

## Co-design Partners in Care case study

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# **‘We’ve got your back’ (Capital & Coast District Health Board)**

### Context

Different services within Capital & Coast District Health Board (CCDHB) have identified that there is an opportunity to improve the referral pathway for people experiencing spinal problems. Wait times for appointments are increasing. Current challenges include referrals that direct consumers for surgical specialist intervention only to find they do not require that service. The consumer is then referred to a different service and is on a wait list again. This also means the number of people waiting to see surgeons is high, and people who do require surgical intervention wait longer than necessary or appropriate.

### Aim

CCDHB consumers being referred for spinal issues should see the ‘right clinician in the right place first time’.

### Start up

We are trying to minimise consumers’ waiting times to be seen in the DHB for spinal issues and ensure they see the most appropriate clinician the first time. In many cases, GPs will either refer to multiple services to ensure their consumer gets seen as soon as possible, or they will tend to refer to a surgical service as the ‘platinum’ referral, when this is not always the best and most appropriate person for the consumer to see. The three services most commonly referred to are neurosurgery, orthopaedic surgery, and musculoskeletal (MSK) physiotherapy. To a much lesser extent, consumers are referred to the pain management team. Triaging is done independently and differently in each of these services. All four services are committed to and keen to pursue a more effective and less time-wasting alternative.

From the data we have looked at so far, the median wait times across all four services was 80 days (from receipt of referral to first appointment). The longest wait was 140 days; the shortest wait was 18 days. Although triaging in each service is different, triages will mostly consist of ‘urgent new’, ‘semi-urgent new’ and ‘routine new’. There were a total of 1201 spinal referrals across CCDHB for January to December 2018.

Our project team was made up of two MSK physiotherapists (one fully clinical, one clinical and management), two surgeons (one orthopaedic, one neurosurgeon), and two consumers who had a long wait to get into MSK outpatient physiotherapy. Although the team was small, we felt that the core project team consisted of people with a relevant range of experience of delivering and receiving care in spinal services.

### Engage

In order to most effectively engage with people and encourage their involvement in the co-design process, we developed an ‘elevator pitch’. The following is a short narrative that we used which can help people understand the reason for the work and how they might contribute.

*Hi, my name is... I am...*

*We are currently reviewing how people access neck and back pain services at our hospital. We want to provide a service that ensures you see the right person at the right place, first time.*

*One of our methods is to speak with people who have been referred to us for spinal issues over the past year.*

*Would you be willing to share your thoughts with us on the care you've received in relation to your back pain?*

*This would be through a survey, which we can work with you to find the best means to complete. We could do it now, or face to face another time, or we could email, post or telephone you at your convenience.*

## Capture

We captured data in a number of different ways:

- We created a report of all spinal referrals into CCDHB (or as many as we could find in our system given the different descriptions) over the last year. We contacted most of our consumers from this report by phone or email, but also captured some from surgical clinics and by word of mouth.
- To aid the surveys we undertook with consumers, we co-developed a survey with the consumer members of our project team, the clinical lead and the project lead. We also gathered comments from one of the surgeons involved.
- Consumers were offered the opportunity to complete the survey via electronic means, through a face-to-face discussion or a telephone conversation. Of the surveys developed for consumers, we completed:
  - Five surveys via SurveyMonkey
  - 20 surveys via telephone interview
  - one survey face-to-face.
- We also surveyed GPs, orthopaedic surgeons and neurosurgeons, and MSK and pain management physiotherapists. Of the surveys developed for these participants, we completed:
  - four surveys with surgeons (one via face-to-face interview, three via SurveyMonkey) (CCDHB staff)
  - five surveys with GPs (four via SurveyMonkey, one via telephone interview)
  - one focus group face-to-face survey with 3 MSK physiotherapists (CCDHB staff)
  - six online surveys with MSK outpatient physiotherapists.

Another method we used to better understand the current process was to spend an afternoon shadowing a neurosurgeon at CCDHB. The shadowing aimed to identify the types of referrals coming through to neurosurgery and where opportunities lay to reroute patients through to more appropriate services. We also gathered data relative to the neurosurgeon's activity during the clinic – for example, how he made decisions regarding triaging to his own clinics and about referring patients onto another service. During the same afternoon we were also able to complete two of the face-to-face consumer surveys noted above.

