

Psychologically Informed Collaborative Conversations (PIC-C)

Final Report

June 2021



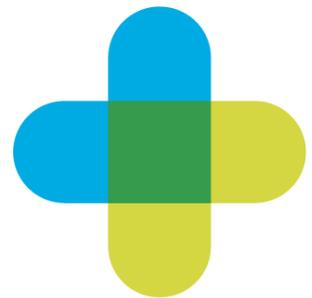
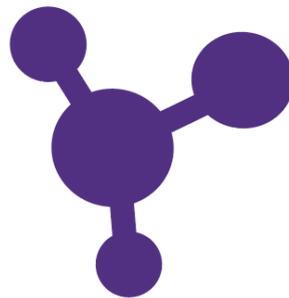
Contents

Executive summary	4
Introduction	6
Chapter 1	7
Pain and Psychological Wellbeing	
Why is this important?	7
Chapter 2	8
Background	
Phase 1: Identifying a testing opportunity	8
Phase 2: Project timeline	8
Chapter 3	9
Introducing PIC-C	
Chapter 4	10
Approach and method	
Developing training content and course design	11
Chapter 5	14
Findings	
Existing pain management knowledge pre-PIC-C training	14
Changes in practice throughout PIC-C training	14
Changes in confidence, anxiety and workplace attitudes	16
PIC-C content and structure	18
Chapter 6	23
Impact of COVID-19	
Chapter 7	24
Future spread and adoption	
Recommendation	24
Chapter 8	26
Conclusion	
Chapter 9	28
Appendices	
Chapter 10	34
References	

About

The Health Innovation Network (HIN) is the Academic Health Science Network (AHSN) for south London, one of 15 AHSNs across England. As the only bodies that connect NHS and academic organisations, local authorities, the third sector and industry, we are catalysts that create the right conditions to facilitate change across whole health and social care economies, with a clear focus on improving outcomes for patients.

This means we are uniquely placed to identify and spread health innovation at pace and scale; driving the adoption and spread of innovative ideas and technologies across large populations.



Executive Summary

In 2020, the Health Innovation Network (HIN), in partnership with St George's Hospital NHS Foundation Trust, Kingston Hospital NHS Foundation Trust, the Physiotherapy Pain Association and Duke University, USA secured funding from Q Improvement Lab, a Health Foundation Initiative, to test innovative ideas to improve care and services for people living with pain.

It is recognised that a proportion of people presenting to health professionals with pain will have moderate to very high levels of psychological distress, impacting on their ability to adjust to and manage pain. A review of relevant literature and research with physiotherapists identified a training gap and need to upskill and improve physiotherapist confidence in exploring and supporting the psychological health of patients presenting with pain.

Prior to this project, the Physiotherapy Pain Association had piloted an eight week 'psychologically informed practice' online course and collaborated with the project team to redesign and enhance this course for delivery with Musculoskeletal (MSK) physiotherapists, leading to the development of **Psychologically Informed Collaborative Conversations (PIC-C)**. PIC-C was co-created with patients who were equal members of the project team, involved in reviewing, critiquing and contributing to content.

About PIC-C

PIC-C is an evidence based online training and supervision programme to help physiotherapists increase their confidence in delivering psychologically informed care and support to patients presenting with pain. Its design is based on four key themes:

- building a therapeutic alliance;
- reducing perceived threat of pain;
- reconceptualising pain beliefs and somatic experience; and
- fostering self-efficacy for pain control.

The course consisted of an eight week (1.5 hours per week) modular teaching block followed by eight weeks of (1.5 hours per week) supervision, facilitated by a Highly Specialist Clinical Psychologist and Highly Specialist Physiotherapist with expertise in working with people living with pain.

PIC-C was tested with 38 physiotherapists. Evaluation two weeks after completing the course showed:

- A **reduction in physiotherapist anxiety and increased confidence**, with 100 per cent of respondents stating PIC-C had a positive impact on their confidence in delivering psychologically informed consultations.
- A **change in practice** in using psychologically informed strategies and techniques with patients as participants progressed through the training. The biggest change observed was that physiotherapists attended more to the therapeutic alliance. Pre-PIC-C, 19 per cent of participants stated that they focused on 'developing a therapeutic alliance' as a standard part of their practice. Post-PIC-C, this increased to 81 per cent of participants.
- Participants who completed PIC-C reported significant improvements in their work-related wellbeing. For example:
 - 100 per cent of participants reported increased **resilience** following the training.
 - 96 per cent of participants reported that the training had increased their **compassion for others**.
 - 93 per cent stated that participating in the training had increased their overall **work satisfaction**, with 50 per cent of participants reporting that the training had reduced their **work-related fatigue**.

Participants **valued the supervision element of the programme**, with participants recognising this was a unique benefit of the course offer. Having protected time to discuss the practical application of techniques learned (including complex cases) helped embed learning and strengthened relationships with colleagues.

Presently, there is no similar learning programme available to physiotherapists in the UK. This evaluation shows that on practitioner's self-assessment, PIC-C upskills physiotherapists in delivering psychologically informed consultations. Its content will be relevant to a wider range of health professionals and we therefore recommend PIC-C is further iterated for other groups and evaluated. It could be made available to health professionals as a stand-alone programme or incorporated into wider educational learning packages e.g. postgraduate courses. We also recommend PIC-C secures accreditation to satisfy quality control and continuing professional development requirements and recognition for Advanced Clinical Practice.

Introduction

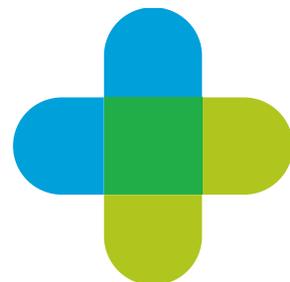
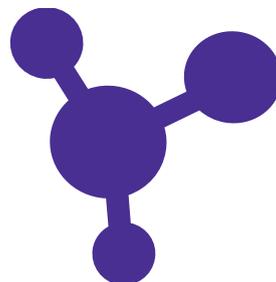
Q Improvement Lab – part of the Health Foundation [Q initiative](#) – provides an opportunity for individuals and organisations to collaborate and make progress on complex challenges that are affecting health and care in the UK.

In September 2018, Q and the national charity, Mind, embarked on a [year-long collaboration](#) to understand how care can be designed to best meet the needs of people living with both pain and psychological distress. In 2019 the HIN, in partnership with St George’s and Kingston Hospitals NHS Foundation Trusts’ chronic pain and MSK physiotherapy teams, applied to be one of six national teams to rapidly explore innovative ideas. Initially the group had six months to identify a testing opportunity.

In 2020 the HIN, in partnership with The Physiotherapy Pain Association, Duke University USA, Kingston Hospital and St George’s Hospital, was selected by Q as one of four national teams to secure 12 months funding to test Psychologically Informed Collaborative Conversations (PIC-C), an innovative training and supervision programme with hospital based MSK physiotherapists. The training aims to increase understanding of, and confidence in, delivering psychologically informed care and consultations to patients living with pain. To ensure the programme met the needs of this population, two patient representatives were also recruited to the project delivery team.

This Final Report details our approach, methods, and evaluation of the PIC-C programme. Supporting evaluation reports are available in the appendices detailing:

- co-creating PIC-C with patient representatives;
- evaluation of training methodologies to inform PIC-C design;
- full write up of exploratory focus groups to inform content and design; and
- full write up of data analysis and findings from pre, mid, post surveys and group session feedback.



Pain and Psychological Wellbeing

Why is this important?

Pain is common in the general population, affecting between one-third and one-half of the UK adults. The connection between pain and psychological wellbeing is reciprocal, with increased awareness that when pain persists it often leads to increased psychological distress^{1,2,3,4}, and high levels of psychological distress can increase the likelihood that painful musculoskeletal conditions will either persist or develop.¹

A proportion of people presenting to healthcare professionals with pain will have moderate to very high levels of psychological distress, impacting on their ability to adjust to and manage pain^{11,12}. This underlines the importance of exploring the physiological, psychological and social wellbeing of individuals experiencing pain.

