# Physiotherapists' Perceptions of Implementing STarT Back in New Zealand: A Thematic Analysis of Focus Group Data

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## **ABSTRACT**

STarT Back is a stratified care approach to identify and manage psychosocial risk factors for persisting low back pain and associated disability. A STarT Back course was held at the School of Physiotherapy, University of Otago, in June 2019, introducing a small cohort of physiotherapists (*n* = 20) to the approach, including psychologically informed interventions. The study aim was to gain insight into these physiotherapists' perceptions of the feasibility of implementing STarT Back in their own practice and more widely in New Zealand. Semi-structured focus group interviews were conducted with 14 physiotherapists who attended the training course and had subsequently used STarT Back to different extents in their own practice. Data were analysed using reflexive thematic analysis. Six themes were identified: confidence in current practice; STarT Back as a useful framework; concerns over the low-risk group; difficulties in translation; education is essential; and behaviour change. The need for behaviour change was a unifying theme with interpretation aided by the Capability, Opportunity, and Motivation Behaviour (COM-B) model. Practical suggestions to enhance implementation were made, with participants identifying strategies that promoted use of STarT Back in their practice. Issues identified included concerns about care for low-risk patients, health system structure and funding, and resistance to changing usual practice. Participants were cautious about the feasibility of wider implementation of STarT Back in New Zealand.

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Key Words: Implementation, Low Back Pain, Psychosocial Factors, Stratified Care, STarT Back

## **INTRODUCTION**

Low back pain (LBP) is a leading cause of disability with a profound impact on individuals, which is exacerbated if chronicity develops (Brunner et al., 2018). Globally, LBP is a

major economic burden, and in New Zealand is considered the biggest contributor to health loss in terms of disability adjusted life years (DALYs) (Hoy et al., 2014; Ministry of Health, 2016; National Health Committee, 2015). In New Zealand (2020–2021), LBP cases cost the Accident Compensation Corporation

(ACC) \$506 million (Analytics & Reporting – Accident Compensation Corporation, 2021).

Management of LBP is challenging. Individual patient characteristics, plus complex interactions with psychosocial factors, influence treatment response and clinical outcomes for people with LBP (Brunner et al., 2018; Cowell et al., 2018; Darlow et al., 2014). Current clinical guidelines recommend adoption of a biopsychosocial approach to care to address risk factors of poor prognosis (Almeida et al., 2018).

STarT Back is a stratified care approach to the management of LBP, which identifies psychosocial risk factors for developing persisting symptoms and disability (Hill et al., 2008). The STarT Back screening tool is used to triage patients with LBP into subgroups based on the level of risk of poor outcome with appropriate treatment matched to each subgroup (Foster et al., 2014). Treatments are: for the low-risk group, advice and education on self-management strategies; for the mediumrisk group, usual physiotherapy care including manual therapy, exercise, advice to stay active, education, and reassurance; and for the high-risk group, usual physiotherapy care plus psychologically informed care (Hill et al., 2011). This approach incorporates specialised training for physiotherapists to provide the matched care (Foster et al., 2014). Developed in the United Kingdom (UK) National Health Service (NHS), STarT Back facilitates clinical decision-making for clinicians at the first point of contact with patients, providing cost-effective health care, and better patient outcomes compared to usual physiotherapy care (Hill et al., 2011).

Implementation of STarT Back in New Zealand is at an early stage, with uncertainty about how effectively STarT Back will translate into the New Zealand context. In a recent New Zealand survey, 94% of sampled physiotherapists reported screening people with LBP for psychosocial factors. Of these, 37% used formal screening tools and 22% used risk stratification tools, with STarT Back being the most common (57%) (Hill et al., 2020). The extent to which the recommended matched care is provided in New Zealand is unknown.

A training course was held at the School of Physiotherapy, University of Otago, in June 2019, introducing a small cohort of physiotherapists (n=20) to STarT Back. The physiotherapists had varied knowledge about STarT Back but none had previously attended a training course. We subsequently conducted focus groups with course participants, with the following aims:

- 1. To explore the experience of how physiotherapists implemented STarT Back into their practice following the training course.
- 2. To investigate participants' perceptions of the feasibility of wider implementation of STarT Back in New Zealand.

## **METHODS**

## Study design

Three focus groups were conducted to address the aims of the research. We took a constructivist approach, recognising that both the participants and the researchers would be involved in a bidirectional construction of meaning (Braun & Clarke, 2013). As we aimed to explore perceptions, we adopted a relativist

stance acknowledging participants' multiple viewpoints, with none taking priority over others (Braun & Clarke, 2013). We used reflexive thematic analysis with three researchers (CC, CM, JH) collaborating in interpretation of data (Braun & Clarke, 2019). Reporting follows the Standards for Reporting Qualitative Research (SRQR) guideline (O'Brien et al., 2014).