## Examples from the collated feedback

### **From consumers**

- *'I rattled around for three months feeling neglected. I went back to the GP and stamped my feet because I lost my job because of the symptoms.'*
- *'I got lost in the system – if you don't ask for yourself nothing happens.'*

- *'It is not easy when you are suffering – back pain and abdominal pain – we want help!'*
- *'I was disappointed at how long it took to have first appointment with physio – 6–7 months.'*
- *'Physio got it back along with the GP who gave meds that helped – all pretty straight forward.'*
- *'The fact that the GP referred me to neurosurgery made me think there was something to worry about.'*

### **From surgeons**

- *'The patient often hangs hope that the surgeon can fix everything.'*
- *'Patients are often frustrated at the long waits to be told that surgery is not an option.'*
- *'They could have started treatment much earlier. And their presence in my clinic also denied a slot to someone else.'*
- *'Often by the time we work our way through the pathways the patient is extremely frustrated. Whatever our feelings are in whether this is correct it is very draining to have a frustrated patient.'*
- From the surgeon survey, question number 5, the surgeon stated that *'none of these descriptions is exactly right – more "resigned", sometimes "frustrated".'*

## **Suggestions of what would improve the experience**

### **From consumers**

- To be seen sooner than the current system enables.
- The need to be heard – listen to what the person is telling you.
- Having one central person to liaise with rather than going through all these people.

### **From surgeons**

- Creation of therapist-run supervised clinics.
- Diversion of patients from surgeon to physiotherapist at referral where appropriate.
- Change the triage system for spine pain to ensure the patients are seen by the most appropriate clinician.

### **From GPs**

- Stronger liaison between the physio service and primary care/general practice. It was felt that there was lots of scope for this in the new Health Care Home programme. The Health Care Home programme is a new way of working involving more active liaison between GPs, GP nurses and the CCDHB community allied health teams – managing patients in common.
- One GP suggested that having an MRI facility in primary care, governed by appropriate guidelines, would help with referrals and waiting times.

### **From the neurosurgeon**

- We need to treat people not scans.
- VOMIT – 'victims of modern imaging technology'. (This acronym encompasses all patients who suffer physically as well as mentally as a result of false positive scan findings.)
- An expression of frustration that some of the detail in referrals can be inaccurate and the patient should have imaging done before being allocated a first specialist appointment.
- Communication skills of the neurosurgeon – for example, this neurosurgeon suggests asking the questions, *'Are there any other elements to this story that you feel are important that I have neglected to ask you about?'* and *'Have we explained ourselves to your satisfaction?'* When he

has trialled it, he reports that 'it was met with great satisfaction by patients as it allowed them an opportunity to ensure their voice was being heard'.

## Learning from shadowing

We found from shadowing of the neurosurgery clinic that some patients were appropriate for triage by physiotherapy, before a surgical assessment. We also identified that there was a gap in knowledge in how to access physiotherapy services. The surgeon told us that he often did not feel comfortable declining referrals, even if the information included in referral indicated that the patient was unlikely to require surgical intervention.

## Understand

After gathering a range of data from patients and staff, we created experience maps which helped us to create themes and make sense of the experiences and collate ideas for improvement.

### Patient experience map

Figure 1: A visual map illustrating high-level themes and data relating to the patient experience of referral