National policies increasingly focus on the need for healthcare providers to address chronic medical conditions such as persistent pain using a more comprehensive biopsychosocial approach (e.g. The Five Year Forward View for Mental Health⁷, Prevention Concordat for Better Mental Health⁸, No Health Without Mental Health⁹ and the NHS Long Term Plan¹⁰). Pain care has been frequently fragmented within primary care and as a result, psychological distress is often under recognized and untreated.

In April 2021, the National Institute of Clinical Excellence (NICE) released revised guidance¹¹ on assessing and managing chronic pain in patients over the age of 16, recommending a person-centred approach and access to psychological treatments delivered by appropriately trained health professionals, highlighting a need for improved training provision in this area.

Background

Phase 1: Identifying a testing opportunity (April 2019-August 2019)

A review of the literature^{12,13,14} related to supporting psychological health of patients presenting to physiotherapy with pain had shown:

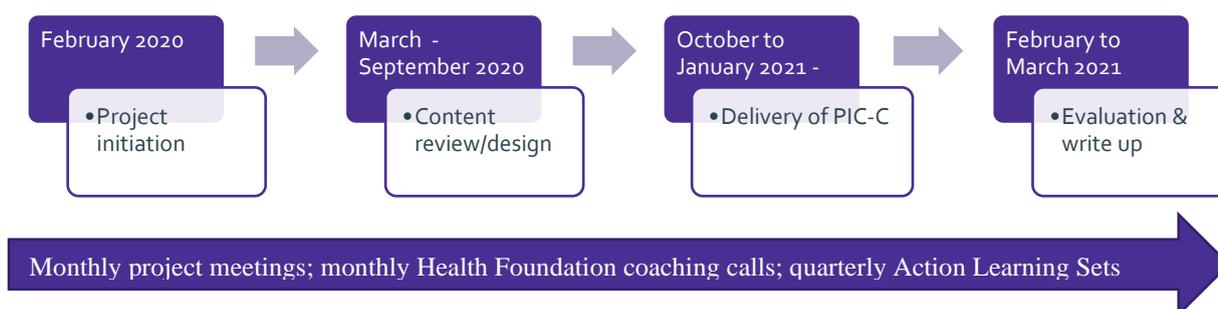
- Physiotherapists lack confidence when exploring biopsychosocial assessment and interventions with patients.
- Existing training is strongly focused on improving physical health highlighting a gap in training on improving psychological wellbeing.
- There is a need for a framework to enable discussion to take place within physiotherapy sessions about emotional wellbeing and physical functioning.
- Physiotherapists themselves are clear they want training in how to support patients' psychological health, including how to start and manage conversations related to psychological wellbeing and better information where to signpost/refer to if a high level of psychological distress is identified.
- Post training supervision is critical to develop deeper learning through supported integration of new skills into clinical practice and reflection.

To understand whether similar needs were prevalent within our partner organisations, explorative focus groups with MSK physiotherapists at St George's and Kingston hospitals were held to understand their experiences and views on delivering psychologically informed physiotherapy to patients presenting with pain. These findings were key to informing Phase 2 of the PIC-C project and a full write up of the focus group findings is available in Appendix 1. Two main improvement areas below were identified, echoing the literature review:

- A gap in knowledge and confidence for physiotherapists when discussing psychological wellbeing and distress with patients.
- A need for ongoing supervision/mentoring from clinicians experienced in pain, to support their understanding and management of patients with complex problems.

Based on our findings, the team identified development of a training and supervision programme as a testing opportunity for phase 2 Q Improvement Lab funding. At the same time, the Physiotherapy Pain Association (PPA) was piloting an online course in Psychologically Informed Physiotherapy, in partnership with Professor Francis Keefe, Duke University Medical School, USA, based on research into the application of psychologically informed practice in chronic pain¹². Following the Invitation to the PPA and Professor Keefe to join the project team for Phase 2, it was agreed to review the PPA online course and adapt for delivery to MSK physiotherapists in hospital-based settings. This adaptation is now known as Psychologically Informed Collaborative Conversations (PIC-C).

Phase 2 Project Timeline



Introducing PIC-C

PIC-C is an evidence based online training and supervision package to increase physiotherapist confidence in delivering psychologically informed care and support to patients presenting with pain.

The course structure and content was co-created with patients living with persistent pain, academics and clinicians, and its development anchored in international and national research identifying the need for such training.^{11,12, 13, 14}

PIC-C focuses on exploration and application of therapeutic approaches used in the pain management field and is grounded in behaviour change theory. PIC-C is underpinned by aspects of cognitive and behavioural approaches as recommended in the National Institute of Clinical Excellence (NICE) guidelines¹¹ including Cognitive Behavioural Therapy (CBT), Acceptance and Commitment Therapy (ACT) and mindfulness. Its approach is experiential learning – learning through doing, encouraging participants to explore and reflect on how their clinical interactions with patients apply to their own psychological wellbeing, and to integrate interventions/tools into their own lives so as to increase confidence and understanding about them before using them when working with patients.

Pre-course reading, a learning workbook¹⁷ and a FutureNHS workspace support the course and included published peer reviewed papers, opinion pieces, podcasts, and blogs. Patient representatives contributed to the course content through personal stories, visual imagery, and film.

PIC-C was delivered over a 16-week period and included eight weekly modular sessions (1.5 hours) [See Table 1] followed by eight (1.5 hour) supervision sessions.

Table 1: PIC-C 8 week training modules

Week	Theme	Session Title	Session format
1	Therapeutic Alliance	Feeling safe and confident to make changes	<ul style="list-style-type: none"> ○ Settling in exercise ○ Review of agenda ○ Setting the scene / Review of between session task ○ Focused topic ○ Skill rehearsal ○ Feedback ○ Between session task for next week ○ Closing exercise
2	Adaptation model	Exploring where you are now and how you got here	
3	Exploring values	Finding your 'why'	
4	Functional analysis	The ABC of activity	
5	Behavioural patterns	Enabling behavioural flexibility	
6	Working with difficulty	Preparing for when things get tricky	
7	Building on progress	Helping changes to stick	
8	Finishing interactions	The end and the beginning	

Approach and method

The development and evaluation of PIC-C was approached in six stages as detailed in Table 2. Detailed information relating to each stage is available below and in the appendices.

Table 2: PIC-C development activity by stage.

Stage	Activity
1. Strengthening evidence to support identified need	<p>Focus Groups:</p> <ul style="list-style-type: none"> ○ Eight St George's MSK physiotherapists. July 2019. ○ 13 Kingston MSK physiotherapists. August 2019. ○ Six PPA physiotherapy members (online). August 2020 <p><u>More information</u> Appendix 1: Phase 1 Focus Group Findings: Full report</p>
2. Develop training content and course design	<ul style="list-style-type: none"> ○ Review and adaptation of PPA online course. ○ Evidence based content and tools desk research. ○ Evaluation of training methodologies and approaches to inform course design. ○ Development of participant learning workbook and PIC-C FutureNHS Platform. <p><u>More information:</u> Appendix 2: Copy of participants learning workbook. Appendix 3: Training evaluation review: full report.</p>
3. Patient involvement	<ul style="list-style-type: none"> ○ Recruitment of two patient representatives living with persistent pain. ○ Development of patient led content including films. ○ Capture patient experience throughout project duration. <p><u>More information:</u> Appendix 4: Working on PIC-C: Patient experience report.</p>
4. Delivery	<p>PIC-C was tested with 38 physiotherapists at St George's and Kingston hospitals. The course was delivered online via ZOOM and facilitated by a Highly Specialist Physiotherapist and Highly Specialist Clinical Psychologist.</p>
5. Evaluation	<p><u>Participant Questionnaire (pre, mid-point and 2 weeks post)</u></p> <ul style="list-style-type: none"> ○ Five patient experience films to review, reflect upon and state how participant would respond. ○ Self-Efficacy (GSE-6). ○ Anxiety (Numeric Rating Scale) – with question focused specifically on anxiety associated with delivering this approach. ○ PANAS-GEN (positive and negative effects scale). <p>More information: See Appendix 5 for full survey results.</p>

	<p><u>Focus Groups</u> Participant pre and post focus group were proposed but did not take place due to COVID-19. Instead, the last supervision sessions were recorded, and participants invited to feedback on their experiences of the course. Recordings were transcribed and thematic analysis undertaken.</p> <p><u>1:1 interviews with project partners and patient representatives</u> A HIN researcher invited project stakeholders to attend 30 min semi structured phone or video calls to feedback on their experiences. Recordings were transcribed and thematic analysis undertaken.</p>
6. Spread and adoption	Engagement with interested organisations re accreditation and hosting of PIC-C.