## Researcher characteristics and reflexivity

The STarT Back New Zealand group are physiotherapists with clinical and research expertise in the conservative management of LBP. One of our main activities was to organise the STarT Back training course; consequently, we had an insider position as fellow physiotherapists, and attendees on the course (JH, ST). The facilitator of the focus groups (CC) did not attend the training course and made a conscious effort not to introduce her own opinions into the interview discussion. However, awareness of some of the potential issues did lead her to probe participants for more detail in some areas. Two researchers have clinical experience of treating people with LBP in New Zealand and the UK (CC, JH). A physiotherapy honours student (CM) conducted the initial analysis of focus group data. She was unfamiliar with STarT Back and not involved in the collection of data.

## **Participants**

Demographic data were collected for physiotherapists who attended the New Zealand STarT Back training course. After the course, attendees were invited to participate in focus group interviews.

# **Focus group interviews**

Focus group interviews were used to facilitate interaction between interviewees and promote expression of thoughts and ideas (Kitzinger, 2006). Interviews took place in October 2019, giving participants time in their clinical work to use STarT Back following the course and attend optional online follow-up sessions. They provided retrospective data from clinical records since attending the course. This included the number of patients with LBP, the number of patients where STarT Back was used, and the number of patients in each STarT Back category. The focus group interviews were conducted via Zoom (Zoom Video Communications Inc.), due to the widespread geographic location of participants. We used a semi-structured interview guide with broad open-ended questions (Table 1), followed by probing and sensitising questions to elicit deeper, more detailed information. Participants were prompted to reflect upon, discuss, and share their ideas and experiences. Each interview took approximately 50 min and was recorded using a digital voice recorder (Sony model ICD-UX523F) and Zoom recording. A research assistant made notes that were used for data checking when meaning was unclear from the transcription or recordings, and for triangulation of findings.

## **Data analysis**

Participants were anonymised and assigned an identification code. Two interviews were transcribed verbatim by an independent professional transcription service. One researcher (CM) transcribed the third interview and checked all transcripts against audio and visual recordings for accuracy. Analysis was conducted after all focus groups were completed.

Reflexive thematic analysis was employed following the sixphase framework described by Braun and Clarke (2006). It was

Table 1

Focus Group Interview Guide

Study aims	Questions/line of questioning	
Explore how physiotherapists implemented STarT Back into their practice following the training course	From your perspective, how have you got on implementing STarT Back in your everyday management of patients with low back pain?	
	Let's start with what has gone well (the facilitators) What helped you with this? And maybe some things that did not go so well (what about the challenges/barriers? What got in the way?).	
To investigate participants' perceptions of the feasibility of future implementation of STarT Back in New Zealand	What are your thoughts about the feasibility of implementing STarT Back at a nationwide level in New Zealand?	
Additional comments	Does anyone have any other comments they wish to make about STarT Back – the programme itself, the training, or where to from here?	

a predominantly deductive analysis, as we were seeking answers to specific research questions. However, there were elements of inductive analysis as meaning was constructed from participants' responses (Braun & Clarke, 2013). Familiarisation with data was followed by latent coding where we sought to identify hidden meaning in the words participants used to express their views (Braun & Clarke, 2013). The codes were discussed and agreed (CM, CC). Next, the dataset was organised into possible themes and sub-themes by two researchers (CM, JH) working independently to identify patterns of shared meaning (Braun & Clarke, 2021). These were reviewed and synthesised by a third researcher (CC).

Member checking was conducted with the coding, themes, subthemes, and quotations sent to participants for feedback.

## **RESULTS**

Of the 20 physiotherapists who attended the STarT Back training course, two attendees were members of the STarT Back New Zealand Group and considered to have a conflict of interest and four were unavailable, leaving 14 participants in three focus groups. The characteristics of focus group participants are presented in Table 2.

Ten participants provided data regarding their use of STarT Back since the course (Table 3). Four participants were using STarT Back with a high proportion of their patients (81/90 patients). Remaining participants saw low numbers of LBP patients or were managers who did not see patients at all, meaning they had used STarT Back infrequently or not at all.

Nine participants responded to the member checking enquiry, all of whom were satisfied with the analysis. No adjustments to the final analysis were required.

Six themes were identified: confidence in current practice; STarT Back as a useful framework; concerns over the low-risk group; difficulties in translation; education is essential; and behaviour change. Some practical suggestions to enhance implementation were made. Participant quotations supporting these themes have been tabulated (Table 4) and are referred to in the text with the prefix Q.

