portfolio assignment and presented their 5-year career plan at an online celebration event.

The evaluation examined how effectively the programme fostered participant engagement, the wider enablers and barriers to engagement, and the extent to which it achieved its stated aims and learning outcomes. It also provided timely feedback to support ongoing development and refinement of the pilot and to generate practical insights and recommendations for future iterations.

To this end, the evaluation adopted a primarily formative and developmental design, employing a mixed-methods approach drawing on surveys, interviews, and documentary analysis at different stages of the pilot. A programme-specific theory of change and the Online Engagement Framework (Redmond et al., 2018) provided the basis for framing questions, guiding data collection, and interpreting how programme design supported participant engagement, whilst the Vitae RDF was used to structure analysis of outcomes.

The programme was largely successful in fostering participants' emotional engagement. A strong sense of psychological safety was established early and deepened over time, enabling participants to feel supported, take part in discussions, and gradually build confidence to share more openly in larger group settings. Coaching groups were particularly effective in reinforcing this safety, combining social connection with emotional support, whilst inclusive facilitation and activities such as MBTI further encouraged openness and trust. The online format also offered some participants a safe and flexible environment, although for those joining sessions from their workplace, the lack of a confidential space occasionally constrained their ability to contribute.

Managing energy levels emerged as a challenge, with afternoon fatigue noted in the early workshops, but this did not undermine overall motivation. Interactive and creative activities helped re-energise participants and sustain focus, and full-day sessions were valued for supporting immersion, with suggestions of half-day formats likely to reduce fatigue, but risk reducing the depth of engagement. By the end of the programme, participants reported high levels of enjoyment, satisfaction and enthusiasm, reflecting a supportive and motivating environment that underpinned their engagement.

The programme was generally successful in fostering behavioural engagement, though experiences varied across its different elements. Engagement with pre-learning materials was mixed. Whilst most participants valued the pre-learning as preparation for meaningful workshop participation, completion was uneven and influenced by timing, workload pressures, and the volume or complexity of content. Materials were most effective when clearly relevant, accessible in format, and released in good time, with engagement strongest when preparatory tasks were essential for workshop activities.

Participation in the online sessions was strong overall, with high attendance, adherence to ground rules, and positive responses to varied interactive activities that supported active learning and maintained interest. Creative methods enhanced behavioural engagement for many by making sessions more enjoyable and stimulating, though a minority found some activities uncomfortable and/or not clearly relevant to their learning. Assignment completion provided further evidence of sustained engagement, with most participants finding them useful for consolidating learning and extending their development and all bar two participants submitting their work. Overall, behavioural engagement was strongest when tasks felt purposeful, formats were varied, and the rationale for activities was clear.

The programme fostered collaborative engagement through a range of mechanisms, though effectiveness varied across settings. Small-group discussions were consistently valued as inclusive spaces that encouraged contribution and interaction, with many participants identifying them as one of the most useful aspects of the programme. Their success, however, depended on group dynamics, preparation, and clear structure, with uneven participation and limited facilitator input sometimes constraining the depth of discussion. Whole-group discussions were less consistently engaging. Whilst these discussions offered opportunities to share perspectives and build peer learning, some participants were hesitant to contribute, reflecting personal anxieties and initial unfamiliarity. These forums worked best when carefully structured and inclusively facilitated, with alternative ways to contribute such as through using the chat function, although this needed to be well-integrated to avoid distraction or marginalisation.

Coaching emerged as one of the programme's strongest vehicles for engagement, offering protected and supportive spaces that fostered reflection, confidence, peer learning, and meaningful relationships. Mentoring was also valued, but experiences were more uneven. Whilst some participants benefited significantly from guidance on career planning, confidence, and access to networks through their mentors, others struggled to establish effective relationships, citing issues such as mentor availability, unclear expectations, or lack of confidence in seeking support. Clearer guidance and earlier support were identified as important for strengthening mentoring in future iterations.

Social engagement developed gradually over the course of the programme, supported by early induction activities and strengthened through small-group discussions and, in particular, the coaching groups, which created the strongest sense of community. Participants explained that the structured yet supportive nature of the coaching groups encouraged openness, which in turn fostered trust, deeper connections, and collaborative learning. This dynamic helped make coaching one of the most effective spaces for building both social and collaborative engagement in the programme, with many expecting relationships to extend beyond the programme. However, outside of the coaching groups, the online format limited the informal "in-between" moments that often build rapport in face-to-face settings, meaning relationships generally took longer to develop. Attempts to create informal online spaces, such as a Canvas "common room" and a WhatsApp group, saw little uptake, suggesting that such platforms need clear purpose, early introduction, and active facilitation if they are to succeed. Incorporating face-to-face elements, particularly early in the programme, is also likely to accelerate trust-building and community formation.

Cognitive engagement developed unevenly across the programme. Early on, some participants were unsure how workshops related to the programme's overarching aims or the Vitae RDF, which at times made it harder to integrate ideas across sessions. By the end, all participants reported a clear understanding of the programme's purpose, although links to the RDF remained less evident. Alignment with individual aims and expectations was also mixed. Many found the content relevant and came to view personal development and self-awareness as integral to becoming a researcher, whilst a minority continued to want greater emphasis on research methods and critical appraisal. These differences often reflected prior experience, with some seeking more advanced, research-focused challenge and others gaining greater value from the reflective and developmental elements.

Reflection, however, was consistently valued for consolidating learning, connecting ideas between sessions, and applying insights to professional development. Guest speakers and real-world examples further enhanced accessibility and relevance, strengthening both cognitive and emotional engagement. Critical thinking was also supported, particularly through reflective inquiry and exposure to different research paradigms, though experiences varied. Some participants felt opportunities for structured debate and deeper analysis were limited, leaving them less challenged than they had hoped.

Future iterations would benefit from clearer early signposting of aims, closer integration of the RDF, and more explicit framing of how personal development, research skills, and different forms of critical inquiry are intended to work together.

A range of wider factors influenced participants' engagement and the effective delivery of the programme. Technology was generally not a barrier, with high levels of digital confidence and proactive support helping participants navigate new platforms. Canvas was widely regarded as intuitive, but experiences with Miro were more mixed. Induction activities were important in building familiarity with the technology and addressing any issues upfront.

Workspace conditions also shaped engagement. Participants joining from busy professional settings sometimes faced distractions and limited privacy, which constrained their ability to focus and contribute fully. More broadly, professional demands were a recurring challenge for some, with competing responsibilities limiting time for pre-learning and reducing the depth of participation.

The online format was widely valued for removing travel barriers, reducing stress, and making participation more manageable alongside work, as well as enhancing accessibility for some by easing social anxieties. However, many expressed a preference for a hybrid model that would combine online flexibility with opportunities for face-to-face connection.

Delivery team structure and dynamics were also influential. A small, consistent core team fostered stability and safety, whilst a diversity of professional backgrounds, facilitation styles and guest speakers enriched learning and made it accessible to different preferences. Effective delivery was underpinned by strong leadership, clear roles and responsibilities, and regular planning and reflection, although facilitators noted that strengthening relationships and building a shared vision within such a diverse team required dedicated time and space

With regard to the learning outcomes, the evaluation indicates that InRes made a clear contribution to developing participants' knowledge, skills and confidence as practitioner researchers. Growth in curiosity, openness, and the confidence to ask challenging questions was particularly strong, with creative activities and a supportive environment fostering a more inquiring mindset. Most participants also reported improved confidence in identifying and accessing reliable research sources and in developing research questions from practice-based problems. Critical thinking also improved, with stronger progress in evaluating the components of successful research than in critically appraising research findings, where change was more modest.

Improvements in personal effectiveness was another important outcome. Participants reported increased confidence, self-reflection and enthusiasm for research, though gains in the latter two were less often described as substantial, suggesting some already entered the programme with strengths in these areas. All participants reported some positive change in how they saw themselves as researchers, but shifts were uneven and often modest, underlining that identity formation is a longer-term process.

Professional and career development outcomes were broadly positive. Participants reported stronger confidence in identifying their development needs, planning next steps, and, for some, broadening their view of possible career routes. Networking and collaboration were also amongst the strongest areas of growth, with participants building new connections within and beyond the cohort. Most also expressed intentions to continue engaging in research-related training and development, although a minority were less certain about their future engagement. In addition, confidence in using the Vitae RDF and in pursuing funding or development opportunities was more mixed, pointing to areas where further emphasis may be needed.

Participants also reported notable improvements in communication skills, gaining confidence in presenting research to different audiences and experimenting with creative approaches to share their work. Awareness of the social and cultural context of research also increased. Leadership outcomes, however, were more tentative. Most participants indicated improved confidence in their understanding of leadership and in demonstrating it in practice, but very few described substantial improvements, and shifts in leadership identity remained limited. Whilst the programme helped participants to begin to reframe leadership in collaborative and relational terms, further emphasis and clearer framing will be needed to strengthen leadership outcomes in future iterations.