Developing the training content and course design

Course content

Following the initial design meetings with the whole project team, the clinical project leads met together to design the structure and content of the PIC-C programme. This was initially informed by reviewing the PPA online course that had previously run psychologically informed physiotherapy online teaching sessions. The PPA online course helped inform the PIC-C programme in terms of providing suggestions for topics that could be covered and how to structure the sessions. The clinical project team agreed to retain some elements of the PPA online course, including the short 'settling in' exercises at the start of each teaching session, and 'on the spot' evaluation and feedback at the end of each teaching session. These exercises have the benefit of helping the participants to focus on the content and be invested in the teaching through recognition that they are part of shaping the content, and that the facilitators are responsive to their feedback.

Evidence based literature was reviewed alongside the four key areas identified by Denny¹² to consider when working with people living with pain . With these four key areas in mind, the clinical project leads utilised their knowledge and experience of working individually with people living with pain and running multidisciplinary Pain Management Programmes (PMPs) to identify eight key themes to cover in the teaching sessions. These themes match onto research and anecdotal evidence of common processes and difficulties that patients report experiencing when living with a long-term condition and trying to implement self-management skills. These processes are well established in learning and behaviour change theories in terms of establishing motivation for behaviour change, implementing changes, and trying to maintain changes. In addition, the themes for the teaching sessions match onto topics that are often covered in PMPs that aim to equip people to manage their pain as effectively as possible over the longer term.

Supervision

Focus group findings provided a clear message that health professionals felt they needed more in-depth input and guidance over a longer time period than a typical weekend workshop to feel more confident in delivering psychologically informed practice. The addition of eight supervision sessions after the teaching block addressed this request, as well as leading to better links and communication between musculoskeletal departments and specialist pain services. The supervision sessions were included with the

expectation that they would allow for deeper learning and embedding in practice over the longer term, as participants had an opportunity to discuss cases and professional issues with their peers, with the support of a pain specialist facilitating the supervision.

Experiential learning

The clinical project leads were keen to provide participants with an opportunity to experience the approaches that they may use in practice for themselves. For example, participants were guided through short mindfulness or relaxation practices at the start of each teaching session, and they were asked to identify and work towards a values-based goal throughout the time that they were taking part in the programme. The inclusion of these elements is a strength of the design of the course in that it allows the participants to experience a process that is similar to the process of a therapeutic intervention between a physiotherapist and a patient.

The session content and structure reflect the potential issues that may arise during a therapeutic interaction: how to initiate a behaviour change; managing difficulties that may arise when working towards a goal and maintaining changes over the longer term. These similarities between the training programme and a therapeutic intervention can allow the participants to have some experience of what the process of such an interaction can feel like personally, as well as increasing their compassion and confidence in managing these interactions in their professional practice.

Patient voice

Throughout the course design, the clinical project leads incorporated the patient voice by consulting with the project patient representatives, and through co-creation of patient led content. Additional resources and content were provided by patient representatives outside of the project team and included poetry, images and videos to provide insight into patient experiences of living with pain.

The project patient representatives were particularly involved in the following:

- **Role-play videos** with the patient representatives to show during the teaching sessions. The videos demonstrated a conversation between a practitioner and a patient utilising the tools and skills that had been discussed in the teaching sessions. In addition, the facilitators conducted role plays within the teaching sessions, sometimes prepared in advance and sometimes in response to content provided by the participants.
- **Images to illustrate the theme of each week's teaching session** ensured patient involvement was at the heart of the course design. These contributions provided an important reminder and insight to the participants each week, reflecting the personal experiences of people they may be working with who are living with a long-term condition that impacts upon quality of life.
- **'Dear clinician' letters** written by patient representatives, each of whom writes a personal letter to their health care professional, sharing their journey and experiences in accessing care and treatment.

Participant resources

A workbook was designed to support participants' learning. Reflecting the experiential nature of the approach, rather than including extensive information on theory and background to the teaching sessions, the workbook included practical tools and resources alongside notes pages for participants to use as they saw fit. In addition, the FutureNHS platform (as well as the workbook) had suggested pre course reading, published peer reviewed papers, opinion pieces, podcasts, and blogs for participants to refer to in their own time for further learning.

Delivery

The delivery of the training package had to be changed to virtual delivery for both pilot sites due to the COVID-19 pandemic. 38 physiotherapists (NHS Band 7/8) participated in the training, with many of the

participants being redeployed during the training to support the response to the pandemic. However, most of the participants were given protected time to continue with PIC-C despite these changes to their usual working roles.

The clinical project leads were keen to keep a balance between experiential learning/personal practice and clinical skills development. An emphasis was therefore placed on reviewing participants' progress each week with their goals and between sessions skills practice, rather than solely focusing on what they had learnt in the previous session.

Supervision sessions were also conducted virtually via Microsoft Teams in small groups of four to five participants. The facilitators each led four supervision groups for eight consecutive weeks. The structure and style of the supervision sessions were based on a Group Reflection Model. This structure was chosen to create a safe space for participants to present a case without feeling that their work was going to be criticised, as the structure promotes supervised reflective practice and listening rather than taking a critical or problem-solving stance.

Findings

The findings show the programme increased physiotherapist confidence in delivering psychologically informed care and support to patients presenting with pain:

- Participating in PIC-C resulted in a shift in physiotherapist confidence, and in physiotherapists' knowledge and application of psychologically informed tools and techniques with patients. 100 per cent of respondents stated the course had a positive impact on their confidence (see Graph 3).
- Supervision was highly valued by participants, enabling them to discuss their learning and experiences with colleagues.
- When asked how the course could be improved, participants felt work-based assessments and some face-to-face sessions would be beneficial, combined with the course supervision spread over a longer period to embed practice.

Key themes from participant surveys and group feedback are detailed below. Full results are available in Appendices 5 and 6.

Existing pain management knowledge pre-PIC-C training

Most participants had undertaken some form of clinical skills training related to pain management prior to attending PIC-C. The highest response rate at 79 per cent for 'other pain management' courses shows that most physiotherapists attending PIC-C had some knowledge of medically based pain management from previous training, although the extent of knowledge and application varied. A quarter of participants had completed one of the pre-defined psychologically informed CBT/ACT/mindfulness courses included in the survey. The average length of courses attended were two days duration.

Changes in practice throughout PIC-C training

Comparing responses across the pre, mid and post training surveys, there is evidence of a shift of a change in practice towards a more psychologically informed approach. Participants were shown 5 video scenarios and asked how they would respond and which tools/techniques they would use. They were also asked to select from a pre-defined list of strategies they use in clinical practices.

Demonstrating change: five film scenarios

Before PIC-C training, participants rated pacing and reassuring the patient as frequently used approaches, and these remained important techniques across the training. New themes emerged at the mid and post surveys, reflecting a more psychologically informed approach including using value-based goals that were identified by patients rather than by the therapist, a focus on patient beliefs using the CBT approaches, e.g. the ABC model, and encouraging self-efficacy. Being positive and encouraging about the patient's effort became a much stronger active response than providing reassurance (see Table 3).

Table 3: Adopting a psychologically informed approach: Change in practice evidence by scenario films.

Survey Key themes – techniques used in practice			
Pre	<ul style="list-style-type: none"> Reassurance pain doesn't mean harm 	<ul style="list-style-type: none"> Pacing 	<ul style="list-style-type: none"> Flare ups
Mid & Post	<ul style="list-style-type: none"> Focus on patient beliefs and the ABC Model Patient-led and value-based goals Exploring the patient's values Encouraging Self efficacy Exploring mindfulness as a supportive tool to combat negative feelings. 	<ul style="list-style-type: none"> Exploring the patient's barriers including worries and beliefs Goal setting Positive about patient's effort Exploring factors that positively or negatively influence experience of pain 	

Changes in frequency of using a psychologically informed approach

Participants were asked pre and two weeks post PIC-C about the frequency with which they use psychologically informed approaches in their work with patients. The table below provides detailed findings. Towards the end of PIC-C, the frequency with which they used the techniques had significantly increased – the biggest change being focusing on 'developing a therapeutic alliance', with a response rate of 19 per cent pre-PIC-C compared to 81% post-PIC-C. The strategies listed also align with many of the dominant themes from the qualitative responses to the five video scenarios.