## Theme 1: Confidence in current practice

Participants expressed confidence in their current practice for managing people with LBP, even though their approaches were varied. Some already intentionally included assessment and management of psychosocial factors, with attendance on the training course confirming their current practice (Q1).

Others had not recognised they were addressing psychosocial factors with their patients but reported the training course led to enhanced confidence in clinical decision-making and were keen to absorb the STarT back approach into their routine practice (Q2).

Conversely, some participants expressed a preference for continuing with their existing practice relying on "hands on" techniques that they were confident produced good results with their patients and were reluctant to relinquish (Q3).

Participants identified several factors that influenced their confidence in using the approach. These included STarT Back being evidence-based (Q4), level of experience, and previous knowledge about psychosocial approaches. Experience was a strong influence on the preferred treatment approach, both in terms of previous success with patients, but also for participants' confidence in dealing with patients.

# Theme 2: STarT Back as a useful framework

Participants emphasised STarT Back was easy to use and a positive addition to their practice that helped guide management of patients with LBP (Q5). Many of the participants identified that STarT Back provided a useful framework for structuring their patient assessments (Q6). They found the tool facilitated open discussion with patients regarding psychosocial factors associated with LBP. It allowed participants to broach patients' emotions and feelings, providing an opportunity to address potentially sensitive issues (Q7). However, some participants did feel it could impede communication and disrupt building rapport with the patients (Q8).

# Theme 3: Concerns about the low-risk group

Participants appeared to have the greatest concerns about the matched care for the low-risk group, with reluctance expressed for using a single treatment session with no follow-up (Q9).

**Table 2**Characteristics of Focus Group Participants: Physiotherapists Who Completed the New Zealand STarT Back Training Course (N = 14)

Characteristic	n	%
Age bracket (years)		
20–29	1	7
30–39	1	7
40–49	6	43
50–59	3	21
60–69	3	21
70+	_	_
Gender		
Male	8	57
Female	6	43
Country of undergraduate training/pre-		
registration	12	86
New Zealand	2	14
United Kingdom		
Experience working as a physiotherapist (years) <sup>a</sup>		
0–9	1	7
10–19	3	21
20–29	6	43
30–39	1	7
40+	2	14
Highest postgraduate qualification		
Postgraduate certificate	3	21
Postgraduate diploma	6	43
Master's degree	5	36
Setting of work		
Public hospital/clinic	1	7
Private practice	11	79
Private organisation	1	1
Other <sup>b</sup>	1	1
Predominant area of work <sup>c</sup>		
Musculoskeletal physiotherapy	13	93
Sports physiotherapy	4	29
Occupational health	2	14
MDT/IP team	3	21
Personal experience with low back pain		
Yes	12	86
No	2	14

*Note.* IP = interprofessional; MDT = multidisciplinary team.

These concerns focused on not knowing the clinical outcomes for individual patients and whether the condition had resolved or needed further input, as well as failure to meet patient expectations, and potentially negative business impacts.

A single session was perceived to be insufficient for building rapport or providing an effective intervention. While participants accepted the argument that low-risk patients may not require extensive treatment, or could be over-treated in the current

**Table 3**Physiotherapists' Use of STarT Back Following the Training Course

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Use of STarT Back by physiotherapists	Total	Mean	Range
> 1 per week ( $n = 4$ )			
Patients with LBP seen since training course	90	22.5	20–26
Patients with LBP seen using STarT Back screening tool Number of patients seen from each risk subgroup	81	22.3	17–26
Low risk	32		
Medium risk	34		
High risk	15		
< 1 per week (n = 4)			
Patients with LBP seen since training course	65	16.3	9–25
Patients with LBP seen using STarT Back screening tool Number of patients seen from each risk subgroup <sup>a</sup>	23	5.8	3–9
Low risk	10		
Medium risk	9		
High risk	2		
With 1 patient $b(n = 2)$			
Not using, or no data provided $(n = 4)$			

*Note.* <sup>a</sup> Risk group not given for three patients. <sup>b</sup> Two patients with LBP – STarT Back used with one, who was categorised as low risk. <sup>c</sup> Managerial role (2); Unable to extract data (1); Did not respond (1).

system, there was also a general feeling that one visit was insufficient to ensure an optimal outcome. Furthermore, participants expressed dissatisfaction about unknown outcomes for the low-risk patients (Q10).

Participants perceived that patient expectations of LBP management, drawn from previous experiences of physiotherapy treatment, could limit patient acceptance of the STarT Back approach, especially the education and self-management strategies recommended as the matched treatments for low-risk patients (Q11). Participants feared "mismatch" in treatment expectation could result in patient dissatisfaction and them seeking treatment elsewhere (Q12).