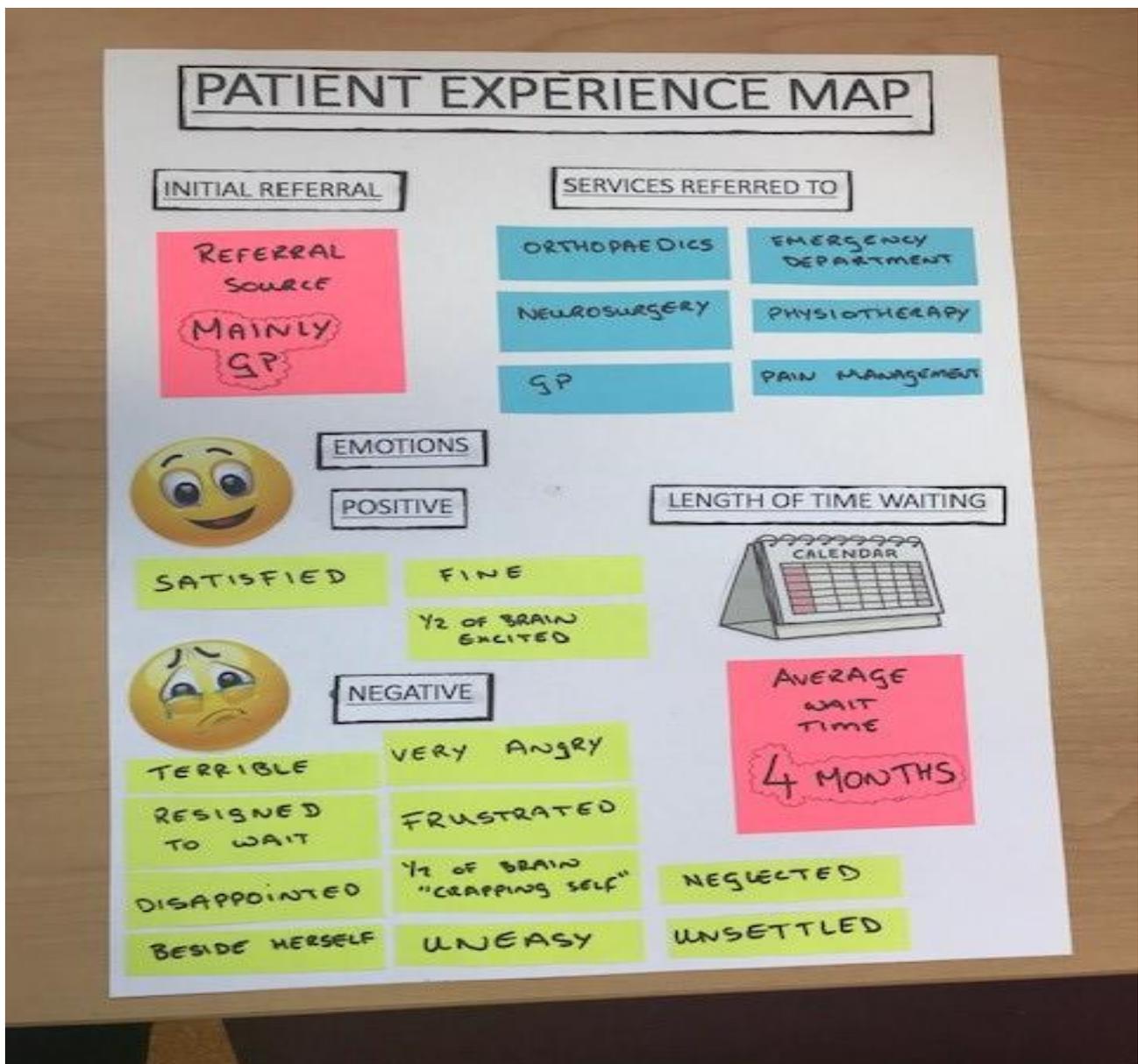
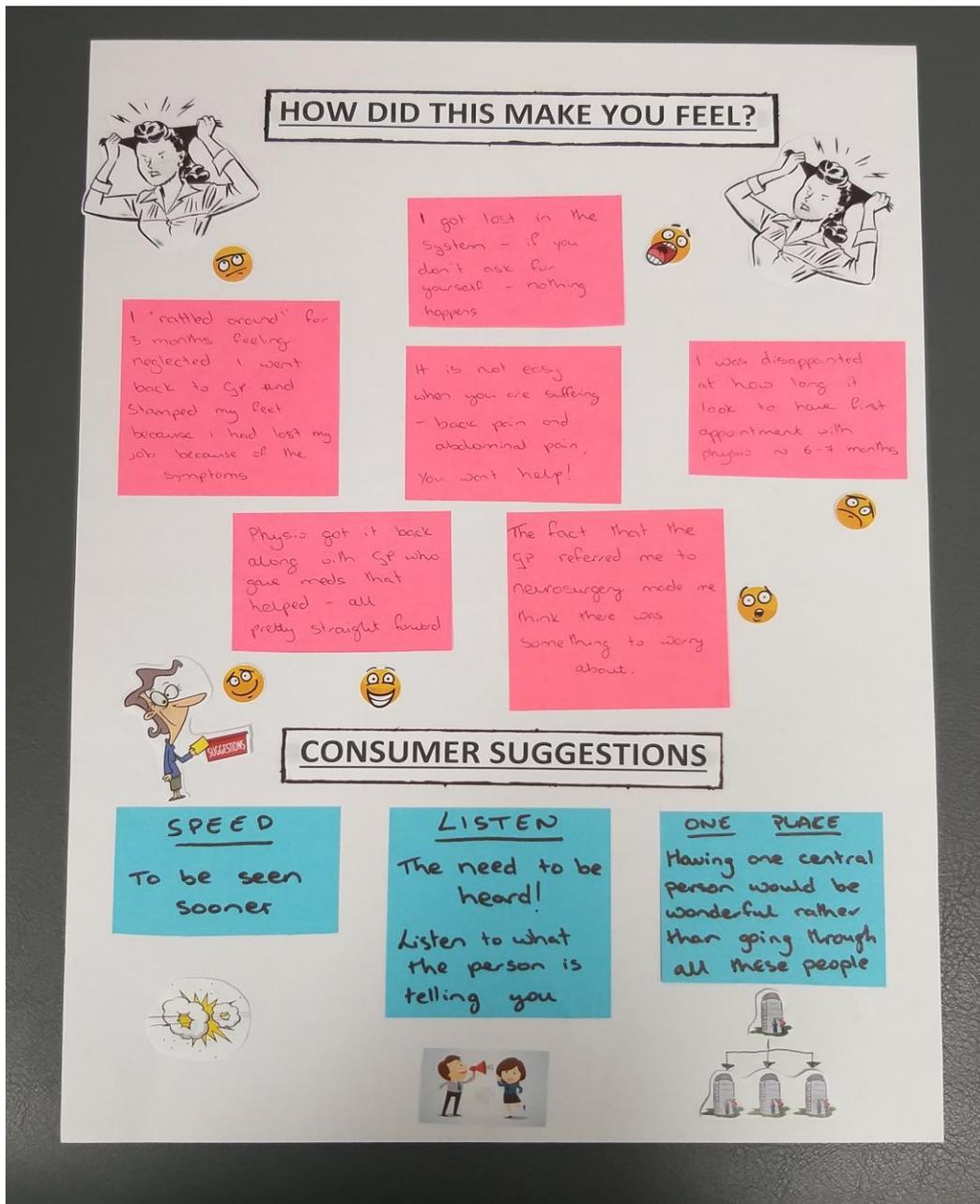