In conclusion, the evaluation findings were synthesised into a revised theory of change, which captures how the programme's mechanisms fostered engagement, the outcomes achieved, and the wider system drivers shaping delivery. Drawing on these insights, the report then sets out recommendations for future iterations of InRes. These recommendations highlight ways to strengthen engagement across its emotional, behavioural, collaborative, social and cognitive dimensions, to address wider contextual factors that influence engagement and delivery, and enhance the programme's capacity to achieve its intended outcomes.

Discussion

The discussion is structured around the overarching evaluation questions, using the Online Engagement Framework to examine how different dimensions of engagement were fostered, challenged, or constrained during the pilot. For each dimension, the analysis considers both participant and facilitator perspectives, highlighting what supported engagement, where barriers were encountered, and what these findings suggest about the strengths and limitations of the programme's design and delivery. This is followed by a consideration of wider contextual factors that shaped participants' experiences and an analysis of outcomes in relation to the Vitae RDF. Taken together, the discussion explores the effectiveness of InRes in meeting its intended aims as well as the implications for strengthening future iterations of the programme. These insights are synthesised in a revised theory of change, which reflects how the programme's mechanisms supported engagement, the outcomes achieved, and the contextual factors shaping delivery (see Appendix B).

To what extent did the InRes programme's design and delivery foster participant engagement?

This part of the discussion addresses the overarching evaluation question: to what extent did the InRes programme's design and delivery foster participant engagement organised around the five dimensions of the Online Engagement Framework. For each dimension, the discussion explores how the programme supported engagement, the challenges or limitations identified, and what these findings reveal about the strengths and areas for improvement in the pilot's design and delivery.

Emotional engagement

Feeling safe and supported

The findings suggest that the InRes programme was largely successful in fostering participants' emotional engagement by quickly establishing a psychologically safe environment in which they felt supported to participate.

Participants' early confidence in asking questions and taking part in small-group discussions (see 4. 1.3.1) are indicators of an emerging sense of psychological safety, whilst the data showed that confidence to contribute in whole-group discussions developed more gradually (see 4.1.3.2), suggesting that larger group contexts required a stronger sense of safety before participants felt able to speak. This gradual increase in confidence to take part in whole-group discussions suggests that psychological safety was progressively reinforced through repeated interactions. Another indication that this sense of safety strengthened over time was that, by the third workshop, many participants felt able to open up and be vulnerable, while others noted that later in the programme, they felt safe to begin exploring new ideas and perspectives. This process points to the way initial feelings of safety provided the foundation for a "brave space" that encouraged participants to take greater

interpersonal and intellectual risks. For healthcare professionals, this was understood to be particularly significant, as showing vulnerability often sits uneasily with their professional identity.

A number of factors were seen to play a role in fostering this sense of safety, with supportive and encouraging facilitation particularly important in creating the conditions in which trust could develop. Strategies that supported social engagement by enabling people to get to know each other were likely to have been especially important in this regard. The interrelationship between social and emotional engagement in fostering a sense of safety was most clearly illustrated in the context of the smaller coaching groups. Under the facilitation of an experienced coach, several participants described how the coaching groups set up a reciprocal dynamic in which social connection fostered feelings of safety, and that sense of safety in turn encouraged more openness and sharing, which deepened these social bonds. In this way, participants are understood as co-creators of a safe and supportive environment.

Creative methods, such as using 'alter-egos' (e.g. puppets) may also have offered some participants a 'safe' way of showing vulnerability, making social connections and experimenting with new perspectives, although for some they risked undermining safety by triggering negative emotions, particularly if the activity was felt to be too personal. Indeed, this finding points to the importance of building a sufficient level of psychological safety before embarking on some of these approaches as well as to ensure activities are sensitively designed. The MBTI exercise seemed to offer a way of supporting psychological safety by helping people get to know each other and start to share their thoughts, experiences and vulnerabilities in a way that felt constructive rather than intrusive.

Knowing who to contact with questions or concerns, along with reports that the early workshops met individual learning needs, is also likely to have contributed to participants' sense of psychological safety. However, one concern about a delay in releasing pre-learning materials suggests that even minor logistical issues can undermine this sense of support.

In addition, the online format itself helped create a supportive and safe environment for some by allowing them to participate from a familiar setting and use alternative ways of interacting, such as turning off the camera or contributing via the chat function, which, for some, helped them to reduce a sense of social anxiety. However, for those who joined some of the sessions from a workplace setting, the lack of a confidential and private space is likely to have negatively affected their sense of psychological safety in contributing to the workshop. This finding suggests that fostering psychological safety requires attention not just to facilitation and activity design, but also to the wider conditions in which participants take part.

Psychological safety was also reinforced when participants themselves created space for others to contribute, pointing to the way in which peer behaviours play an important role in co-creating safe spaces alongside the facilitators.

Overall, the design and delivery of InRes appears to have been largely successful in fostering participant engagement, particularly by establishing and sustaining psychological safety as a foundation for emotional and social engagement.

Energy and motivation

The evaluation highlights that managing energy levels was a recurring challenge across the initial workshops, with participants and facilitators often reporting tiredness in the afternoons. These fluctuations in energy can be seen as a key aspect of emotional engagement, shaping participants' ability to sustain motivation, interest and behavioural engagement. Interactive and creative activities, including those that involved time outdoors, were consistently valued for their role in re-energising participants. Whilst most respondents felt the overall pace and timing of activities were appropriate, the findings suggest that sequencing a diverse range of activities and incorporating sufficient screen breaks are important strategies for mitigating fatigue and sustaining concentration (see also 4.1.2.2).

Issues of fatigue did not, however, appear to undermine participants' overall motivation or positive emotional engagement with the programme. Across the early sessions, participants described strong feelings of enjoyment, anticipation, and satisfaction. Perceiving the content as relevant to their work and aspirations, stimulating and stimulated by cognitive engagement connecting new learning with their own contexts, was an important factor in sparking motivation and commitment that supported behavioural engagement (see 4.1.5.2).

Full-day sessions were seen to support immersion and focus, whereas half-day formats may ease fatigue but risk reducing that depth of engagement. The evidence indicates that participants' motivation and affective commitment helps them sustain engagement even during demanding sessions, as long as the design is sufficiently responsive to their energy levels.

By the end of the programme, participants' feedback reflected a strongly positive affective response, with the large majority rating the experience as excellent or good. Expressions of gratitude and appreciation indicate that the programme met participants' learning needs and generated enthusiasm.

Overall, the programme was largely successful in fostering emotional engagement by creating a supportive and motivating environment, though some areas could be refined to sustain energy for all participants.

Behavioural engagement

Pre-learning

Engagement with the pre-learning materials provided an important indicator of behavioural engagement, as timely preparation was regarded as a prerequisite for meaningful participation in the workshops. The uneven pattern of completion across the early sessions suggests that while participants became more accustomed to the flipped learning model, sustaining this behaviour over time was more challenging.

Several factors influenced participants' engagement in the pre-learning work. Timing was particularly significant, with earlier release of the materials widely seen as a way to promote better time management and more sustained engagement. Workload pressures and personal responsibilities also constrained the timing and time available for pre-learning, highlighting the broader contextual challenges participants faced in balancing professional, personal, and programme commitments (see 4.2.3). Despite this, most participants reported finding the workload manageable.

Patterns of engagement with the materials reflected different learning preferences. Some participants completed the work well in advance to allow time for reflection, whilst others reviewed it shortly before the session, in some cases due to time pressures. Facilitators noted that this latter approach limited opportunities for deeper engagement, but also acknowledged that flexibility in when participants engaged with the materials made the model more accessible to diverse learners. These insights prompted reflection on how rigidly the timing of engagement in pre-learning should be enforced, and whether alternative structures, such as providing some tasks to be completed post-session, might better accommodate different working styles.

The volume, complexity, and format of pre-learning materials were also barriers to behavioural engagement, especially early in the programme. The reading load for Workshop 1 was seen by many as particularly demanding, which is likely to have contributed to lower completion rates. The complexity of the content also influenced patterns of engagement, with the materials for Workshop 4 viewed as particularly demanding, which may have contributed to the decline in pre-learning completion at that stage.

Some participants reported that working through the reading materials required significant cognitive effort that led some to more superficial engagement, particularly for those with limited recent experience of academic study. By contrast, shorter videos, reflective exercises, and practical "do" activities were described as more accessible and motivating. These findings highlight the need to balance volume and challenge with a mix of formats that can accommodate different learning styles, experience and levels of confidence. These findings may

also have contributed to the relatively modest engagement with the further reading and supplementary resources.

Facilitators suggested that a more differentiated approach to pre-learning could help address these challenges, such as providing clearer explanations and examples for less experienced participants, optional advanced readings for those seeking greater depth, and reflective prompts to support active processing. They also noted the value of introducing pre-learning gradually, as front-loading too much material risked overwhelming participants, undermining confidence, and discouraging engagement.