Given the current structure of private practice in New Zealand, some participants identified potential financial implications of matched care as a barrier for future implementation, particularly where a physiotherapist's income relied on caseload (Q13).

 $<sup>^{\</sup>rm a}$  One response missing.  $^{\rm b}$  Education.  $^{\rm c}$  Participants could select more than one answer.

#### Table 4

Focus Group Participants' Quotations Referred To In Text

## Theme 1: Confidence in current practice

- Q<sup>a</sup>1. I see already lots of complex clients so kind of validates what I'm seeing. (A<sup>b</sup>7<sup>c</sup>)
- Q2. I think it was really useful in terms of maybe giving you your confidence in decisions and yeah, improving decision making ...

  The training gave me the confidence to do psychologically informed physio on patients that would normally just go straight into a pain programme. (A1)
- Q3 ... you can have a direct like cause and effect, like you do your manual therapy ... they're heaps better from your treatment as such so I would struggle to know that I could do something to help them there and then not do it. (D6)
- Q4. I think well I mean basically we've been doing a lot of what was talked about anyway and I think what I find refreshing as much as, that it was nice that there was research to back it up. (D2)

## Theme 2: STarT Back as a useful framework

- Q5. It's really easy to use and I think, so I tend to do it at the start of my subjective questioning, and it gives me, you know, a really good idea straight away, you know their risks so it's so easy to use and you just get a really good overview of what risk group they're in. (A4)
- Q6. I think also that framework of how to implement it was what I got out of it the most. (M1)
- Q7. [STarT Back] is really useful just in terms of confirming maybe what I was thinking but also opening up some dialogue with the patient to maybe talk about their worrying thoughts ... their feelings ... rather than necessarily just where their pain's coming from. (D4)
- Q8. It kind of gets in the way of that rapport building so we kind of need it done in the waiting room before they come in. (D6)

## Theme 3: Concerns with the low-risk group

- Q9. I think the hardest one to grasp is the fact that it was being suggested that if you'd identified your patient as being low risk, that you only saw them once. I think as a group, we find that, we felt that that really was not going to work for us as to how we practised. (D2)
- Q10. I think it's a concern because you lose contact with that patient for a start off and you really don't know what the outcome is.
- Q11. ... people expect to have a little bit more ... They're paying to come and see us so if we just tell them to go home and self-manage, that's probably not what they're paying for. (A3)
- Q12. We have lost probably a few patients; they've come back for different things and they've said "I ended up with a chiropractor or osteopath or something for my back", 'cause they didn't feel they'd been treated. (D6)
- Q13. Looking from a business model and a clinical model ... a lot of the physios are contractors so, the difficulty particularly when you are trying to implicate [implement] matched care, it does have an income impact on private business. (M2)

# Theme 4: Difficulties in translation

- Q14. A lot of what you're talking about with the British market with the NHS [National Health Service] and the type of clients ... is quite different to here ... not only how they work but how they pay. They're not private practice ... they're hospital driven. (M2)
- Q15. ACC would really have to be on board because the vast majority of the back-pain patients I see have got an ACC history. (M2)

  O16. There are carrots and sticks and levers that ACC can put in place and have shown. historically to change physio behaviour.
- Q16. ... there are carrots and sticks and levers that ACC can put in place and have shown ... historically to change physio behaviour. (A6)
- Q17. You know we would see a hugely different population of clients in the UK. Even when they were classed as acute, they were minimum six weeks down the line. It would take six weeks just to get a referral from the doctor to come through, then have a waiting list and then till you see an "acute" person. (M1)
- Q18. ... something like two thirds of their patients had three months of back pain before they got treatment, whereas ... [in NZ] people are coming in at one week. (A5)

## Theme 5: Education is essential

- Q19. So, if we're going to be better at the soft skills and the biopsychosocial implementation of management, we've got to train at that and we've got to be good at that. The schools have got to run it out ... so that in four years' time, everyone that's graduating will have a really good knowledge of it. (A7)
- Q20. We were all senior practitioners with a lot of experience, and we still find it difficult to take that all on board ... I don't think I would support it as a new grad sort of course ... You really do need to have a bit of an understanding of what you're actually dealing with from experience. (D2)

- Q21. It was nice to sort of, from the course content, to bring it all together as much as it was [intense] over the four days ... it helped to, as others have said, be confident that in fact this is a realistic way of treating. (D1)
- Q22. The four-day training course itself is very intense and those sorts of skills required, you can't learn those in a four-day workshop. (A5)
- Q23. Many of the case studies they were applying weren't relevant to the population that we are dealing with ... very difficult to envision how that was going to work in our practice, when the training itself is a population very different to our own. (M2)
- Q24. I know the training in the UK was done over weeks blocks ... I think that would be a better way of training, where you go away and you do a little bit then come back with questions. (M1)