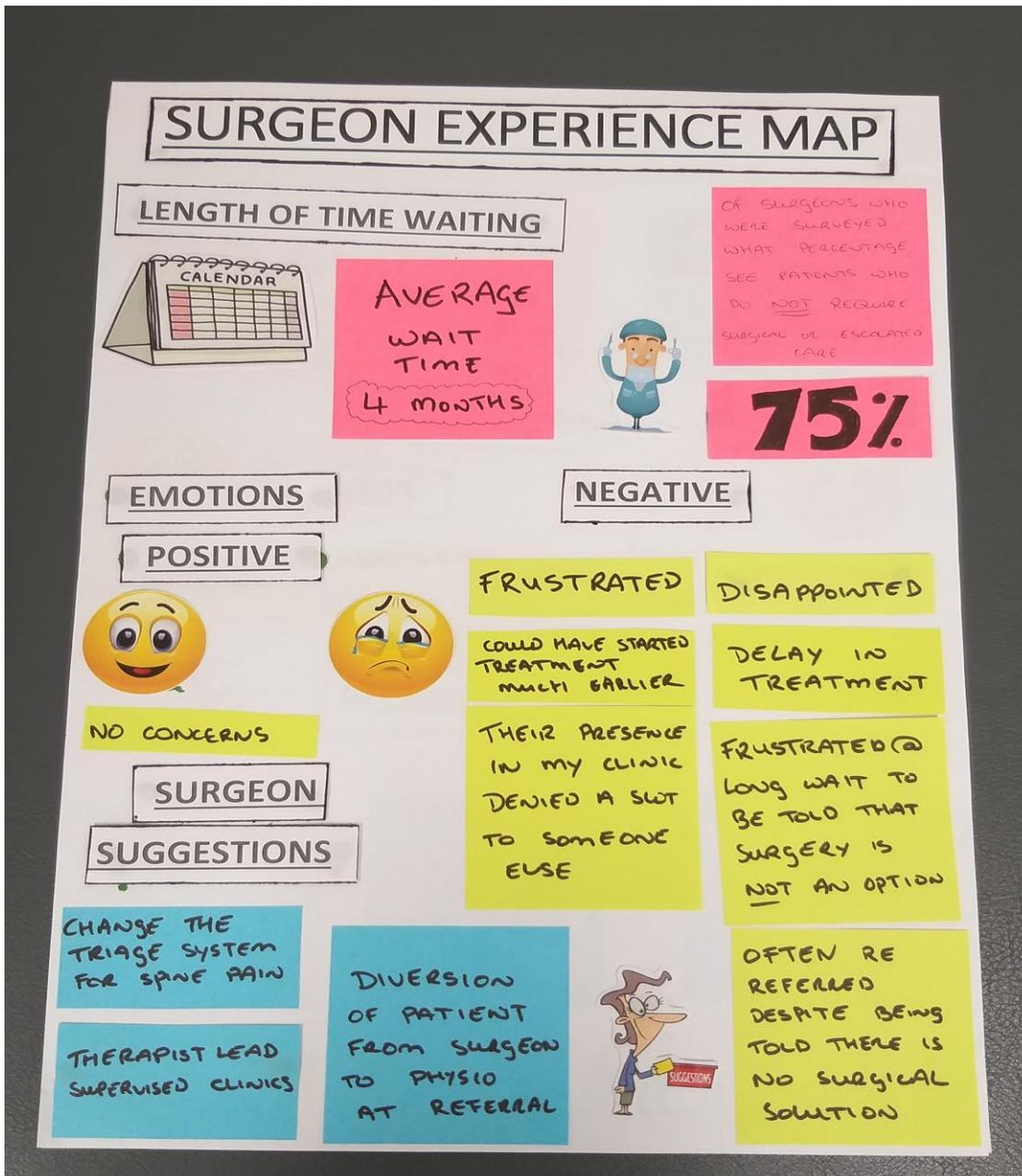