Table 4: Changes in frequency of using psychologically informed approaches with patients

Psychologically informed approaches	Pre-PIC-C	Mid-PIC-C	Post-PIC-C
	% of participants		
Developing a therapeutic alliance	19%	40%	81%
Value based goals	8%	8%	12%
Educational strategies including reducing perceived threat	12%	12%	35%
Cognitive strategies that assist reconceptualising beliefs and somatic experience	4%	4%	12%
Fostering self-efficacy	8%	20%	42%
Coping skills development including behaviour change	0%	8%	12%
Strategies to adapt psychophysiological focus	0%	4%	4%

Change in practice: participant quotes

"It changed my practice quite a lot in terms of I'm much more happy to sit and listen to the patient. Give them more time, get the whole story, take more time on the subjective and I guess include more of the biopsychosocial, rather than just looking at the physio and the exercises, kind of the physical component." (S8/P4)

"I feel like I've got more tools to kind of tackle those barriers and explore them further and use them." (S1/P1)

"Yes, I feel I am using more specific techniques with patients in a different way. I am also much more aware of therapeutic alliance which I think is really important." (S9)

"Thinking about finding those values, those goals and using that to direct treatment, rather than trying to force their goals to fit the treatment you've decided." (S1/P1)

Change in confidence, anxiety and attitudes in the workplace

Confidence

Participants were given four confidence statements and asked to rate their confidence of applying psychologically informed practice clinically. There was a shift from not true/hardly true from the pre/mid surveys to moderately/exactly true post PIC-C, showing increased confidence as participants progress through the PIC-C training (see Table 5 and Appendix 5).

Table 5: Shift in confidence in applying psychologically informed practice clinically based on 4 confidence statements.

Confidence Statement #	Hardly true			Moderately true			Exactly true		
	Pre-TIPS	Mid-TIPS	Post-TIPS	Pre-TIPS	Mid-TIPS	Post-TIPS	Pre-TIPS	Mid-TIPS	Post-TIPS
1	23%	16%	0%	65%	84%	96%	0%	0%	4%
2	42%	12%	8%	54%	84%	77%	4%	4%	15%
3	15%	0%	0%	81%	92%	88%	4%	8%	12%
4	8%	0%	0%	84%	88%	85%	8%	12%	15%

Qualitative feedback from the group feedback supports this shift in confidence, with participants also stating they were comfortable with the theoretical application even if they have not yet been able to apply the techniques with patients presenting with pain (due to changes in their role as a result of the pandemic and being redeployed):

"I feel more confident that I can manage some of these more complex patients, not filling silences, just allowing the patient to explore and facilitating that." (S3/P7)

"I definitely would feel more confident now, in seeing this particular group of patients. Talking through other people's experiences and my own has definitely made me feel more confident with the idea of it, even if I haven't actually been able to necessarily apply it yet." (S1/P2)

Anxiety

Participants were asked how anxious they felt when applying psychologically informed approaches with patients with pain (see Table 6). Although the participant numbers are small, and there is no statistical analysis, the Anxiety Numeric Rating Scale (NRS) shows a reduction in anxiety in applying the techniques towards the end of the training, indicating increased confidence in working psychologically with patients. Although some anxieties remained, this is likely to improve the more opportunities participants have to apply their learning in practice.

Table 6: Changes in participant reported anxiety

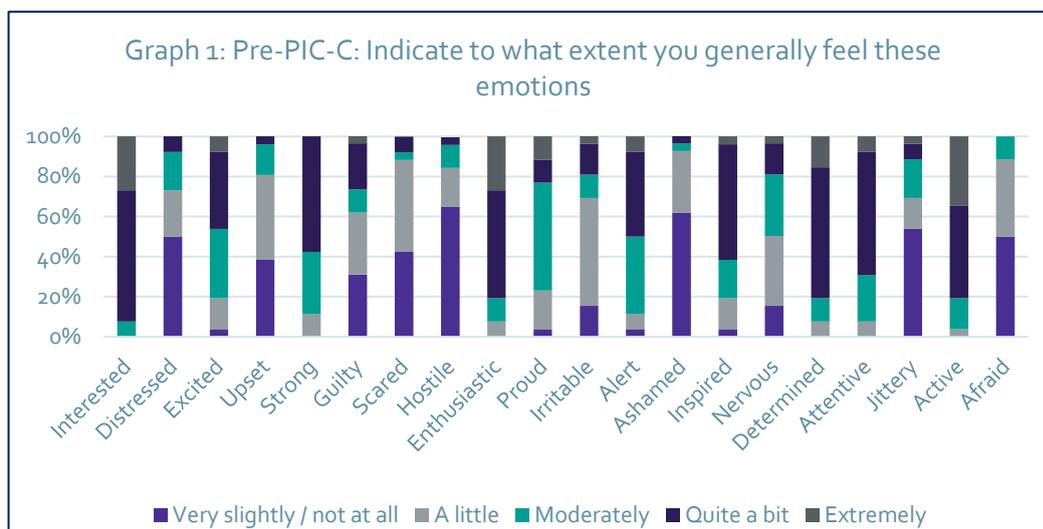
Question: On a scale of 0 (*Absolutely calm and relaxed*) to 100 (*tense and anxious as I have ever felt*) how anxious do you feel applying psychologically informed approaches with patients with pain?

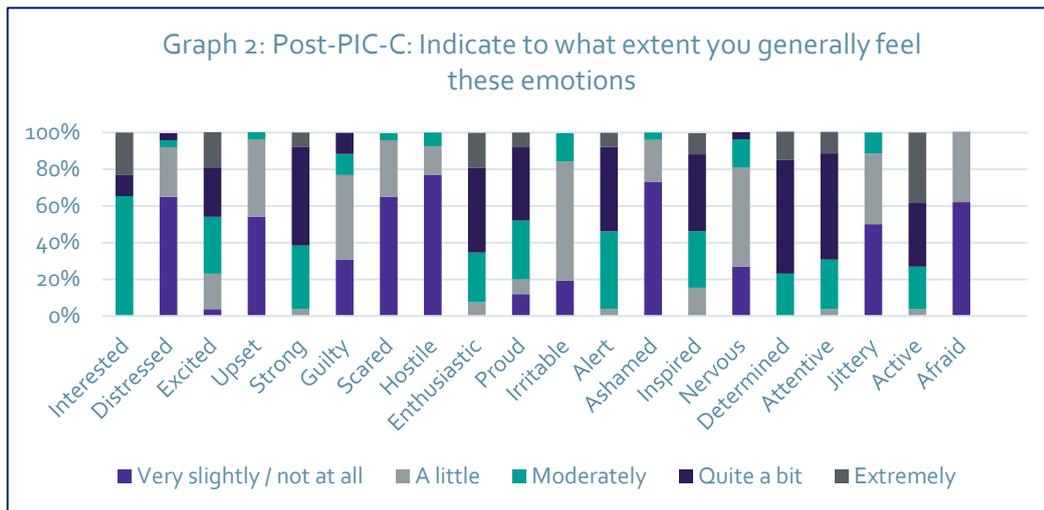
Average response out of 50 (sliding scale)	Pre-PIC-C	Mid-PIC-C	Post-PIC-C
	49/50 = 98%	41/50 = 82%	33/50 = 66%

PANAS-GEN scale of emotions.

Alongside determining confidence levels, the surveys explored how physiotherapists were feeling at that time. Using a PANAS-GEN scale, participants were given a list of feelings and emotions and were asked to rank to what extent they generally felt this way on average. The PANAS-GEN scale is a reliable and validated scale to measure mood and emotion.

Graphs 1 and 2 below show the responses for each feeling or emotion and to what extent they generally felt this way (from 'very slightly/not at all' to 'extremely'). Responses across the three surveys were relatively consistent throughout the training, showing only minor shifts in attitude. Negative feelings or emotions were largely felt 'very slightly / not at all' or 'a little'. Whereas more positive feelings or emotions tended to have higher percentage responses for 'quite a lot' or 'moderately'. This shows that in general, many participants experienced positive feelings and emotions at work.