## Theme 6: Behaviour change

- Q25. It's gonna obviously require a lot of training and a lot of time I think, you know, to change physios' behaviour. (A4)
- Q26. It really is a heck of a lot of information to absorb and then to try and expect to change your lifelong practices or what your beliefs are or whatever to change that, because some people will say well on this is just too hard. (D4)
- Q27. I don't know if it's as hard as maybe what people think. I think that there is already some change starting to happen. (A3)
- Q28. You know it's going to take time, but I think we are definitely seeing a shift. (M1)

#### Practicalities

- Q29. We've got technology that we can actually just give them an iPad at the front desk and they can fill it out and its right there... its literally in the waiting room ... they can press a couple of buttons. (M1)
- Q30. We had an in-service with staff so just to let them know what we're doing with the STarT Back tool and getting the questionnaire to patients, which has been useful. (A7)
- Q31. I think an app would be perfect, you know the day and age now with an app just look at something and get some advice around education around the simple things you can do. (M1)
- Q32. If you can get some research that is New Zealand specific, you have a much easier chance of getting ... people on board. (M2)

*Note.* <sup>a</sup> Q prefix = quotations in manuscript text. <sup>b</sup> A/D/M prefix relates to different focus groups. <sup>c</sup> number relates to individual participant.

# Theme 4: Difficulties in translation (UK to New Zealand)

Addressing concerns about the low-risk group is one of the aspects participants felt would need to be addressed if STarT Back was to be implemented widely in New Zealand. Participants identified several further potential difficulties for implementing the approach including differences in the health systems, and funding streams between the UK and New Zealand (Q14). Participants felt that successful implementation of STarT Back in New Zealand would necessitate a change in funding models, and support would be required from the ACC as they are a major funder of physiotherapy treatment for people with LBP due to injury (Q15, Q16).

Based on their own experience or knowledge of the NHS health system in the UK, participants perceived that as first contact practitioners, physiotherapists in New Zealand see patients with LBP a lot sooner than colleagues in the UK NHS secondary care sector who must wait for a doctor's referral (Q17). Participants felt the health system in New Zealand, and ACC funding, make it easier for patients to access physiotherapy earlier in their course of LBP; this was a notable difference to the NHS system where delay in referral to physiotherapy from GPs means patients may not be seen within the first few weeks (Q18).

## Theme 5: Education is essential

Education and training were raised as important considerations, with the STarT Back training requiring some adaptation to better fit the New Zealand context.

Participants suggested education of student physiotherapists about STarT Back and underlying concepts would be essential

for future implementation in the New Zealand context (Q19). However, participants felt attendance on a specialist course and using the STarT Back approach would be better targeted to physiotherapists with more experience, as novice physiotherapists had other skills to focus on (Q20).

Participants' perceptions of the training course were generally positive, identifying the course as a strong facilitator for implementing STarT Back in their own clinical practice (Q21). The training was acknowledged as valuable and informative, but there was general agreement the course was too short, creating a pressured learning environment (Q22). Several participants highlighted parts of the training were out of context for the New Zealand population and healthcare system, and struggled to link case examples to their current practice (Q23).

Participants advocated an extended training course, with time to implement and reflect upon the tool in practice, and thus consolidate learning. They suggested case scenarios relevant for the New Zealand context be used to aid learning. Participants suggested structured follow-up sessions to complement the training course, enabling clinicians to connect and learn from each other's experiences (Q24).

# Theme 6: Behaviour change

Aspects of the training course were identified as facilitators for implementing STarT Back into participants' own clinical practice, with participants recognising that behaviour change would also be required to make this successful (Q25). Some participants considered shifting behaviour away from the traditional biomedical approach would be too hard for some

physiotherapists (Q26). By contrast, other participants felt it was not as hard as anticipated, and education would help. It was also recognised that behaviour change in practice would take time but is already occurring (Q27, Q28).

## **Practicalities**

While not a theme, participants made several practical suggestions to promote implementation of STarT Back in New Zealand. Participants identified strategies for implementing STarT Back within their own practices, including involving reception staff to facilitate routine completion of the screening tool (Q29), and conducting in-service training with colleagues (Q30).

Additional suggestions were made for improving the training course (Theme 5) and use of technology to enhance education and clinical use of STarT Back (Q31).

Additionally, New Zealand-based research into STarT Back was seen as being essential to promote implementation (Q32).