Figure 2: Sample of quotes from patients about how the referral process made them feel and what ideas they had for improvement



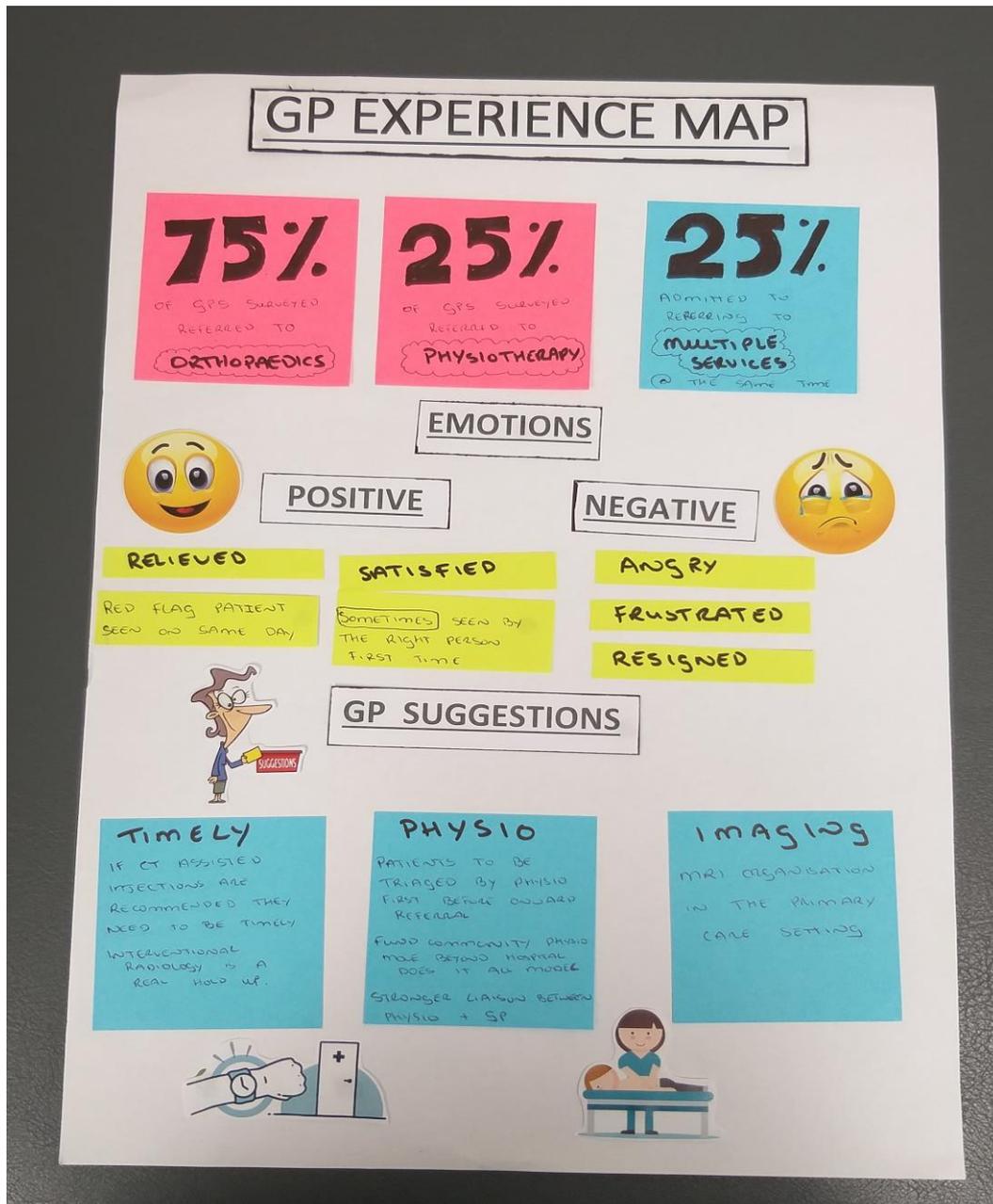
## Surgeon experience map

Figure 3: Visual map illustrating high-level themes and data relating to the surgeon experience of referral, how it made them feel, and suggestions for improvement



# GP experience map

Figure 4: Visual map illustrating high-level themes and data relating to the GP experience of referral, how it made them feel, and suggestions for improvement



# Physiotherapist experience map

Figure 5: Visual map illustrating high-level themes and data relating to the physiotherapist experience of referral