The findings also suggest that the perceived relevance of the pre-learning to the online workshop was an important, though partial, driver of behavioural engagement. Although the majority of participants felt there was a clear connection, with the materials helping them to prepare effectively for these sessions, feedback indicated that these connections were not always explicit in terms of how the session then deepened cognitive engagement with the content. Where this alignment was lacking, some participants reported reduced motivation to engage fully with the flipped learning model. A similar pattern was evident with the further reading and supplementary resources, since without clearer incentives or stronger links to workshop activities, participants tended to treat them as optional rather than integral to their learning.

The evaluation also points to the role of accountability in supporting behavioural engagement with pre-learning. Participants engaged more consistently when tasks, such as submitting the MBTI questionnaire in advance, were required for the workshop to function effectively, suggesting that embedding essential preparatory activities can encourage higher levels of engagement. Facilitators considered introducing other low-burden requirements, such as short reflective submissions to use in the workshops, but also cautioned that these could create barriers for busy health and care professionals. They therefore emphasised the need to design workshops so that those who did not engage with the pre-learning could still benefit, whilst ensuring that those who had prepared more fully were able to progress. At the same time, some participants saw value in this model as a way of encouraging self-directed learning, suggesting that sustaining engagement also depends on fostering participants' agency and responsibility as adult learners.

Overall, the programme's design and delivery supported behavioural engagement with pre-learning to a moderate extent. Engagement was strongest when tasks were necessary for participation, content was clearly relevant to the workshop, formats were accessible, the workload was manageable, and materials were released in time to support different learning preferences and contexts.

Online session participation

Facilitators reported strong behavioural engagement across the induction and first two workshops, noting full attendance, timely starts, and active completion of individual tasks. Furthermore, the absence of attrition over the course of the programme demonstrated a high level of sustained behavioural commitment. Concerns about behavioural engagement centred on limited verbal contributions in whole-group discussions (see 4.1.3.2), though this was not necessarily taken as a sign of disengagement.

Adherence to the online ground rules was also consistently positive, with participants recognising the value of clear expectations in this regard. Facilitators' reminders to minimise distractions, such as email, were also reported to legitimise participants' focus and reduce guilt about setting aside work tasks.

The design of the workshops played a central role in enabling behavioural engagement. Participants consistently valued opportunities for active learning through dialogue, group work, and interactive tasks, contrasting this favourably with more passive webinar formats. The diversity of activities was especially important, with participants reporting that variety kept sessions stimulating and supported different learning preferences. However, feedback also highlighted the limitations of certain mechanisms, such as the red/green cards, repeated

icebreakers, and an over-reliance on discussion groups, which were less effective in sustaining participation and interest for some participants.

Overall, behavioural engagement in the programme was strong and sustained, supported by varied activities that promoted active learning, maintained interest, and helped ensure inclusive participation.

Creative methods

The use of creative methods was a distinctive feature of the programme and was largely successful in supporting behavioural engagement through active participation. Most participants reported that these approaches enhanced their learning and development, with feedback indicating that they also made sessions more enjoyable and energising, thereby strengthening emotional engagement and sustaining participation.

At the same time, not all participants found these methods equally comfortable or relevant. Some reported feeling uncomfortable and/or uncertain about the purpose of some of the creative activities which limited their behavioural and cognitive engagement. These reactions suggest that while creativity can be a powerful driver of engagement, it can also lead to disengagement if the rationale is unclear or if activities feel disconnected from participants' learning aims. However, the fact that some participants eventually recognised their value suggests that initial resistance can sometimes give way to appreciation once the purpose and relevance of creative methods are understood.

Overall, creative methods proved highly effective in fostering emotional and behavioural engagement, but their impact, for some, depended on clear purpose and framing.

Assignments

Assignment completion also provided a clear indicator of behavioural engagement, with the majority of participants finding them useful for their learning and development. The assignments were variously valued as an opportunity to consolidate and extend learning, push beyond their comfort zones, and encourage critical thinking, whilst others noted that the creative and personal focus made them feel more accessible. Thus, overall, the assignments helped sustain engagement by balancing challenge with accessibility. The two participants who did not complete the assignments does, however, signal a degree of disengagement for a very small minority of the cohort. One participant's comments suggests that the lack of accreditation might be a contributory factor in this regard, although formal recognition does not seem to have been a central driver of engagement overall.

Collaborative engagement

Small group discussions

Participants' reports of active contribution in the early workshops indicate that small-group discussions were effective in fostering collaborative engagement. Early survey data also showed growing confidence to participate in these discussions over the first three sessions. Together, these findings suggest that small groups provided supportive and inclusive spaces that encouraged interaction and built confidence to contribute. Participants consistently rated small-group work as useful and engaging, with many identifying it as the most valuable aspect of the workshops, particularly when supported by clear structure and guidance.

However, participants also highlighted practical challenges with small-group discussions. Feedback pointed to issues of time and timing, with some groups feeling cut short and others left with longer periods that were not always productive. These concerns partly reflected wider challenges in group dynamics, where uneven levels of preparation, openness, and willingness to engage limited the depth of discussion. The absence of facilitators in breakout rooms was also noted as a limitation, as conversations sometimes relied too heavily on a few individuals and missed opportunities for deeper, critical engagement without specialist input. Opinions varied on whether greater facilitator presence would enhance the quality of group work or risk inhibiting participation and

undermining participants' ownership of learning. Nonetheless, there was broad agreement that more could be done to strengthen the cognitive dimension of collaborative engagement in these settings

Overall, small-group discussions played a vital role in sustaining collaborative engagement by providing an inclusive and participatory space for interaction. However, their effectiveness depended heavily on group dynamics and individual preparation. These findings suggest that while small groups are a valuable vehicle for engagement in online programmes, variation in group composition, clearer framing of tasks and roles, as well as strategies to balance participant autonomy with facilitator support would help maximise their collaborative and cognitive potential.

Whole group discussions

Reports of participation in whole-group discussions suggest a more uneven picture of collaborative engagement than in small groups. Whilst many participants felt confident to contribute, this did not always translate into verbal participation, and facilitators often observed hesitancy in this regard. Feedback pointed to personal anxieties, lack of familiarity, and discomfort with large-group interaction as key factors in this reticence. Confidence to contribute to whole group discussions also increased gradually over the first three sessions, indicating that growing familiarity helped lower barriers to engagement.

The online format also appeared to enable and constrain participation in these discussions. On the one hand, some participants valued the chat function and Miro board as lower-pressure entry points into whole group discussions, broadening opportunities for collaborative engagement beyond verbal contributions. On the other hand, participants and facilitators noted that the dynamics of online discussions, such as judging when to talk or managing side conversations in the chat, could restrict the natural flow of conversation. Some facilitators also highlighted the need to integrate written contributions into discussions to ensure these forms of engagement were not marginalised. In this way, facilitation was central in shaping how whole-group discussions unfolded, with direct invitations to contribute, follow-up questions, and encouraging feedback from breakout groups (whether verbal or written) all helping to support collaborative engagement.

However, for some, disengagement from both whole-group and small-group discussions was triggered by an overreliance on this form of collaborative engagement, with practices such as going around the group to invite contributions sometimes feeling time-consuming. Discussions without expert input or clear structure were disengaging for some. When conversations lacked depth or direction, participants' motivation dropped and they became less willing to contribute, highlighting the need to balance collaborative engagement with cognitive challenge to sustain participation.

However, for some, disengagement from both whole-group and small-group discussions was triggered by an overreliance on this form of collaborative engagement. Practices such as going around the group to invite contributions could feel time-consuming, while unstructured discussions without expert input or sufficient depth reduced some participants' motivation and willingness to contribute, underscoring the need to balance collaborative engagement with adequate cognitive challenge to sustain participation.

Overall, whole-group discussions contributed to collaborative engagement by enabling peer-to-peer learning and exposure to different perspectives, but they were less consistently effective in supporting behavioural engagement compared to small-group work. The findings suggest that whole-group forums require careful design, with structured content, inclusive facilitation, and alternative modes of participation to ensure all voices can be heard. More broadly, they point to the importance of building strong social and emotional engagement as a foundation for fostering collaborative engagement in these settings. More broadly, these findings suggest that difficulties in whole-group discussions often reflected anxieties, lack of familiarity, or limited psychological safety, underlining the importance of strengthening social and emotional engagement as a foundation for effective collaborative engagement in these settings.

Coaching

Coaching was highly valued by most participants, creating a space for deeper forms of collaborative, social and emotional engagement. By the end of the programme, all bar one participant agreed that they understood the value and role of coaching in their professional development, with this connection established from early on in the programme. The vast majority of participants also reported that coaching had supported their development as aspiring researchers in a myriad of different ways. The sessions were experienced as protected spaces for reflection, where participants could explore professional and personal challenges, test ideas, and gain insights. Participants variously reported that the groups helped them build confidence, confront imposter syndrome, strengthen resilience, build self-awareness and bolster cognitive engagement with the course. Coaches also identified key themes across some of the groups including managing burnout, career uncertainty, and navigating professional hierarchies.