## **DISCUSSION**

Our study aimed to explore perspectives of New Zealand STarT Back trained physiotherapists about implementing the approach in their own clinical practice, and the feasibility of wider implementation in New Zealand. As the training course was the first of its kind to be held in New Zealand, this study affords a unique perspective of experienced physiotherapists using STarT Back in the New Zealand context.

Data from the pre-focus group questionnaire, combined with focus group data, indicate different levels of participant engagement with STarT Back since the training course. Some of the participants had thoroughly embraced the approach for managing their patients with LBP. As identified in previous research, these participants valued stratifying patients based on the risk of chronicity and felt the matched care helped guide and prioritise patient needs (Caeiro et al., 2019). Other participants were more cautious, finding it hard to let go of their preferred approaches to treatment, especially for the low-risk group where STarT Back advocates self-management alone. Some participants had used STarT Back very little or not at all, mostly due to the specific requirements of their job (e.g., a managerial role). However, we encouraged all participants from the training course to participate in the qualitative study as we valued all perspectives, not only those of high users of the approach.

We identified six themes: confidence in current practice; STarT Back as a useful framework; concerns over the low-risk group, difficulties in translation; education is essential; and behaviour change.

The importance of confidence in their skills to deliver a particular type of treatment, was apparent across participants. Some felt their confidence to use STarT Back was enhanced by the training. This relationship has been noted previously, as lack of training is recognised to impact confidence in dealing with psychosocial aspects of LPB in practice, even when physiotherapists are aware of their importance (Cowell et al., 2018; Synnott et al., 2015). While perspectives included in each theme are grouped around a central concept, there is also considerable overlap between the themes. For example,

the influence of training on confidence was also perceived to promote behaviour change for some participants, illustrated by their willingness to utilise the new approach.

Participants suggested extended training would enable the continued development of the skills learnt during the course, while providing clinicians with support and guidance as they work to incorporate STarT Back into practice. Research shows individuals' confidence in using a psychosocial approach is influenced to different extents by attendance on a training course, reporting difficulty integrating learning into clinical practice (Synnott et al., 2015). Our participants highlighted this issue, suggesting ongoing training beyond an initial course should be considered. Furthermore, participants felt incorporating online training into future programmes could be a facilitator for implementation by improving access to training material and resources. In recent years, Keele University has transitioned to an online training format where resources are easily accessed via the institution's website (University of Keele, 2021).

Participants reported STarT Back is easy to use and provides a useful framework for assessing and managing patients with LBP; it also enables conversations with patients about psychosocial factors. Similar themes have been identified in previous STarT Back research (Hsu et al., 2019), although some GPs have reported the closed nature of the questions in the screening tool can inhibit rapport building (Karstens et al., 2015). This perspective was identified by one physiotherapy participant, who suggested completion of the tool in the clinic reception area would overcome this issue. These findings suggest there may be diversity in perspectives of different health professionals, which has implications for wider implementation of STarT Back. Further exploration of New Zealand GPs' opinions about STarT Back is warranted.

Another potential barrier to future implementation of STarT Back is the concern expressed about management of patients in the low-risk category. The limited contact, unknown outcomes, and failure to meet patients' expectations could make this aspect of STarT Back unacceptable to some physiotherapists. Similarly, Portuguese GPs considered the proposed intervention for low-risk patients would lead to patient dissatisfaction with care (Caeiro et al., 2019). Equally important in terms of acceptability and uptake of the approach are the financial implications. Fewer appointments for the low-risk group, or loss of current or future custom due to patient dissatisfaction, are very real concerns for business owners and individual physiotherapists whose income may rely on volume of patients. Similar concerns were expressed by German physiotherapists who felt that adaptation of STarT Back to their health system would be required to prevent financial disadvantage to clinics and be necessary for successful implementation (Karstens et al., 2018).

Successful translation of STarT Back into different health and cultural contexts has not been established. Two recent trials in the United States showed low rates of stratification by primary care physicians (GPs), and subsequently low rates of referral for appropriately matched care, despite considerable efforts to provide training and support strategies (Hsu et al., 2019; Middleton et al., 2020). Some of the barriers are likely to be similar in New Zealand, such as lack of primary care physician

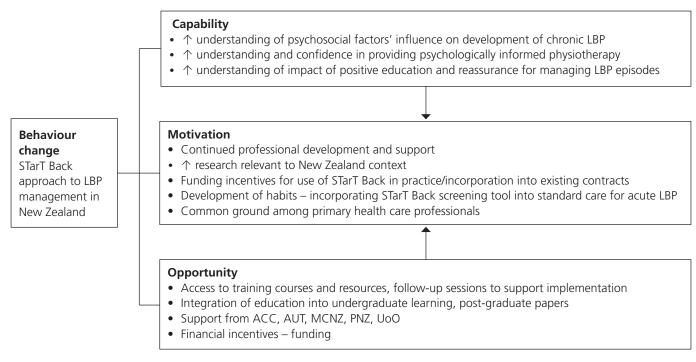
(GP) engagement, and inadequate length of appointments (Middleton et al., 2020). The most effective strategies for implementation of new treatment approaches in New Zealand primary care have yet to be identified and could be the basis of future research.