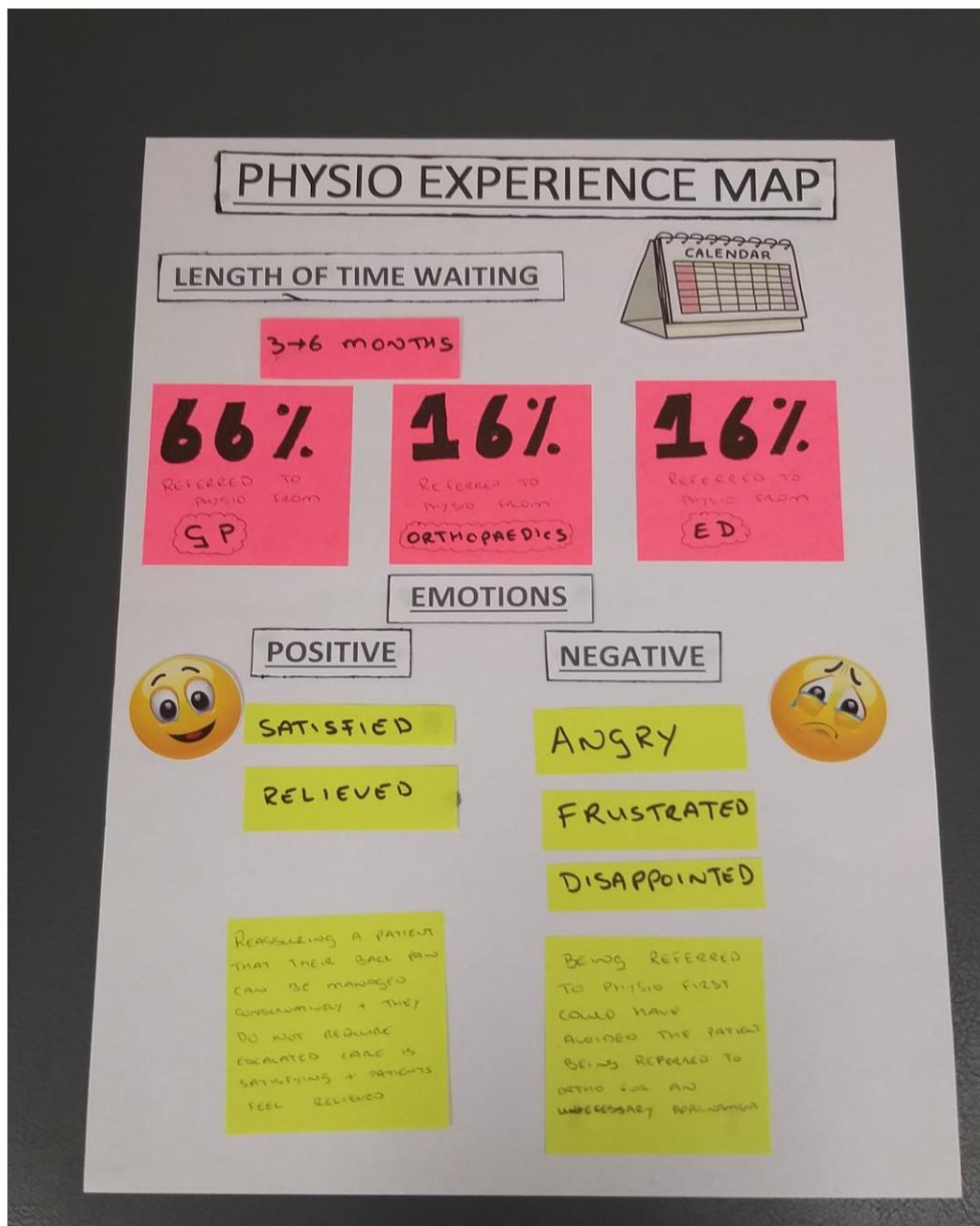