The coaching groups also played a vital role in building social engagement, which was reciprocally nurtured by fostering strong emotional engagement in an intimate, inclusive and supportive environment. Together, these dynamics created the conditions in which participants reported the strongest sense of belonging and community, with several participants expecting that the relationships formed would extend beyond the life of the programme.

There were, however, some isolated reservations, with some citing logistical challenges and others questioning the relevance of their coaching discussions, suggesting that additional organisational support and more detailed exploration of aims and expectations could enhance accessibility and maximise impact.

Overall, coaching emerged as one of the programme's most effective mechanisms for multi-dimensional engagement. It provided safe and supportive conditions for emotional openness, built confidence, encouraged reflection and cognitive growth, enabled peer learning and collaboration, and fostered networks that extended participants' personal and professional development as practitioner-researchers.

Mentoring

Mentoring was generally experienced as a valuable element of the programme, although levels of engagement and impact varied more widely than for coaching. By the second workshop, all but one participant understood the purpose of mentoring and felt confident in identifying a suitable mentor.

Whilst mentoring was clearly beneficial for many, with most participants reporting that it had supported their development, a notable minority remained uncertain about its value. This mixed picture points to the unevenness of experience within the cohort in terms of establishing and sustaining mentoring relationships.

When mentoring relationships were successfully established, participants reported a wide range of benefits. Mentors helped clarify career direction by supporting career planning and progression as well as opening up broader opportunities to connect with networks and current research projects. These experiences boosted participants' confidence and understanding of their potential as practitioner-researchers.

In contrast, a small number of participants indicated low levels of mentoring engagement variously due to mentor availability, unclear expectations and/or a lack of perceived relevance to their current work. Several interviewees reflected that they would have benefited from clearer guidance on the purpose of mentoring and structured frameworks to guide discussions.

The findings also indicate that relying on colleagues as mentors can be highly effective, as existing relationships provided trust, constructive challenge, and a platform for ongoing collaboration. However, this model also risks uneven access, as participants without suitable colleagues were more likely to struggle in sustaining a mentoring relationship.

Confidence in finding a mentor was mixed, with participants citing barriers such as limited time, uncertainty about who to approach, and lack of confidence in initiating conversations, suggesting a need for greater support in building the skills and capacity to seek out and sustain mentoring relationships.

Overall, mentoring provided significant developmental benefits where relationships were well-matched and clearly structured, but the unevenness of experience suggests scope for improvement. Whilst mentoring was an effective mechanism in supporting collaborative engagement, future iterations may need to provide stronger frameworks clarifying its purpose, earlier support in identifying suitable mentors, and more explicit guidance on how to initiate and sustain these relationships.

Social engagement

Social engagement appeared to build gradually over the course of the programme, with both participants and facilitators noting that early activities played an important role in laying the foundations for connection. Induction activities such as sharing photos, exchanging personal stories, and paired phone calls helped to establish initial rapport, whilst small-group discussions supported the development of these early social ties (see 4.1.3.1).

These results indicate that social and collaborative engagement were closely intertwined. Participants described how active contribution and openness in group work fostered stronger social connections, with coaching groups, in particular, created the conditions for deeper social connection and sense of community (see 4.1.3.3).

However, the online format limited the informal 'in-between' moments, such as coffee breaks, that initiate and strengthen social connections in face-to-face settings. Facilitators also observed that although virtual settings could sometimes foster greater intimacy, relationships generally took longer to develop. In this regard, there was strong support for incorporating face-to-face elements in future iterations, particularly in the early stages to accelerate trust-building and community formation. Mid-point gatherings were also suggested as a way of consolidating connections and sustain momentum, with an in-person celebration event also holding potential to help sustain the emerging social ties.

In response to the limited informal opportunities for social engagement, the delivery team trialled strategies such as creating a Canvas "common room" and encouraging the use of WhatsApp. However, these spaces saw very little use, with participants citing factors such as unclear purpose, limited existing relationships, and discomfort with unstructured exchanges. These findings suggests that the purpose of any informal social platform needs to be clearly framed, introduced early, and actively facilitated if they are to generate meaningful interaction. At the same time, additional online activity risks exacerbating time pressures and screen fatigue, which may limit uptake.

Even with these challenges, the findings indicate that the programme did foster a sense of community with the extended cohort for many participants, further evidenced by their desire to sustain connections beyond its lifetime as a source of ongoing peer support and networking. Others, however, reported limited opportunities to form lasting relationships or regarded community as peripheral to their learning and development.

In summary, the programme fostered meaningful social connections, particularly within the coaching groups, but the online format constrained the informal interactions that help to strengthen social engagement. Future iterations could enhance the sense of community by embedding more purposeful online social spaces alongside dedicated face-to-face elements.

Cognitive engagement

Understanding programme aims

For many, understanding of the programme's aims and their relationship to the content developed only gradually, with uncertainty most evident in the early stages. By the end of the programme, however, all

participants reported a clear understanding of its overall purpose, indicating that the design and delivery were ultimately effective in supporting cognitive engagement. There was, nevertheless, slightly less certainty about how the content aligned with the Vitae RDF.

The findings suggest that it was not always clear how individual workshops or activities connected to the programme's overarching aims, with this lack of coherence sometimes undermining cognitive engagement by making it harder for participants to integrate ideas across sessions and see their relevance to their professional development (see 4.1.5.2).

The Vitae RDF was recognised as a helpful organising framework in this respect, but not always easy to navigate. Suggestions for clearer signposting at the outset, for example, through a simple roadmap, indicates a need for stronger guidance to help participants connect content across workshops and relate it more directly to the programme's overarching aims. At the same time, it was acknowledged that the design intentionally encouraged participants to take ownership of their learning by finding the connections for themselves and applying ideas to their individual context.

Overall, however, InRes enabled participants to develop a clear understanding of its aims and objectives, aligning programme content with a broader framework for researcher development, although more explicit guidance might help participants at all levels of prior experience to make sense of the programme's intent and support more meaningful engagement.

Alignment to participant aims and expectations

By the end of the programme, most participants judged the content to be relevant to their learning and development, with only a small minority offering more neutral responses. This suggests that InRes was largely successful in aligning content and delivery with participants' developmental needs.

In the early stages, some participants were unsure of the value of reflective activities focused on personal development, especially when these felt tangential to their expectations of developing 'hard' research skills. However, many participants also found these activities, particularly the MBTI exercises, insightful and motivating. Over time, a number of participants reported increasing clarity about how these activities related to their professional development, with several coming to recognise personal development and self-awareness as integral to becoming a researcher.

A minority, however, remained less convinced. Some wanted greater emphasis on research methods and critical appraisal and felt the content was pitched below the level they had anticipated. These divergent views, to some extent, reflected differences in prior research experience, with more experienced participants seeking deeper conceptual and critical challenge.

The issue of level was most evident in the research paradigms session, which some participants described as stimulating and highly relevant, while others found it daunting and difficult to connect with their stage of development. These contrasting experiences underline the challenge of pitching content for a mixed cohort. Crucially, the findings also illustrated the role of facilitation in sustaining engagement, with some participants who initially felt confused or uncomfortable reporting that effective support helped them to reframe the experience, identify gaps in their knowledge, and connect the material to their professional development. Participants consistently emphasised the value of guest speakers and real-world examples that helped to ground abstract concepts, make them more accessible, and enhance both cognitive and emotional engagement, regardless of prior experience.

Facilitators observed that when participants perceived the content as relevant, they were more likely to grasp the programme's aims and apply learning to their own research journeys. They highlighted the need to make explicit

how academic researcher skills ("head") and personal development ("heart") were intended to work together, and to clarify differing understandings of 'research' and 'research engagement'.

Overall, the evidence indicates that InRes was largely successful in fostering cognitive engagement through supporting participants to apply the programme's aims and content to their own developmental goals. However, differing expectations across the cohort suggest a need for clearer communication of the programme's aims, approach and level, with more explicit framing of how personal and academic development are interconnected to help ensure that participants consistently see the relevance of the programme to their own context.

Reflection

The findings indicate that reflection was a valued component of InRes, supporting learning, helping participants draw connections between sessions, developing ideas, and applying insights to their professional practice. In particular, the MBTI session was often described as a key moment where reflection supported cognitive engagement, prompting participants to reconsider self-perceptions, build greater self-awareness, and reframe their professional identities, with some linking these insights directly to new confidence and career decisions. This finding suggests that reflective tools such as MBTI stimulate multiple dimensions of engagement, not simply cognitive. At the same time, a small number of participants remained unsure about the purpose of certain reflective exercises, pointing to the need for clearer framing to maximise their relevance and impact.