The differences in health systems, funding by ACC, and direct access to physiotherapy in New Zealand means that patients identified as medium and high risk may be seen earlier than in the UK as wait list for physiotherapy in the NHS may mean there is a delayed flow through the healthcare system. STarT Back was developed and tested on people with non-specific LBP of any duration, with the screening tool asking about behaviour of symptoms over the previous two weeks (Hill et al., 2011; Hill et al., 2008). Duration of an episode of LBP influences the predictive ability of the STarT Back screening tool, with it being less predictive for episodes < 2 weeks (Morso et al., 2016). Participants reported frequently seeing patients with acute LBP within a few days of pain onset, meaning previous research conducted in the NHS may not be directly applicable to the New Zealand context. Recognition of these differences and adaptation of STarT Back is therefore required to better suit the presentation of patients with acute LBP in the primary care context in New Zealand. In recent years, there has been an increase in private practice physiotherapy in the UK, which could enable more relevant comparisons of implementation to occur in future research.

A unifying theme underpinning the data was the concept of behaviour change. Participants perceived change in clinical practice as necessary for successful implementation of STarT

Back, but this could be challenging and take time to achieve. Stimulating behaviour change of physiotherapists and other health professionals will be an important aspect when considering implementation of STarT Back in New Zealand. Effective behaviour change can be influenced by several dynamically interacting factors as conceptualised by the Capability, Opportunity, and Motivation Behaviour (COM-B) model (Michie et al., 2011). "Capability" necessitates having the requisite psychological and physical skills and knowledge; "Opportunity" involves all the external factors necessary to promote change; while "Motivation" means having the drive to make decisions and implement change (Michie et al., 2011). The training course extended *capability* by teaching the importance of psychosocial factors to effectively manage patients with LBP and created opportunities to rehearse psychologically informed skills. The course also highlighted the opportunity to engage in behaviour change by prompting participants to integrate the screening tool into routine practice, thus making it more likely a sustainable change to practice will occur (Michie et al., 2011). A further opportunity was provided by giving access to resources necessary to facilitate the use of STarT Back, which promoted professional development among colleagues, and widened the reach of the approach beyond the study cohort. Increased confidence in clinical decision-making, as described by some of our participants, can act as a reflexive motivator for behaviour change (Michie et al., 2011). In summary, for some participants we feel the course improved capability in the desired skillset and provided the opportunity to engage in the behaviour, thus enhancing their motivation to implement the desired behaviour change, that is, adoption of the STarT Back approach (Figure 1).

Figure 1 Representation of Factors Influencing Implementation of STarT Back in New Zealand Using the COM-B Framework



Note. ACC = Accident Compensation Corporation; AUT = Auckland University of Technology; LBP = low back pain; MCNZ = Medical Council of New Zealand; PNZ = Physiotherapy New Zealand; UoO = University of Otago.

Conversely, other participants did not exhibit behaviour change. Some felt they were already operating an approach similar to STarT Back, while others were satisfied with their current (non-psychosocial) approaches. Some participants expressed concerns with features of STarT Back itself. For example, concerns about the limited contact with patients in the low-risk category and the potential failure to meet patients' expectations would adversely affect "social opportunity" described in the COM-B framework and potentially represent a barrier to behaviour change (West & Michie, 2020). Furthermore, perceived unfavourable financial impacts from implementing STarT Back will block opportunities and be de-motivating for physiotherapists and practice owners.

## **Study limitations**

Generalisability of findings is limited as this was a small group of experienced physiotherapists, not necessarily representative of all physiotherapists treating people with LBP in New Zealand. We lack the insight of newly trained physiotherapists, whose perceptions of STarT Back may differ.

There were positive and negative aspects relating to the use of Zoom to conduct the focus groups. While it permitted more inclusive attendance as geographical location of participants became irrelevant, interactive discussion was somewhat constrained by only one person talking at a time. Interaction between participants is one of the main reasons for using a focus group method. In person/face-to-face discussion may have facilitated a more natural open discussion in the groups.