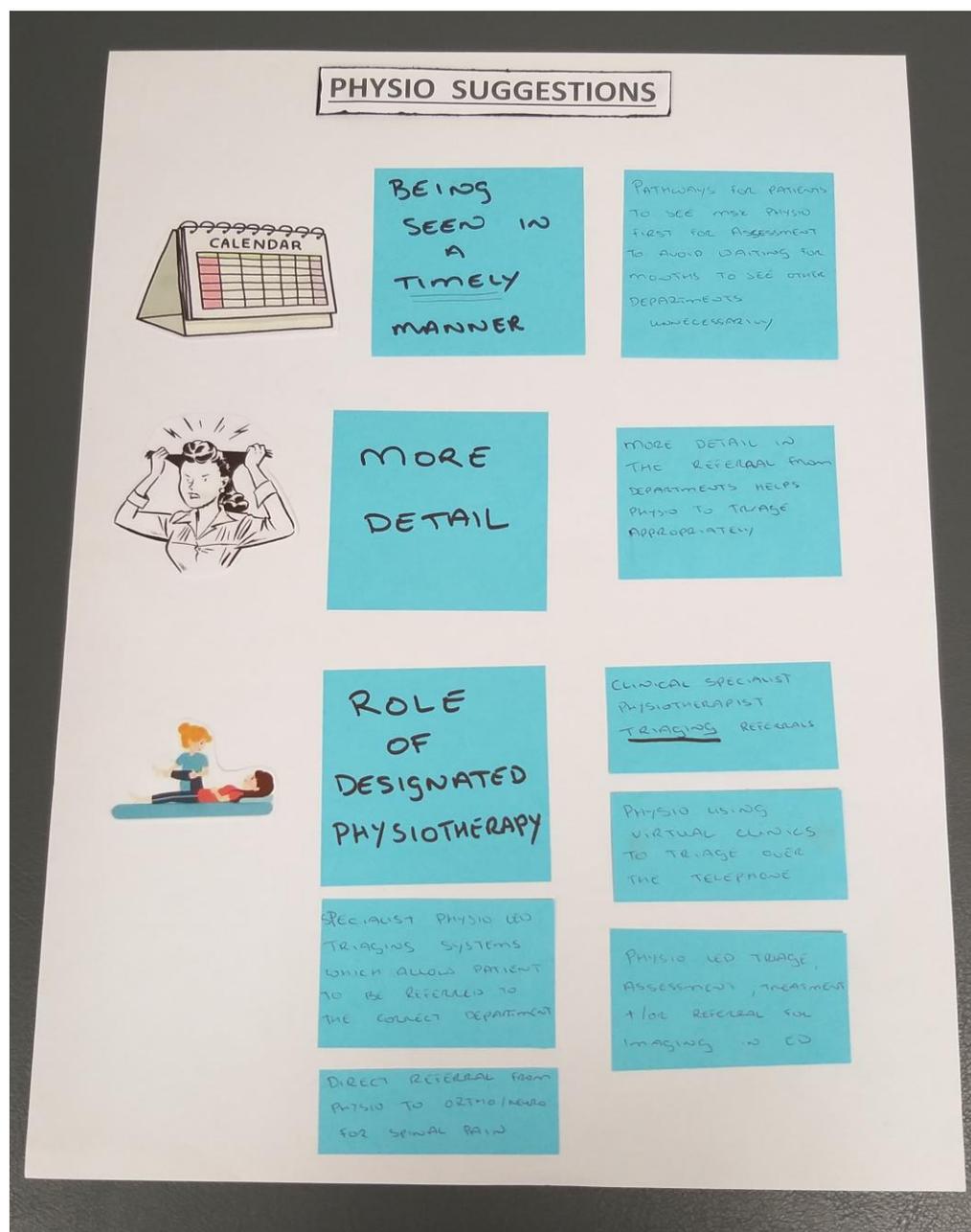