Facilitators observed that dedicated time for reflection was central to sustaining cognitive engagement, emphasising that slowing the pace, limiting content, and creating opportunities for reflective dialogue and individual inquiry were effective in supporting deeper engagement with the material. One participant further suggested building in more structured reflective opportunities between workshops to aid consolidation and retention of learning.

Overall, reflection emerged as an effective strategy for supporting cognitive engagement, though the evidence suggests that explicit articulation of purpose and varied approaches would help ensure relevance for all participants.

Overall, reflection emerged as a key strategy for fostering cognitive engagement, particularly when the purpose of activities was clearly explained and their relevance to professional development was made explicit. The evidence suggests that using varied approaches and incorporating tools that combine self-insight with practical application, such as MBTI, can also strengthen their relevance and impact across the cohort.

Critical thinking

Although most participants felt that the early workshops provided sufficient opportunities for critical discussion, both contemporaneous and later reflections suggested a more mixed experience. At this stage, curiosity-driven inquiry methods and structured reflection supported some participants' critical thinking by encouraging them to explore new perspectives, question assumptions, and connect ideas to practice. For others, however, the purpose and relevance of these approaches to developing criticality as a researcher were less clear, with some indication that a few participants felt there were limited opportunities for critical debate. Facilitator feedback also expressed concern about the level of critical engagement during these early sessions.

Different understandings of criticality and its role in the programme appeared to contribute to these divergent responses. For some, critical thinking in the programme was supported primarily through self-reflection, examining assumptions, professional identity, and sources of motivation. Others understood criticality as a more externally oriented process, such as appraising evidence or analysing research design. Later in the programme, some interviewees described moving from self-reflection towards more advanced forms of critical engagement, developing awareness of research paradigms and methods, and gaining confidence in applying critical thinking and writing skills to professional and research contexts. Others, however, felt the programme did not sufficiently extend their ability to analyse evidence or engage in debate, with some facilitators echoing these concerns.

Facilitators' reflections further underscored the multiplicity of meanings attached to criticality in the course. Approaches ranged from critical pedagogy to critical self-reflection and the critical appraisal of research evidence. Combining facilitators from academic research and learning and development backgrounds was viewed by some as valuable in integrating self-awareness with critical engagement, framing both as integral to the intertwined personal and professional development that the course aimed to foster. The involvement of experienced practitioner researchers was also seen as important for role-modelling critical skills in practice. Facilitators emphasised that developing criticality requires careful support, including clear explanations, a gradual introduction of ideas, and purposeful activities that enable participants to engage in deeper critical reflection and analysis.

=Overall, InRes supported more critical forms of cognitive engagement through varied routes, particularly in respect to critical self-reflection, and helped many participants build confidence in applying these skills within their professional contexts. At the same time, the evidence highlights limitations in how consistently the programme enabled critical engagement with course content or advanced participants' ability to appraise evidence and engage in debate. These findings suggest that future iterations would benefit from more explicit framing of the programme's approach to criticality, clarifying how critical reflection, appraisal, and inquiry connect to one another and to the overarching aims of the course.

Multi-dimensional engagement

Overall, the programme fostered engagement across all five dimensions, with particularly strong evidence in affective and collaborative areas, and more mixed results in behavioural, social, and cognitive aspects. Design choices that effectively supported engagement for most participants included supportive and inclusive facilitation, small-group formats, coaching, and interactive and creative activities. These created psychologically safe conditions, sustained motivation, and enabled inclusive participation and peer learning.

Behaviourally, engagement during early online sessions was strong, helped by varied opportunities for active learning, with the exception of collaborative engagement in whole-group discussions, which was less consistent. However, engagement in pre-learning proved more uneven variously due to time, timing, volume, complexity, and perceived relevance. Socially, the cohort developed some sense of community, especially via coaching, but the online format limited informal interactions and constrained social engagement. Cognitively, participants ultimately understood the aims of the pilot and found the content largely relevant, with structured reflection supporting deeper engagement. However, early uncertainty about the programme's aims and their relevance to participants' own development, varied expectations about its level, and limited opportunities for critical discussion reduced the extent of cognitive engagement for some.

Taken together, the pilot's design and delivery fostered strong engagement when participants could see clear connections between activities, the overall aims of the programme, and their own development as practitioner researchers. Engagement was weaker where these links were less obvious or when activities gave limited scope for expanding knowledge or developing critical thinking, and where collaborative dialogue was harder to sustain.

What wider factors enabled or hindered the effective delivery of the programme and participants' engagement?

This section considers the role of technology, workspace conditions, professional workload, accessibility, and the facilitation team in shaping programme delivery and participation, examining how these contextual factors both enabled and hindered engagement.

Technology

Whilst all participants had access to the requisite technology, a small number of technical issues and challenges with platform usability affected confidence and, for some, the quality of engagement, particularly in the early stages of the programme.

Technical problems were most common during the induction and first workshop, reflecting challenges with University of Liverpool log-in processes and unfamiliarity with new tools such as Miro. Importantly, these issues were generally resolved quickly with support from IT services or the delivery team and did not constitute major barriers to learning. Facilitators highlighted the importance of setting up accounts in advance and providing clear guidance on how platforms would be used to help mitigate these issues.

Overall, digital confidence was high and did not constitute a barrier to engagement. Induction activities helped build familiarity with the platforms, with Canvas widely regarded as intuitive and confidence remaining strong in using this throughout. In contrast, Miro elicited more mixed responses. Whilst many valued Miro supporting interactive learning, others found it difficult to navigate both early on and later into the programme, which, for some, limited confidence in using this platform. Lower end-of-programme ratings of the VLE were largely attributed to frustrations with Miro.

Overall, InRes was largely successful in supporting participants to engage with the online platforms by providing proactive technical support and guidance, as well as embedding induction activities that built familiarity and confidence. However, experiences with Miro illustrate the tension between its potential to enhance collaborative engagement and issues of usability, which for some constrained behavioural engagement. Future iterations would benefit from critically reflecting on these trade-offs when selecting digital tools.

Workspace

Workspace-related barriers were minimal and declined over the first sessions. However, joining from open professional settings limited privacy and increased distractions, constraining behavioural and emotional engagement for some participants. Those who later joined from home reported greater ease in sustaining focus, demonstrating that workspace conditions influenced participants' ability to fully engage.

Professional demands

Professional demands were a significant factor shaping engagement. Participants in less flexible roles sometimes joined sessions from work, which allowed access but also heightened distraction and reduced focus. There was some reflection that this time would have been easier to safeguard in face-to-face settings, where being physically offsite created clearer boundaries.   Workload pressures also affected pre-learning, with role flexibility influencing when and how much time participants could dedicate to it. Overall, competing professional responsibilities limited the depth and consistency of engagement for some, underscoring the need for organisational support to protect time for fuller participation.

Accessibility

The online format was widely viewed as an enabler of participation by removing travel barriers, reducing stress, and making engagement more manageable alongside professional responsibilities. For some, it also enhanced accessibility, where social anxiety or introversion made online engagement easier. Only one participant reported that technical issues and discomfort with online working outweighed these advantages, though many indicated a preference for a hybrid format to better support social and collaborative engagement.

Delivery team structure and dynamics

Facilitator reflections indicated that while initial nervousness about online delivery was common, confidence grew quickly, supported by an induction that allowed the team to get used to the tools. To this end, some facilitators highlighted the value of additional opportunities to practise and rehearse sessions and establish shared protocols for collaborative, online facilitation. As delivery progressed, the team also identified the need for a virtual 'staff room' to maintain real-time communication during workshops without disrupting the participant experience.

Overall, facilitators felt that working as a small, consistent core team enhanced efficiency and cohesion by fostering trust and continuity. This stability helped support affective and social engagement by creating familiarity and a sense of safety for participants. At the same time, both facilitators and participants recognised the value of diversity within the delivery team. Varied professional backgrounds, guest speakers, and different facilitation styles helped to keep the course engaging and inclusive, while also making it more accessible to different learning preferences. However, one participant noted that too much variation created unpredictability and limited their sense of preparedness. These findings suggest that facilitator consistency can strengthen behavioural and emotional engagement, but that diversity also enriches learning by broadening perspectives and providing multiple entry points into the content. In addition, whilst few people commented on the demographic diversity within the delivery team, a small number of comments suggested that greater ethnic diversity could enhance inclusivity and representation, particularly for participants from underrepresented backgrounds.

Given the team's varied professional backgrounds, some facilitators noted the importance of allowing time and space to strengthen trans-professional collaboration through building trust, exploring differences, and co-creating a shared vision for the course. Clarifying roles and responsibilities, and how these related to each other and to the programme's objectives, were also highlighted as an important part of this process in order to ensure coherent and effective delivery. Strong leadership and regular planning and review meetings were an essential part of supporting and sustaining this collaboration.