Conducting individual interviews via Zoom is another option and is considered an acceptable alternative to face-to-face interviews (Archibald et al., 2019). Previously, participants and researchers reported high satisfaction with the convenience and cost-effectiveness of the method, and felt it permitted good development of rapport with individuals (Archibald et al., 2019). The acceptability of online platforms such as Zoom for conducting focus groups is less certain. Our experience was that it was challenging to establish good rapport between participants, and the need for turn-taking directed by the facilitator influenced the power dynamic of the groups in favour of the facilitator. Attempts were made to mediate this with the use of humour, empathy, and by taking a stance of mutual understanding about the issues faced in clinical practice. We also ensured all participants had an opportunity to respond fully to every question, thus balancing out the contribution from individuals.

One aspect where contributions were lacking was around the financial concerns and implications of implementing STarT Back in New Zealand. A few perspectives were shared and have been discussed. However, comments were made with careful deliberation and with specific prompting from the facilitator. On reflection, this could have been an example of social desirability bias, which is the tendency to present oneself in a socially acceptable way, rather than expressing one's actual reality (Bergen & Labonté, 2020). Given the physiotherapy profession is driven by the overarching goal of providing individuals with the best care possible, this could have led to participants feeling obliged to talk more empathetically about the low-risk

interventions not meeting patient expectations or resulting in poor outcomes, rather than discussing in depth the potential financial impact on their business.

No observations were made about the implications for Māori with LBP about the acceptability of STarT Back. We speculated that STarT Back might impact how Māori access primary care for LBP, but were unable to draw any conclusions. As partners under Te Tiriti o Waitangi, we must uphold principles such as tino rangatiratanga to ensure services for Māori with LBP are developed in collaboration with Māori.

#### **Future research**

Findings from this study suggest STarT Back as developed in the UK requires adaptation for the New Zealand context. Future research should explore the accuracy of the screening tool for identifying risk of poor outcome in acute LBP of less than 2 weeks duration and investigate how stratification might change when screening is repeated at different appointments, early in the episode of LBP. Acceptability to physiotherapists and patients of the recommended matched care for the low-risk group needs further exploration. Physiotherapists' acceptance of these recommendations could be influenced by research investigating the clinical outcomes for this group. Furthermore, acceptability of STarT Back for Māori and Pacifika patients requires future research, and possible adaptation for their specific cultural context.

## **CONCLUSION**

The training course was valuable for some participants, generating behaviour change by extending capability, providing opportunities, and thus motivating them to implement STarT Back in their own practice. The extent of behaviour change was variable, with some participants exhibiting great enthusiasm for adopting the new approach, while others were more cautious with using STarT Back, or continued with their preferred methods for treating people with LBP. A further group felt they were already using the same principles to manage their patients, and the course reinforced their existing practice.

Participants recognised the importance of education and training in future implementation of STarT Back in New Zealand. Suggestions for improving the training course included spreading the course over a longer timeframe, utilising online training resources, and re-structuring materials to better reflect the New Zealand context.

Overall, participants affirmed the value of the STarT Back approach to managing people with LBP in New Zealand. However, they were cautious in their view about possible future implementation before health system and funding issues were addressed. Concerns about management of the lowrisk group, the applicability of the STarT Back screening tool for patients with acute LBP of less than two-weeks duration, and the absence of any cultural consideration indicates STarT Back should be adapted before use in New Zealand. Variable success of the approach in health systems other than the UK NHS reinforces this need for adaptation. Any adapted approach would then need pre-implementation research to investigate its clinical- and cost-effectiveness, and predictive accuracy.

## **KEY POINTS**

- 1. STarT Back was perceived to be useful and easy to integrate into routine physiotherapy practice.
- 2. Education about screening and management of psychosocial risk factors for people with LBP enhances confidence and promotes change in clinical practice behaviour for some physiotherapists.
- 3. Stimulating behaviour change in health professionals and patients will be important for future implementation of STarT Back in New Zealand.
- 4. STarT Back will require some adaptation to the New Zealand context to make implementation feasible. This includes consideration of cultural factors, funding models, and health system structure.

## **DISCLOSURES**

We gratefully acknowledge the PNZ Scholarship Trust and the Otago Southland Physiotherapy Trust in supporting the New Zealand STarT Back training course and this preliminary evaluation. There are no conflicts of interests that may be perceived to interfere with or bias this study.

## **PERMISSIONS**

Ethical approval was granted by the University of Otago Human Research Ethics Committee (reference number HD19/026).

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# **CONTRIBUTIONS OF AUTHORS**

CC, JH, RE, DR, RE, ST and GDB conceived the project and contributed to study design. CC and GDB collected the data. CC, CM and JH undertook analysis and interpretation of data, and wrote the initial draft of the manuscript. All authors contributed to revisions and approved the final draft of the manuscript.

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