Impact of PIC-C on work-related wellbeing

Participants were asked to feedback on whether the PIC-C training package had a positive impact on various aspects in their work, as shown in Graph 3. Physiotherapists overwhelmingly felt that the training had a positive impact on their confidence (100 per cent), compassion for others (96 per cent), resilience (100 per cent) and overall work satisfaction (93%), demonstrating a wider range of the course benefits to both individuals and teams/organisations.

Work related fatigue had an equal 50 per cent 'yes' and 50 per cent 'no' response. This may be due to the unrelenting pressures faced in clinical settings throughout the pandemic, or other factors. Qualitative feedback highlighted acknowledgement of aspects such as the importance of discussing work related fatigue and burn out, a strengthening of relationships with colleagues and awareness that the tools would perhaps be useful for themselves as well as patients.



Participant Quotes: Attitudes in the workplace

"It's really improved my feeling of ease at approaching pretty much anyone to talk about a patient with, which is really nice because we all work behind closed doors, you don't normally get that level of interaction, other than with your supervisor." (S1/P5)

"I just feel like my work satisfaction is kind of increased, I might have risked feeling maybe overwhelmed kind of supervising people in this kind of funny circumstances." (S3/P3)

"Some of the teaching sessions on you know, talking about things like values-based goals and actually trying to establish a goal ourselves. I think we're very good at getting our patients to do that, but actually learning about how you put it in to practice for yourself and actually you might have this goal." (S1/P10)

"I agree with that side of it [PIC-C helping with compassion fatigue]...I think also not practiced it as much as I would have hoped for, but the compassion fatigue element, it's kind of or the empathy fatigue, where you get to the point where you've had so many people offload so many things to you, how does that make you feel at the end of your week? At the end of your day? And that can be very very waring." (S2/P10)

PIC-C content and structure

Participants were asked to provide feedback on the PIC-C course content and suggested improvements for future courses. Key themes identified from survey responses and group feedback are detailed in Table 7 and 8. Feedback showed 73 per cent of participants found PIC-C relevant to their role and that overall, participants liked the modular design and duration of the course, rating the experiential approach to learning and recognising the value of protected supervision to discuss application of techniques and complex patients.

Table 7: PIC-C: What worked well and what could be better: Key themes

What worked well	What could be better
Modular approach and course content	Mixing training and supervision together
Duration of training programme	Reconsider use of role plays
Strong focus on communication skills	Include work-based assessments
Pre-filmed role plays and case studies	More face-to-face teaching
Supervision	FutureNHS Platform
Workbooks	Protected time for learning and ongoing supervision

Table 8: Participant feedback on key themes. Further participant quotes are available in the appendices (6)

Theme	Participant quotes
The modular approach and duration of PIC-C helped to consolidate and embed learning.	<p>"I like it spread over longer because I feel like it gives me more time to kind of use it and practise. Even if I didn't have a patient, then I guess it's not too much information to hopefully remember it for when they do come up." (S4/P3)</p> <p>"I think for me one of the positives of the course was its longevity. In the fact it wasn't all cramped in. The fact it wasn't a two-day hit session on everything and then off you go with the fact, it was a little bit for so long. It means you're kept in the loop of everything for that length of time." (S5/P3)</p>
Course content was viewed as relevant.	"I think for me the structure of it worked perfectly, in the sense of, like to start with the therapeutic alliance and drumming that home and the importance of that and then going on to like the

<p>Although some concepts were 'not new' they had not considered applying them in an MSK setting.</p> <p>Participants liked the mix of learning materials e.g. written, film, podcasts etc.</p>	<p>value-based goals and things. That gives you the real foundation of everything else to come." (S5/P2)</p> <p>"And the behaviour patterns I think it's something that we've all kind of studied before, but it was really nice to have that reminder and actually we can use it in the MSK setting." (S8/P1)</p> <p>"And I liked the variety, kind of had podcasts, blogs and all that sort of thing." (S8/P3)</p>
<p>Supervision was highly valued, with participants recognising this as a unique part of the PIC-C programme.</p>	<p>"I think it's been lovely to have that protected time, because for our portfolios of advanced practitioners and as sevens we're meant to be moving to autonomous learners, so having that time where you present the patient and where you find the blocks and then actually sitting back and listening to the other talk around it and actually you not being part of that bit was quite nice." (S2/P6)</p> <p>"I think if we just had the teaching sessions without the supervision bit, I think there would have been that problem with the equivalent of just doing a weekend course and never using it." (S2/P7)</p>
<p>Mixing the training and supervision sessions was suggested to allow opportunities to apply the learning.</p>	<p>"So maybe have three taught sessions and then the fourth session it would almost be like a mini-supervision session or a mixture...taught for half of it and then you go into yours, what will be your supervision group to start to prepare and reflect on what you've used or gathered so far." (S6/P3)</p> <p>"And I guess if we had a session and then it was teaching and then you had your session to discuss between you, then personally I'd actually learn more kind of reinforcing things." (S7/P2)</p>
<p>A strong focus on communication skills particularly how to phrase a question or work with challenging patients was valued. The role and skill set of the facilitators, as a psychologist and advanced physiotherapist was mentioned.</p>	<p>"The language is important and as good as intentions that we probably have to be non-threatening and trying to probe without being intrusive or too intrusive is a skill isn't it? And we can learn a lot [from facilitators] because that's what they do as a role." (S2/P9)</p> <p>"I really liked hearing your responses and ideas on how to navigate difficult conversations with really challenging patients." (S7/P3)</p>

<p>The pre-filmed role-plays and case studies were valued, with suggestions to include more as learning aids.</p>	<p>"That's been really helpful, and I think that made it quite different to some other courses that I've done. So, that I can see how it's used practically, not just what the information is." (S1/P6)</p> <p>"If there could have been maybe more examples where you went...almost went through your...an example of a new patient assessment. Yeah, and maybe contrasting a new patient assessment that...where some of these techniques had been well applied, to one that hasn't." (S7/P3)</p>
<p>Work-based watched assessments were frequently mentioned as a useful alternative to role-playing.</p>	<p>"So, I think in order for us to embed it in our practice and as you say then it be embedded within the department, I think we need to make sure we have decent enough time for watched assessments." (S2/P7)</p> <p>"It's probably good to maybe do a bit more of that because then you'd...it's almost like you...we need to actually do it ourselves and say it ourselves and you need to give us feedback how we did doing that. Almost like a watched assessment, I guess. Applying some of these skills." (S7/P4)</p>
<p>The learning workbook is a useful addition to the PIC-C programme.</p> <p>The FutureNHS Platform, although recognised as being a useful resource, was not used by many participants due to time constraints, or feeling it was difficult to navigate.</p>	<p>"These booklets are amazing. I have referred back to the booklet, so having it all in one nice tidy place with some references. I have flicked back and kind of looked at it, so this is a really really useful thing to have, that I think you know, in another six months I can flick through." (S6/P5)</p> <p>"I think lots of people...it's quite...unless you use it all the time it's just one of those thing's isn't it that you forgot about and you forgot your password and all those types of things. And it's not laid out in the most user-friendly way." (S7/P3)</p>
<p>Preference for a face-to-face option, although participants recognised the limitation of this due to COVID-19, stating that virtual delivery worked well as an alternative.</p> <p>A preference for face to face over supervision was noted.</p>	<p>"If you're then going into a breakout room with someone that you've not met, it can be quite kind of stilted. Whereas, if it was face to face, I think it is a little bit easier to form a bond quicker with a random...face to face than it is over...it could be quite awkward to get anywhere. I think virtual has got some strengths in some way, because you're able to maintain the topic without the natural going off topic, which will happen face to face" (S6/P1)</p>

	"I think the teaching face to face. If you had to prioritise one half, I'd say the teaching part." (S6/P2)
Set up of ongoing protected supervision.	"I don't know whether there is, again it's tricky, but having the option of kind of like a three-month review in a normal non-Covid world, where you are seeing patient, to reflect on" (S6/P5) "So I think that we probably do need to look at how we can implement this...if this is what we want people to be able to do and to be able to use these skills, then we need to be able to ring fence the appropriate time." (S3/P4)

Impact of COVID-19

In August 2020 due to prevalence of COVID-19 cases increasing in hospitals and restrictions on staff mixing, it became evident that the initial aim to compare face-to-face delivery with a virtual model was not possible, and that both courses would need to be delivered virtually.