These insights highlight that effective delivery depends on individual facilitation skills together with investment in team development and diversity, underpinned by leadership that fosters collaboration, creates a safe and open environment for dialogue, and provides clear direction across the programme.

Overall, the evaluation indicates that wider contextual factors both enabled and hindered programme delivery and participant engagement. Reliable technology, proactive technical support, and a consistent core delivery team created stability and continuity, while diversity in professional backgrounds and facilitation styles helped keep the programme engaging and inclusive. At the same time, workspace distractions, professional pressures, and usability issues with Miro disrupted participation. The online format improved accessibility and reduced logistical barriers, but also limited opportunities for informal interaction. Effective delivery depended on strong leadership, clear roles, and regular planning that built confidence with online tools, alongside time and space to foster trust and collaboration across professional backgrounds.

To what extent did the programme achieve its principal aims and learning outcomes in developing participants' knowledge, skills, and confidence as practitioner researchers?

This section addresses the evaluation question of how far the programme achieved its aim to develop participants' knowledge, skills, and confidence as practitioner researchers. It reviews outcomes across the Vitae RDF domains, highlighting areas of strongest and weaker progress, and considers how these developments contributed to participants' emerging identities as researchers and potential leaders.

In comparing the extent of positive change across the different outcome measures, it is important to note that given the small number of respondents, differences between measures often reflect only one or two participants. Secondly, two participants did not complete all the measures on the post-programme evaluation.

Knowledge and Intellectual Abilities (Domain A)

The programme made a clear contribution to developing participants' research knowledge and intellectual capabilities, although the extent of progress varied across sub-domains.

Growth in curiosity and openness as well as in confidence to ask thoughtful and challenging questions was most widely reported in this domain, indicating that the programme made a substantial contribution to fostering an inquiring mind (A3). Qualitative feedback highlighted that creative activities in particular had helped them to broaden their perspectives and encouraged greater openness, risk-taking, and questioning of assumptions (see 4.1.2.3). A supportive environment that fostered feelings of psychological safety was also identified as an important enabler of developing a more inquiring mindset (see 4.1.1.1).

Confidence in identifying and accessing reliable research sources also increased for most participants, reflecting growth in information seeking (A1). In addition, confidence improved in developing a research question from a practice-based problem (A2 Problem Solving), although a greater proportion reported no change in this area.

With regards to critical thinking (A2), critically evaluating the components of successful health and care research was the area where the greatest proportion reported substantial gains in this domain. Confidence in critically evaluating research findings and assumptions also showed similar numbers of gain, but the depth of change was modest compared with other areas in this domain.

With regards to critical thinking (A2), most participants improved their confidence in evaluating research findings and assumptions, though only one reported feeling much more confident. Several participants noted that they would have welcomed more structured opportunities to practise critical evaluation, highlighting scope to strengthen this element in future (see 4.1.5.4). By contrast, whilst a similar proportion reported improvements in confidence to critically evaluate the components of successful health and care research, a greater share described feeling much more confident, marking this as a particularly significant aspect of growth for some participants.

Confidence in understanding the principles and governance of ethical and sustainable research also increased for most participants, reflecting growth in relation to Ethics, Principles and Sustainability (C1)

Personal Effectiveness (Domain B)

The evaluation indicates that the programme made a substantial contribution to participants' personal development as researchers, in relation to strengthening self-reflection, confidence, and enthusiasm.

Self-reflection (B1) emerged as a clear area of growth, with all bar one participants reporting that they were reflecting more deeply and frequently on their strengths, limits, and learning needs. However, fewer characterised this change as substantial compared with other measures in this domain, suggesting that whilst reflection became more widespread, the depth of change was less marked. Feedback suggested that the reflective activities deepened participants' self-reflection, fostering greater self-awareness and, for some, a stronger sense of agency. In this regard, some describe now beginning to advocate for themselves and voice their views more confidently, laying the groundwork for the broader gains in self-confidence described below.

Confidence to contribute to research was one of the clearest areas of positive change in this domain, reflecting substantial growth in self-confidence (B1). Participants reported feeling more confident about their capacity to engage in research, with several describing the course as a key turning point in helping them to rebuild self-belief and start to consider career options they had previously thought out of reach.

Motivation and enthusiasm for engaging with research was another strong outcome in this sub-domain. Nearly all participants reported renewed or heightened enthusiasm, and qualitative feedback suggested that, for some, this translated into a greater sense of commitment to continuing their research journey.

Development of a researcher identity presented a more mixed picture. Whilst all participants described some positive change, only around half reported significant shifts in how they saw themselves as researchers. Compared with the more consistent growth seen in other measures, this suggests that identity formation is a slower and less uniform process, likely requiring sustained engagement and support beyond a single programme.

Professional and Career Development (Domain B)

The programme appears to have made a strong contribution to participants' professional and career development, though the extent and depth of change varied between measures aligned to this domain.

Confidence to identify development needs and seek opportunities to progress as a researcher was one of the strongest areas of growth within the professional and career development sub-domain (B3). Many participants reported substantial growth, with few indicating no change, suggesting that the programme provided a solid foundation for CPD planning. By contrast, confidence in using the Vitae RDF to plan development was more uneven, likely reflecting varying levels of prior familiarity with the framework and mixed perceptions of its relevance, pointing to the need for stronger support in applying it in practice (see 4.1.5.1). Confidence in career planning and taking ownership of next steps in research development also improved, showing growth in relation to Career Management (B3)

Growth in confidence to apply for opportunities appropriate to their career stage and increases in awareness of funding and development opportunities showed a more moderate pattern of change, although most participants reported some improvement. This result suggests that responsiveness to opportunities (B3) was supported to some extent, but may require greater emphasis in future delivery if participants are to make the most of the opportunities available to them. Even so, participants described broadening their view of possible career routes, with some highlighting aspirations such as clinical doctorates, PhDs, or Associate PI training. For others, growth was linked to broader commitments to equality, diversity and inclusion, or to mentoring and supporting colleagues. Time and organisational support were identified as potential barriers to pursuing these opportunities.

Most participants expressed intentions to continue engaging in research-related training and development, although around a quarter gave a neutral response to this question, suggesting some uncertainty about future engagement.

Measures aligned to networking (B1) and working with others (D1) were amongst the strongest outcomes in this domain. All but one participant reported greater confidence in building and using networks, developing collaborative relationships, and increasing access to supportive networks, with a notable proportion indicating substantial growth in these areas. Confidence in working effectively in teams also showed broadly comparable growth.

Qualitative feedback highlighted that participants were expanding their networks within and beyond the cohort, and in some cases linking these directly to career development. For some, this growth was linked to personal growth, such as greater ease in making connections, stronger self-perception, and feeling that their contributions were valued.

Changes in participants' sense of belonging to a wider learning community was less pronounced than other measures in this domain, likely reflecting the limited sense of connection participants felt outside their coaching groups and pointing to the need for more opportunities to build social engagement across the wider cohort (see 4.1.4).

Engagement, Influence and Impact (Domain D)

Communication methods (D2) were a strong area of growth within this domain, with all but one participant reporting greater confidence in communicating their ideas to different audiences and in using a range of formats and media, with a notable proportion indicating substantial improvements.

Qualitative feedback suggested that increased self-awareness and adaptability, along with feeling "braver" about taking creative risks or showing vulnerability, underpinned these improvements. Presentation tasks were also seen as valuable in prompting participants to experiment with new formats and develop more engaging ways of sharing their research. These findings highlight the programme's success in fostering the skills, confidence and creativity needed to make research accessible and impactful across a wide range of audiences.

In relation to Influence and leadership (D1), a comparable proportion of participants reported greater confidence in reflecting on what leadership involves and in demonstrating it in practice, although fewer described these gains as substantial. Whilst all participants reported some positive change in seeing themselves as someone who could lead or influence research, half of the cohort were more tentative in this regard. This finding suggests that although the programme strengthened participants' understanding and practical confidence in leadership, for many this is not yet translating into a robust leadership identity.

Reflecting on how the programme had supported their leadership development, some participants described now viewing leadership as a process of working with and enabling others. Some also described applying this perspective in practice, for example by adapting their approach to different personalities, using active listening, or supporting colleagues to engage with research. One participant linked their increased confidence in leadership to growth in critical thinking, situating this skill as a key part of being a leader.

Several participants, however, felt that leadership development was less prominent in the programme compared to other areas. Facilitators also acknowledged the challenge of making leadership feel relevant within an introductory programme, where participants are still consolidating their research skills. They reflected on the importance of presenting leadership as a form of agency that can be exercised without formal authority, and of foregrounding relational approaches rooted in collaboration and trust.

These findings suggest that the programme helped participants begin to reframe leadership in more relational and collaborative terms, and in some cases to apply this in practice, however further emphasis and clearer framing may be needed to support participants in building a stronger sense of themselves as research leaders.

Awareness of how research is shaped by, and in turn shapes, wider social, cultural, and environmental factors increased for most participants, with several reporting substantial gains in relation to this measure of Engagement and Impact (D3). Qualitative feedback also highlighted the value participants placed on learning about patient and public involvement (PPI) in the programme, with this being a key area of interest for a number of participants.

Comparison across measures

The results indicate that the programme had its strongest and most consistent impact in building participants' confidence in networking, collaboration, communication, and identifying development needs. These areas saw the widest reporting of positive change and some of the highest levels of substantial change, suggesting that participants experienced both breadth and depth of growth in these domains.

By contrast, while motivation, enthusiasm, and self-reflection were areas in which almost all participants reported improvement, fewer described their gains as substantial. This pattern may suggest that participants already entered the programme with a baseline level of confidence in these areas.

Leadership outcomes present a more mixed picture. Many participants reported positive change in critically reflecting on what leadership involves and demonstrating leadership in practice, but very few experienced

substantial shifts in confidence. In addition, all participants reported some positive change in seeing themselves as potential leaders, but many remained tentative, indicating that leadership identity is still emerging. This suggests that while the programme helped participants to start engaging with leadership, further emphasis is needed to build confidence in this area and support participants to develop a more robust leadership identity.

Other comparatively weaker outcomes, such as confidence in critically evaluating research findings, developing research questions, using the Vitae RDF, and understanding ethics, governance, and applying for and awareness of funding and development opportunities highlight domains where additional emphasis may be needed in future iterations of the programme.

The overall picture, however, is one of clear progress towards the programme's aims. Participants developed greater confidence in their ability to reflect critically on their professional development, contribute to and influence research, and strengthen the skills and competencies required for early career researchers. The programme also supported the development of a stronger researcher identity, with all participants reporting some degree of positive change in this area.

How can the findings be used to strengthen the design and delivery of future iterations of the programme?

The evaluation findings highlight opportunities to enhance the programme's design and delivery in ways that can strengthen different dimensions of engagement and better support the achievement of programme outcomes as follows:

Emotional engagement

- Ensure icebreakers, particularly in the early sessions, avoid requiring overly personal disclosure, instead focusing on activities that gradually build comfort, trust and social connection

- Emphasise the importance of a private workspace in creating psychological safety and enabling open participation (see below)

- Continue using structured reflective tools such as MBTI in the early sessions to build self-awareness and mutual understanding through which people feel more comfortable to open up and share their experiences

- Continue supportive facilitation that concentrates on building psychological safety in the early sessions.

- Make explicit the role of participants in co-creating safe spaces and encourage peer behaviours such as inviting contributions, positioning these as opportunities to develop collaborative leadership skills

- Design early sessions to intentionally build familiarity, psychological safety and confidence in contributing to whole-group discussions (see below)

- Consider half-days for some sessions and ensure sufficient screen breaks and varied activities during full-day workshops to better manage fatigue and sustain energy,

- Incorporate interactive and creative activities, including opportunities for movement or time outdoors, to re-energise participants and sustain motivation.

Behavioural engagement

- Release pre-learning earlier to give participants more flexibility in managing time and sustaining engagement.

- Reduce initial pre-learning reading load and gradually introduce more complex materials to avoid overwhelming participants.

- Provide a diverse mix of formats (e.g., videos, reflective tasks, short readings) to cater to different learning preferences.

- Explore offering differentiated activities and resources to cater for participants at different levels of experience and need.

- Consider post-session tasks for some content, to accommodate different working styles and reduce overload before workshops.

- Strengthen explicit links between pre-learning and online sessions so participants see its relevance.

- Explore light-touch accountability, such as short submissions or Miro board additions that feed directly into the online workshops, whilst avoiding undue burden.

- Continue to design highly interactive workshops, minimising over-reliance on small group and whole-cohort discussion

- Replace less effective mechanisms such as the red/green cards and repeated icebreakers to better sustain attention and engagement.

- Circulate and reiterate shared participation guidelines, including clear guidance on confidentiality, camera and microphone use, and respectful interaction, while balancing this with inclusive practices that accommodate different circumstances and needs.

- Clarify the purpose of creative methods to overcome discomfort and maximise engagement.

Collaborative engagement

- Recognise that participation in whole-group discussions depends on psychological safety and social connection so that early sessions focus on build familiarity and confidence so that contributions increase over time.

- Recognise chat contributions as a legitimate form of participation and engagement, particularly in early sessions when confidence to speak is limited. Strengthen inclusive facilitation by actively integrating these contributions into discussion, for example by designating a facilitator to draw out key points and invite participants to expand on them verbally.

- Strengthen whole-group facilitation by using strategies such as direct invitations, follow-up questions, and structured feedback from small groups to encourage participation, while ensuring inclusivity by, for example, inviting volunteers, rotating group spokespeople, or drawing first on written contributions to avoid putting individuals on the spot.

- Avoid over-reliance on "go-round" formats by adopting approaches that build on contributions and sustain momentum.

- Strengthen whole-group discussions by encouraging critical engagement, linking conversation to key themes, and drawing on expert input where relevant to stimulate deeper engagement.

- Provide flexibility in small-group work by allowing additional time where needed, offering alternative activities for groups that finish early, and creating simple ways to signal to facilitators when they need support or are ready to move on.

- Increase facilitator presence in small-group discussions to guide and support deeper engagement, whilst balancing this with maintaining participant autonomy.

- Vary small group composition to prevent fixed dynamics and encourage wider interaction.

- Assign or rotate simple roles within small groups (e.g. spokesperson, time-keeper, note-taker) to share responsibility and encourage more balanced contributions.

- Offer some flexibility for participants to join groups where shared interests or similar challenges can be explored, supporting more constructive discussion.

- Retain coaching as a core component, but make its aims clearer from the outset, illustrating its value with concrete examples of positive impact to enhance perceived relevance.

- Provide earlier and clearer programme guidance on mentoring, distinguishing it from coaching, with case studies of successful mentoring relationships and criteria for selecting mentors.

- Offer targeted support to help participants build confidence in approaching potential mentors, identify suitable contacts, and address practical barriers such as time, access, and initiating conversations.

Social engagement

- Incorporate face-to-face elements, particularly at the beginning of the programme, to help establish relationships and accelerate a sense of an emerging learning community.

- Introduce structured, purposeful online social spaces from the outset and actively support their use, while being mindful of time pressures and screen fatigue.

- Consider creating opportunities for ongoing social engagement and informal interaction beyond the programme, helping participants to maintain connections and sustain peer support networks.

Cognitive engagement

- Provide clearer signposting and roadmaps to link individual workshops to overall aims and the Vitae RDF.

- Clarify the interrelationship between personal development and professional development as a researcher from the outset.

- Explain how the programme content supports both research skills and research engagement, making clear its relevance for novice and more advanced early career researchers to manage expectations about programme level.

- Expand inclusion of guest speakers to enhance personal relevance and cognitive engagement by making content more accessible, motivating, and connected to practice.

- Make the programme's approach to critical thinking explicit by explaining how different activities (reflection, analysing evidence, debating ideas) fit together and link back to the overall aims.

- Involve more experienced practitioner researchers to role-model critical thinking and demonstrate how reflection, appraisal, and inquiry are enacted in practice.

- Explain the purpose of reflective and critical thinking exercises, showing how they strengthen research skills and support participants in developing their identity as researchers.

- Offer more structured opportunities for critical engagement, including critical evaluation and debate alongside self-reflection.

Programme delivery and context

- Continue to provide proactive IT support and early induction into different technical platforms.

- Reconsider the use of Miro, weighing its benefits against the usability challenges experienced by participants.

- Ensure all materials remain accessible on Canvas throughout the programme to support catch-up, and consider making session recordings available where this will not compromise confidentiality or discourage open contributions.

- Emphasise the importance of a private workspace to enable the participatory style of online learning central to this programme, and work closely with organisations to help protect this time.

- Balance the advantages of online access with some participants expressed preference for hybrid formats by exploring the inclusion of occasional in-person elements (see social connection)

- Maintain a consistent core facilitation team for trust and coherence, while curating diverse facilitation styles and a range of guest speakers to broaden perspectives.

- Explore increasing demographic diversity among facilitators to enhance inclusivity and representation.

- Retain strong leadership and review structures, and provide planning time for facilitators to build relationships across professional boundaries, clarify roles, and strengthen collaboration.

- Provide facilitators with opportunities to rehearse sessions, establish shared protocols for working online, and clarify roles, supporting trust and effective collaborative delivery.

- Create a virtual 'staff room' for facilitator communication and co-ordination during workshops.

Programme outcomes

- Place greater emphasis on making leadership relevant to participants at an early stage of their researcher journey

- Integrate more opportunities for networking and community-building across the whole cohort (including with facilitators)

- Strengthen support for critical thinking and enquiry skills, including evaluating research findings, analysing the components of research and developing research questions from practice-based problems.