Moving PIC-C to virtual delivery enabled the team to still test PIC-C and maintain participant attendance during the pandemic as staff could access using smartphones, from home or within an office space at work.

Participants and project partners were asked to share their experiences of participating in and delivering PIC-C during the pandemic, with key themes tabulated below (see Table 9) and in the appendices (7).

Table 9: Impact of COVID-19 on experience of PIC-C

Theme	Participant and Project Partner Quotes
Difficulties applying learning to remote consultations or redeployment.	"The only downside was that most of us were redeployed during the supervision sessions and so didn't have the chance to bring real cases to the sessions which we could then feedback on but that was just unfortunate timing with COVID-19. The facilitators made them still very worthwhile despite this." (S9)
Unknown impact on training quality.	"I think it...we'll never know but I think it would have probably taken something away from the training delivery and I think particularly for the supervision...but that may just be me because I'm so used to supervising people face to face and I really personally dislike the shift to online supervision." (Project PartnerT4)
Opportunity to strengthen virtual testing and relationship to future spread and adoption.	<p>"I guess it's been a good test to demonstrate that it is possible because I think whatever happens to PIC-C next it's likely to have a sort of virtual online flavour to at least some of it, so I guess it was quite nice that that happened because of COVID-19." (Project Partner T4)</p> <p>"If it is all virtual, that doesn't really bother me so much because the advantage of that is that it's potentially more accessible and more scalable and rollout-able as a training programme." (Project PartnerT7)</p>
Participants mentioned participating in PIC-C provided normality and regularity during the pandemic.	"Even if, through a video call, or usually crowded into the same room, but it felt like a bit of a touch of normality given everything else that's been going on." (S1/P4)

Future spread and adoption

Recommendations

1. Band 5/6 to access PIC-C training

Participants, who were generally NHS Band 7/8 physiotherapists were asked to suggest who would benefit from future iterations of the PIC-C programme. A recommendation was that Band 5/6s have access to the training as they carry a wider caseload, and that having more colleagues trained in PIC-C will support embedding psychologically informed ways of working within the department.

"But it's also kind of that recognition still, that kind of, this information does need to be trickled down or like you know, kind of to the 6s and 5s, who see a bigger rate of patients than we do in general," (S3/P4)

"I think things like this, like action learning sets and peer learning are such a great place to practice. You know no two situations are the same, but like the more you see, the more you hear about and the more you get to practice those conversations on how you deliver information to the different people who might receive it differently." (S3/P5)

2. Widen access to other Health Care Professionals

The PIC-C course was tested with physiotherapists only, although some of the PIC-C content had been previously tested and well received in the USA with Occupational Therapists. Feedback from team members was orientated towards retaining key elements of the original aim of the programme and looking for opportunities to widen the audience base across a range of health professionals and not only those who work with pain.

"You could apply this to a range of individuals that see people with persistent pain – nursing home assistants, social workers, even care givers ..." (PT2)

"I really would like it to spread...and I think the whole idea about this potentially being for a number of different health disciplines really appeals to me as well" (PT4)

"There something that we can do in terms of training up the multi-disciplinary teams that are coming together to cope with post-Covid, or long Covid. Also, we've been rolling this out to just look at the confidence of the clinician – [we could look at] patient outcome data, to see whether those with psycho-social input, do they get better patient reported outcomes?" (PT3)

3. Secure accreditation for PIC-C

Accreditation is currently being explored with interested organisations, acknowledging that an accrediting body needs to provide opportunities for wider spread as well as sufficient recognition for advanced clinical practice:

"The PPA and the higher education institution modules. I guess that sits with like, ongoing clinical practice education and that's something that is changing and growing I think, so that could be, kind of, quite innovative." (PT6)

Discussion & Conclusion

Evaluation shows that the PIC-C programme increased physiotherapist confidence in delivering psychologically informed care and support to patients presenting with pain was achieved. Practitioner anxiety is a major barrier in adopting and applying psychologically informed approaches and this was reduced by the end of the programme. The experiential approach of PIC-C combined with tools and techniques to use practically with patients were valued, with both survey responses and feedback from group sessions demonstrating a change in practice, with a positive shift towards adopting a more psychologically informed approach. Confidence in participants' own knowledge and skills increased, combined with evidence of an increased understanding of the relationship between pain and psychological wellbeing, leading to a more compassionate and empathetic view of patients and their ability to make change. A substantial number of participants were redeployed during the pandemic and unable to practically apply their learning, although feedback suggests PIC-C remained useful to them in terms of confidence and knowledge of psychological approaches to use with patients, highlighting the possibility of a wider application beyond pain.

The majority of participants had undertaken learning on pain management prior to PIC-C. Most of these courses were generalist pain management courses and relatively short in duration spanning one to three days of training. Although several participants felt that the content was 'not new', PIC-C' modular, experiential approach combined with a theoretical background over a 16-week period to include supervision as well as teaching sessions enhanced the learning experience. Inclusion of protected supervision was highly valued by participants and seen as a unique selling point of the programme which makes PIC-C stand out from previous courses attended.

COVID-19 impacted on the ability to test and compare face-to-face and virtual delivery modes. Feedback on the remote delivery of the training was relatively neutral, evidencing that accessing the training remotely in the most part was acceptable to participants. Due to COVID-19 there was no alternative delivery option, although some participants suggested face-to-face elements such as practical work, be considered in future iterations. Being unable to compare the two methods it remains unknown how in person training would have affected the training delivery, participant experience and outcomes.

There was evidence to support PIC-C having a wider positive impact on participants personally and in the workplace, with nearly all respondents highlighting improvements in resilience and confidence in their practice, better relationships with colleagues and increased work satisfaction. Participants also recognised the applicability of tools/techniques to their own situations, with half of participants reporting a reduction in work-related fatigue and burn out. These results indicate that despite the training taking place during a challenging time with many participants impacted by redeployment due to the pandemic, participation in the training still provided very significant gains in work-related wellbeing. It is also unknown for how long the results of the training might persist, as participants were followed up at two weeks post course completion only.

In conclusion, the results show that the organisation, structure and content of the PIC-C training is acceptable to participants. PIC-C influenced a change in practice, evidencing a shift in confidence in adopting psychologically informed approaches. PIC-C provides benefits to practitioners themselves and the organisations in which they work. The results also show some small areas for consideration for the next iteration of the programme such as:

- mixed approach of training and supervision timings;
- supervision sessions to be spaced over a longer period of time;
- more patient/professional 'filmed' examples;
- effectiveness of practical sessions using a virtual platform;
- review of usability of FutureNHS platform; and
- strengthening the usefulness of tools/techniques for self-use to support professional wellbeing.

The PIC-C training course is relevant to all physiotherapists and health professionals and therefore will be of interest locally, nationally and internationally. Supervision post teaching sessions was identified as a 'missing link' by physiotherapists in the literature and our exploratory focus groups, and its inclusion sets this training apart from other packages.

Presently, there is no similar learning programme available to physiotherapists in the UK. We therefore recommend PIC-C is made available to health professionals as a stand-alone programme or incorporated into wider educational learning packages e.g. postgraduate courses. We also recommend securing accreditation to satisfy quality control and continuing professional development requirements and recognition for Advanced Clinical Practice.

Appendices

#	Description	Link
1	PIC-C Findings from research to inform practice. October 2020	Link
2	PIC-C Participant Learning Workbook	Link
3	PIC-C Review of training methodologies and approaches – an evidence report. June 2020.	Link
4	PIC-C Patient Coproduction Report	Link
5	PIC-C Survey Analysis Report	Link
6	Participant Feedback on course structure by theme	
	The modular approach and duration of PIC-C helped to consolidate and embed learning:	<p>"I like it spread over longer because I feel like it gives me more time to kind of use it and practise. Even if I didn't have a patient, then I guess it's not too much information to hopefully remember it for when they do come up." (S4/P3)</p> <p>"You know it's nice to have it in those kind of bite-sized chunks." (S5/P2)</p> <p>"I think for me one of the positives of the course was its longevity. In the fact it wasn't all cramped in. The fact it wasn't a two-day hit session on everything and then off you go with the fact, it was a little bit for so long. It means you're kept in the loop of everything for that length of time." (S5/P3)</p> <p>"So yeah, I thought it was really good having it over that period of time just to kind of build in the habit of using it and kind of keep reinforcing it." (S8/P2)</p>
	Course content was viewed as relevant.	"I think for me the structure of it worked perfectly, in the sense of, like to start with the therapeutic alliance and drumming that home and the importance of that and then going on to like the value-based goals and things. That gives you the real foundation of everything else to come." (S5/P2)
	Although some concepts were 'not new' they had not considered applying them in an MSK setting.	<p>"As I said I think the content was spot on." (S5/P5)</p> <p>"And I liked the variety, kind of had podcasts, blogs and all that sort of thing." (S8/P3)</p> <p>"All were very relevant to my work & really useful." (S9)</p>
	Participants liked the mix of learning materials e.g. written, film, podcasts etc.	<p>"And the behaviour patterns I think it's something that we've all kind of studied before, but it was really nice to have that reminder and actually we can use it in the MSK setting." (S8/P1)</p> <p>"I think it's reinforced a lot of things, that perhaps we already, in some ways, have collected over the years from doing things with various other...not necessarily pain management programmes as such, but when we've had the back pain classes in the past, we've used very sort of similar sort of...I suppose educational content, but not necessarily had the theory behind it ourselves, about how we would teach that." (S2/P1)</p>

		<p>"Maybe just a variety of...rather than just reading all the time. Yeah, it's a different way of learning, so that's quite nice to have the variety." (S6/P5)</p> <p>"I thought it was good having a mixture [of learning materials], because then you could tap into whatever you have one, the time to do, or seated your learning. Yeah, I think you covered all bases." (S6/P6)</p>
	<p>Supervision was highly valued, with participants recognising this as a unique part of the PIC-C programme.</p>	<p>"I think it's been lovely to have that protected time, because for our portfolios of advanced practitioners and as sevens we're meant to be moving to autonomous learners, so having that time where you present the patient and where you find the blocks and then actually sitting back and listening to the other talk around it and actually you not being part of that bit was quite nice." (S2/P6)</p> <p>"I think if we just had the teaching sessions without the supervision bit, I think there would have been that problem with the equivalent of just doing a weekend course and never using it." (S2/P7)</p> <p>"For me the supervision has been key. It's been really really good to put all the learning together and as we were talking about earlier, our mix is really nice that we're coming from different approaches and that's been really really beneficial." (S6/P6)</p> <p>"I think certainly I like what the intended structure was. You know, you have a problem, you bring the problem, people listen to that problem and then they challenge you around what you've done and then help you to sort of come to some self-realisation." (S2/P5)</p> <p>"But yeah, I feel like these formats felt very safe, secure, encouraging, enjoyable...like I can't say I've ever not looked forward to the session." (S2/P7)</p> <p>"I suppose my summary is I've found the supervision really helpful. It was nice to sort of mull over problems patients and to get that reassuring input from [facilitators], that we're doing the right sort of stuff and we're thinking along the right lines." (S3/P7)</p> <p>"I thought it was a very good kind of environment in that respect. I felt really respectful and everyone was very approachable and supportive. Yeah. It was good." (S7/P5)</p>
	<p>Mixing the training and supervision sessions was suggested to allow opportunities to</p>	<p>"I'm literally wondering about this whether it would be good to like a few of the theories and then a couple of supervisions and then a few of the theories and then a couple....I don't know." (S2/P8)</p> <p>"So maybe have three taught sessions and then the fourth session it would almost be like a mini-supervision session or a mixture...taught for half of it and then you go into yours, what will be your supervision group to start to prepare and reflect on what you've used or gathered so far." (S6/P3)</p>

apply the learning:		"And I guess if we had a session and then it was teaching and then you had your session to discuss between you, then personally I'd actually learn more kind of reinforcing things." (S7/P2)
A strong focus on communication skills particularly how to phrase a question or work with challenging patients was valued. The role and skill set of the facilitators, as a psychologist and advanced physiotherapist was mentioned:		<p>"Just sort of learning how to word a question or change it can make a big difference. So, I think for me that would have been very helpful." (S2/P9)</p> <p>"The language is important and as good as intentions that we probably have to be non-threatening and trying to probe without being intrusive or too intrusive is a skill isn't it? And we can learn a lot [facilitators] because that's what you do as a role." (S2/P9)</p> <p>"I really liked hearing your responses and ideas on how to navigate difficult conversations with really challenging patients." (S7/P3)</p>
The pre-filmed role-plays and case studies were valued, with suggestions to include more as learning aids:		<p>"That's been really helpful, and I think that made it quite different to some other courses that I've done. So, that I can see how it's used practically, not just what the information is."(S1/P6)</p> <p>"I found the video that [the facilitator] did with the patient really helpful kind of showing what would be a not so good one and what would be a really good example." (S8/P1)</p> <p>"So, I think I found that helpful, I think the model we see it in practice in a kind of/sort of real life scenario with an expert" (S2/P8)</p> <p>"So maybe you know, because we're practical learners, talking about the model and then having a taped scenario where it's used." (S2/P8)</p> <p>"If there could have been maybe more examples where you went...almost went through your...an example of a new patient assessment. Yeah, and maybe contrasting a new patient assessment that...where some of these techniques had been well applied, to one that hasn't." (S7/P3)</p>
Some participants didn't really enjoy the role-play activities:		<p>"I think the hardest thing for me was probably the role playing virtually. That was a...that definitely felt a little clunky at times and there was that certain trepidation as the breakout rooms were kind of forming..." (S5/P4)</p> <p>"Yeah, that was quite hard. What would have been really good actually, I'm just thinking about it, I mentioned this before because I like reading, would be to have some of the scripts." (S2/P9)</p>
Work-based watched assessments were frequently mentioned as a useful alternative to role-playing:		<p>"So, I think in order for us to embed it in our practice and as you say then it be embedded within the department, I think we need to make sure we have decent enough time for watched assessments." (S2/P7)</p> <p>"It's probably good to maybe do a bit more of that because then you'd...it's almost like you...we need to actually do it ourselves and say it ourselves and you need to</p>

	give us feedback how we did doing that. Almost like a watched assessment, I guess. Applying some of these skills." (S7/P4)
<p>The learning workbook is a useful addition to the PIC-C programme.</p> <p>FutureNHS Platform, although recognised as being a useful resource was not used by many participants due to time, or feeling it was difficult to navigate:</p>	<p>"These booklets are amazing. I have referred back to the booklet, so having it all in one nice tidy place with some references. I have flicked back and kind of looked at it, so this is a really useful thing to have, that I think you know, in another six months I can flick through." (S6/P5)</p> <p>"I thought the workbook was actually quite nicely laid out and I've definitely seen... I mean I actually was going through it this morning before a face to face patient, just to kind of remind myself and kind of...that kind of formulated strategy." (S7/P2)"</p> <p>"I thought it was really good having [the workbook] it over that period of time just to kind of build in the habit of using it and kind of keep reinforcing it." (S8/P2)</p> <p>"To be honest I haven't because just in term of the first time I went on to register (FutureNHS), I just found it so awkward [...](17.52-17.55), so it pretty much put me off going back." (S6/P5)</p> <p>"I think lots of people...it's quite...unless you use it all the time it's just one of those thing's isn't it that you forgot about and you forgot your password and all those types of things. And it's not laid out in the most user-friendly way." (S7/P3)</p>
<p>Preference for a Face to face option, although participants recognised the limitation of this due to COVID-19, stating that virtual delivery worked well as an alternative.</p> <p>A preference for face to face over supervision was noted.</p>	<p>"I mean with the virtual, it was run really well, so I'm not taking anything away from that, but I would prefer face to face." (S1/P7)</p> <p>"And I think this is where the virtual stuff does lose it a bit. If you're all in a room together, the informal conversation over the coffee or the before and after, where you get to know people and you have that conversation." (S5/P4)</p> <p>If you're then going into a breakout room with someone that you've not met, it can be quite kind of stilted. Whereas, if it was face to face, I think it is a little bit easier to form a bond quicker with a random...face to face than it is over...it could be quite awkward to get anywhere. I think virtual has got some strengths in some way, because you're able to maintain the topic without the natural going off topic, which will happen face to face" (S6/P1)</p> <p>"I think supervisions worked quite well virtually."(S6/P2)</p> <p>"And the size of the group. I think you know, obviously you can manage loads more people virtually, compared to a group." (S6/P2)</p> <p>"I think the teaching face to face. If you had to prioritise one half, I'd say the teaching part." (S6/P2)</p>
Set up of ongoing protected supervision	"So it would be nice I guess, to have some sort of mechanism or avenue where these complex patients could be discussed as a case study or a.... I mean [to facilitator] it would be so lovely to carry on these sessions all be it not as often. . So, say, you're under one supervisor it might be that you'll say actually every other week, you know, why don't we do group supervision rather than one-to-one?" (S2/P11)