- Provide more structured opportunities to practise and apply new skills through hands-on tasks or real-world case studies, so that confidence translates into deeper and more substantial change.

- Offer clearer guidance on applying the Vitae RDF to support development planning.

- Encourage participants to plan how they will sustain their motivation, enthusiasm, and development after the programme ends, for example by linking them to peer networks, mentors, or ongoing training and development pathways.

- Increase focus on building confidence in applying for opportunities appropriate to participants' stage of researcher development, and strengthen awareness of funding and development options to help them progress their research careers.

- Consider giving greater attention to research governance and PPI.

- Support participants to develop a stronger sense of researcher identity by embedding activities that explicitly connect reflective work to professional identity formation.

Initial Theory of Change

Wider context
- **Participant infrastructure:** reliable computer/laptop, internet connection, camera and microphone
- **Organisational support:** release time to participate fully
- **Participant environment:** quiet, private workspace with stable internet connection

Inputs and resources
- **People:** InRes delivery team, external speakers, coaches, mentors, participants
- **Technical infrastructure:** MS Teams, WhatsApp, Miro, Canvas.
- **Programme activities:** Online workshops, asynchronous learning resources (Canvas), group coaching, mentoring, assignments

Mechanisms of change (how change is expected to happen)

The programme draws on the Redmond et al. (2018) Online Engagement Framework to conceptualise the interrelated dimensions of engagement that support learning:
- **Social engagement** (community)
- **Collaborative engagement** (collaboration)
- **Emotional engagement** (curiosity, confidence, safety)
- **Behavioural engagement** (participation)

Leading to and reinforced by:
- **Cognitive engagement** (criticality)

Learning Outcomes (short-term results)

Participants will:

- Evaluate critically the intrinsic and extrinsic factors that are involved in successful health and care research.
- Analyse and evaluate critically the components, application and importance of leadership in a practitioner research environment.
- Reflect critically on the personal and professional development requirements of becoming a healthcare research leader.
- Demonstrate and apply newly acquired knowledge related to networking and its impact on health and care researcher effectiveness.
- Identify, understand and begin to develop the knowledge and intellectual skills in research appropriate to early career, health and care researchers.

Intended Impacts (longer-term results)

Individual impacts:

- Developing a research career (e.g., internships, in-practice fellowships, pre-application funding, HCP credentials, research ambassador roles).
- Progression to doctoral studies or leading research projects.

Organisational impacts:

- Enhanced research culture.
- Improved staff retention.
- Increased research activity.

System-level impacts:

- Better patient and healthcare outcomes through improved research capacity.

Broader system drivers

- **Policy and strategy**: NHS Long Term Workforce Plan; professional development strategies prioritising research capability; post-COVID digital strategy and system-wide digital agendas.
- **Evidence base**: clear links between research, patient outcomes, and staff recruitment/retention; positive impact of ECRDP on researcher capability and capacity.
- **Equity and access**: demand for more flexible, accessible programmes to reduce barriers (e.g. release time).
- **Scaling and efficiency**: extend reach and deliver cost-effective workforce development.

Revised Theory of Change

Wider context
- **Participant infrastructure**: reliable computer/laptop, internet connection, camera and microphone.
- **Organisational conditions**: organisational support and role flexibility make it easier to balance participation with work responsibilities.
- **Participant environment**: quiet, private workspace with stable internet connection.
- **Online format**: increases accessibility by removing travel barriers, reducing stress, and supporting those with social anxieties. Hybrid models likely balance accessibility with stronger social and collaborative engagement.

Inputs and resources
- **People**: InRes core facilitation team, external speakers, coaches, mentors, participants.
- **Management:** leadership, clear roles, regular planning and coordination (e.g. a virtual staff room).
- **IT support:** Proactive IT support and induction activities
- **Technical infrastructure**: MS Teams, WhatsApp, Miro, Canvas.
- **Programme activities:** interactive workshops, asynchronous pre-learning, group coaching, mentoring, assignments.
- **Methods:** Creative and interactive activities

Mechanisms of change (how change happens)
The programme draws on the Redmond et al. (2018) Online Engagement Framework, where dimensions of engagement are interrelated and mutually reinforcing:

- **Emotional engagement (curiosity, confidence, safety, motivation)**
  - Online interaction options (e.g. chat, camera use) can reduce anxiety and enhance psychological safety,

- Supportive facilitation, reflective tools and peer behaviours reinforce psychological safety, building confidence and motivation.
- Consistency in the core facilitation team fosters familiarity and stability, creating safe conditions that build participants' comfort, confidence, and trust.
- Coaching groups strengthen emotional engagement by providing safe spaces for openness.
- Ensuring relevance to participants' goals sustains motivation and commitment.
- Varied, interactive, and creative activities help re-energise participants and sustain curiosity.
- Balanced pacing, breaks, and session formats help manage fatigue while maintaining immersion.
- A supportive and motivating environment fosters enjoyment, satisfaction, and enthusiasm.
- IT support and induction builds digital confidence and reduces barriers.

- **Social engagement (community)**
  - Induction, small-group work, and coaching foster early connections.
  - Psychological safety supports openness and trust, which in turn strengthen social bonds.
  - Coaching groups reinforce community by combining social connection with emotional support.
  - Inclusive facilitation and reflective tools encourage sharing and deepen connections.
  - Opportunities for informal social interaction online require purposeful design and active facilitation.
  - Early face-to-face or hybrid elements are likely to accelerate trust-building and community bonds.

- **Collaborative engagement (working with peers, coaches, mentors)**
  - Enabled through small-group discussions, coaching, and mentoring.
  - Coaching provides protected, supportive spaces that foster peer learning, reflection, and collaboration.
  - Effective whole-group facilitation integrates chat contributions, avoids over-reliance on "go-rounds," and uses structure and expert input to sustain engagement.
  - Mentoring is most effective when supported early with clear frameworks, guidance, and help identifying suitable mentors.

- **Behavioural engagement (participation and preparation)**
  - Evidenced through attendance, adherence to norms, pre-learning, and assignment completion.
  - Sustained engagement with pre-learning depends on early release of materials, appropriate level of challenge, and diverse formats (readings, videos, reflective tasks) support sustained engagement.
  - Clear alignment between pre-learning and workshops sustains intrinsic motivation for participants to complete the work
  - Accountability mechanisms (e.g. preparatory tasks feeding into workshops) reinforce extrinsic motivation.
  - Creative methods and varied activities sustain participation when their purpose and relevance to the learning objectives is clear.

- **Cognitive engagement (criticality and reflection)**
  - Strengthened when participants integrate ideas, question assumptions, and apply learning to practice.
  - Clear purpose, framing, and explicit links between workshop content, programme aims, and the Vitae RDF help participants integrate learning and understand its relevance.
  - Structured reflection consolidates learning and supports researcher identity development.
  - Explicit framing of critical thinking (reflection, evidence appraisal, debate) clarifies its role and supports deeper inquiry.
  - Guest speakers and real-world examples enhance accessibility and relevance.

- Alignment with participants' prior experience and expectations is important, with some requiring more challenge.

Learning outcomes (short-term results)
Participants increase confidence and capacity in:

- critically evaluating factors in successful health and care research.
- developing an emerging understanding leadership in practitioner research and how it can be applied in practice.
- reflecting critically on personal and professional development needs.
- networking, collaboration, and recognising their role in research careers.
- building early-stage research knowledge and intellectual skills to support progression as practitioner-researchers.
- sustaining motivation, and enthusiasm for research engagement.
- strengthening self-awareness and reflective skills
- gaining awareness of career development pathways and beginning to plan next steps.
- communicating clearly to diverse audiences using different media and styles
- recognising the wider social and cultural context of research, including patient and public involvement.
- forming an emerging researcher identity

Intended impacts (longer-term results)
Individual
- Progression in research careers (e.g. internships, fellowships, doctoral studies, research ambassador roles).
- Increased agency and confidence to pursue opportunities.
- Development of stronger researcher and leadership identities over time.

Organisational
- Strengthened research culture and integration of research into practice.
- Improved staff motivation, retention, and career satisfaction.
- Increased organisational capacity for research activity.

System-level
- Improved patient and healthcare outcomes through enhanced research capacity.
- Stronger communication and public engagement in research.
- More equitable access to practitioner-researcher development opportunities.

Broader system drivers
- **Policy and strategy**: NHS Long Term Workforce Plan; professional development strategies prioritising research capability; post-COVID digital strategy and system-wide digital agendas.
- **Evidence base**: clear links between research, patient outcomes, and staff recruitment/retention; positive impact of ECRDP on researcher capability and capacity.
- **Equity, diversity, and inclusion:** demand for flexible and inclusive programmes that reduce barriers (e.g. release time) and strengthen representation in research and professional development.
- **Scaling and efficiency**: extend reach and deliver cost-effective workforce development.