		<p>"I don't know whether there is, again it's tricky, but having the option of kind of like a three-month review in a normal non-COVID-19 world, where you are seeing patient, to reflect on" (S6/P5)</p> <p>"So I think that we probably do need to look at how we can implement this...if this is what we want people to be able to do and to be able to use these skills, then we need to be able to ring fence the appropriate time." (S3/P4)</p>
7	Impact of COVID-19 : Participant and Project Team quotes	
	Difficulties applying learning to patients due to remote consultations or redeployment	<p>"The patient group that we think this would be most helpful are the very patients whose sessions have been put in hold and who just haven't seen at all between the first wave this current [Feb 21] situation. (S1/P2)</p> <p>""The only downside was that most of us were redeployed during the supervision sessions and so didn't have the chance to bring real cases to the sessions which we could then feedback on but that was just unfortunate timing with COVID-19. The facilitators made them still very worthwhile despite this." (S9)"</p> <p>"I mean like I said...part of the reason I wasn't that good with my homework was actually because of just the kind service model that we were operating at the time, with loads of remote appointments and that kind of thing." (S7/P1)</p>
	Unknown impact on training quality	<p>"I think it...we'll never know but I think it would have probably taken something away from the training delivery and I think particularly for the supervision...but that may just be me because I'm so used to supervising people face to face and I really personally dislike the shift to online supervision." (Project PartnerT4)</p> <p>"We were looking at to compare the two and see if there was a difference in outcome or satisfaction etc etc...so it was a bit disappointing that we can't do that." (Project Partner T3)</p> <p>"It worked really well but it is a shame that the face-to-face training needed to go due to COVID-19. Going forwards, I think there needs to be the option of either online training or face to face training. Unfortunately, we were not able to test out face to face training but that will happen in the future I am sure" (Patient Rep 2)</p>
	Opportunity to strengthen virtual testing and relationship to future spread and adoption	<p>"I guess it's been a good test to demonstrate that it is possible because I think whatever happens to PIC-C next it's likely to have a sort of virtual online flavour to at least some of it, so I guess it was quite nice that that happened because of COVID-19. " (Project Partner T4)</p> <p>"If it is all virtual, that doesn't really bother me so much because the advantage of that is that it's potentially more accessible and more scalable and rollout-able as a training programme." (Project PartnerT7)</p>
	Several participants mentioned participating in PIC-C provided	<p>"Even if, through a video call, or usually crowded into the same room, but it felt like a bit of a touch of normality given everything else that's been going on." (S1/P4)</p>

<p>normality and regularity during the pandemic, with others highlighted detachment from the content due to their working environment as a result of the pandemic.</p>	<p>"I think personally for where I've been it's been quite nice to actually come back to something that is a bit more...my normal job shall we say." (S1/P4)</p> <p>"I think personally I feel a little bit more detached from it because it doesn't, you know it's not happening to me right now." (S1/P4)</p>
--	---

References

1. Loftis, T., Ellis, B. and Margham, T., n.d. Musculoskeletal conditions and multimorbidities report. [online] Versus Arthritis. Available at: <<https://www.versusarthritis.org/policy/policy-reports/musculoskeletal-conditions-and-multimorbidities-report/>> [A]
2. Depression and pain. (2017). Retrieved 17 May 2021, from <https://www.health.harvard.edu/mind-and-mood/depression-and-pain>
3. Osterweis, M., Kleinman, A., & Mechanic, D. (1987). Pain and disability - Clinical, Behavioral, and Public Policy Perspectives. Washington, DC: National Academy Press.
4. Hooten, W. (2016). Chronic Pain and Mental Health Disorders. *Mayo Clinic Proceedings*, 91(7), 955-970. doi: 10.1016/j.mayocp.2016.04.029
5. The Kings Fund & Centre for Mental Health. (2012). *Long-term conditions and mental health - The cost of comorbidities*. London: The Kings Fund. Retrieved from https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf
6. Rethink Mental Illness. (2018). Physical Health Resources for Healthcare Professionals. Retrieved 18 May 2021, from <https://www.rethink.org/get-involved/campaign-with-us/influencing-the-nhs/physical-health-resources-for-healthcare-professionals/>
7. [NHS England and The Mental Health Taskforce. \(2016\). The Five Year Forward View For Mental Health. NHS England and The Mental Health Taskforce. Retrieved from https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf](https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf)
8. Public Health England. (2020). About the concordat. GOV.UK.
9. Department of Health. (2011). No health without mental health - A cross-government mental health outcomes strategy for people of all ages. HM Government.
10. NHS. (2019). The NHS Long Term Plan. NHS. Retrieved from <https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/>
11. Overview | Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain | Guidance | NICE. (2021). Retrieved 18 May 2021, from <https://www.nice.org.uk/guidance/ng193>
12. Denny, D., Frijdal (nee Klapper), A., Bianchi-Berthouze, N., Greenwood, J., McLoughlin, R., & Petersen, K. et al. (2020). The application of psychologically informed practice: observations of experienced physiotherapists working with people with chronic
13. Ferreira, P., Ferreira, M., Maher, C., Refshauge, K., Latimer, J., & Adams, R. (2013). The Therapeutic Alliance Between Clinicians and Patients Predicts Outcome in Chronic Low Back Pain. *Physical Therapy*, 93(4), 470-478. doi: 10.2522/ptj.20120137
14. Keefe, F., Main, C., & George, S. (2018). Advancing Psychologically Informed Practice for Patients With Persistent Musculoskeletal Pain: Promise, Pitfalls, and Solutions. *Physical Therapy*, 98(5), 398-407. doi: 10.1093/ptj/pzy024

Project Team

Organisation	Project Role	Name and job title
St George's University Hospitals NHS Foundation Trust	Co clinical project lead & PIC-C facilitator	Rebecca McLoughlin, Highly Specialist Physiotherapist
	Co clinical project lead & PIC-C facilitator	Dr Anna Mathieson, Highly Specialist Clinical Psychologist - Chronic Pain Self-Management Team
	PIC-C Supervisor	Claire Copland, Consultant Clinical Psychologist and Clinical Lead for the Chronic Pain Service
	PIC-C Supervisor	Tim Noblet, Consultant MSK Physiotherapist
Kingston Hospital	Project partner	Amanda Clifford, Clinical specialist Physiotherapist - Pain Clinic
Physiotherapy Pain Association	Expert Advisor	Diarmuid Denny, Physiotherapist and Chair of the Physiotherapy Pain Association
Duke University, USA	Expert Advisor	Dr. Francis Keefe, Psychologist and Professor in the Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, USA.
Patient representatives		Christine Price Carole Robinson Una Lynch
HIN AHSN	Project Lead	Amy Semple, Senior Project Manager Nina Pearson, Evaluation Project Manager Paige Gladstone, Project Support Officer Laura Walton, Project Support Officer – Evaluation George Croft, Project Support Officer Aileen Jackson, Head of Mental Health Muj Husain, Clinical Director Mental Health Mike Hurley, Clinical Director MSK George London, Head of Content

Acknowledgments

Thank you to:

- The Q Improvement Lab (The Health Foundation) for funding and supporting PIC-C.
- RUBISIQ and Anna Burhouse.
- Rachel King at wearekinsmen films.
- Focus group participants from St Georges and Kingston Hospitals and the PPA.
- Participants on the PIC-C programme.