Figure 6: Samples of quotes from physiotherapists about how the referral process made them feel and what ideas they had for improvement



## Improve

The project team (project lead, clinical lead and two consumers) came together and reviewed the learning from the capture phase. We identified common themes and suggestions (see Table 1).

Table 1: Review of feedback and suggestions from the capture phase

SOURCE	FEEDBACK	SUGGESTIONS
<b>Surgeons</b>	<ul style="list-style-type: none"> <li>• Frustrated with patients being referred by GPs multiple times</li> <li>• Patients who are not surgical candidates taking up slots for patients who are</li> <li>• Waiting list times due to volume of patients referred</li> <li>• Patients could have started their treatment elsewhere instead of being on waiting lists</li> </ul>	<ul style="list-style-type: none"> <li>• Change the triage system for spine team</li> <li>• Therapist-run supervised clinics</li> <li>• Diversion of patient from surgeon to physio at point of referral</li> </ul>
<b>GPs</b>	<ul style="list-style-type: none"> <li>• In 'red flag' cases relieved when patients seen on same day</li> <li>• Frustrated when patients are only sometimes seen by the 'right' person</li> <li>• Angry with waiting list and seeing frustrated patients numerous times</li> </ul>	<ul style="list-style-type: none"> <li>• Patients being seen in a timely manner</li> <li>• Timely interventional radiology</li> <li>• MRI in primary care setting</li> <li>• Patients to be triaged by physio first</li> <li>• Physio to be available beyond a 'hospital does it all model'</li> <li>• Stronger liaison between physio and GP</li> </ul>
<b>Patient</b>	<ul style="list-style-type: none"> <li>• Satisfied</li> <li>• Resigned to wait</li> <li>• ½ of brain excited; ½ of brain crapping self</li> <li>• Beside herself</li> <li>• Uneasy</li> <li>• Unsettled</li> <li>• Neglected</li> </ul>	<ul style="list-style-type: none"> <li>• Speed – to be seen sooner</li> <li>• Listen – to be heard – listen to what the patient is telling you</li> <li>• Having one central person would be wonderful rather than going through multiple people</li> </ul>
<b>Physio</b>	<ul style="list-style-type: none"> <li>• Satisfied when patients who can be managed conservatively are not sent to surgical services</li> <li>• Frustrated with patients waiting on multiple waiting lists to access treatment</li> <li>• Disappointed with patients attending multiple unnecessary appointments</li> </ul>	<ul style="list-style-type: none"> <li>• Being seen in a timely manner – pathways via expert/specialist physios</li> <li>• Using virtual clinics and triaging systems to put patients in the right place</li> <li>• Physio-led triage and assessment clinics – supervised by ortho/neuro</li> </ul>

Together we reviewed the themes, identified ideas that came through most strongly, and agreed to start by testing one of those ideas. This was to test early triaging and assessment of new spinal referrals by a suitably qualified physiotherapist. We then created a plan for testing/implementation, which began in March 2019 and completed its first round in April 2019.

This initial test involved the physiotherapist participating in five clinics (two neurosurgical and three orthopaedic), where she jointly assessed patients with the surgeon and in one case independently led the assessment. Following the assessment, the surgeons and the physiotherapist discussed the assessment and treatment plan, focusing on how appropriate it would be for these and similar patients to be triaged/assessed first by a physiotherapist.

## Measure

In the orthopaedic clinics there were a total of five appropriate new patients. The physiotherapist and the surgeon both reviewed the referrals and felt that all of the new patients were appropriate to be assessed by a physiotherapist.

- All five patients received physiotherapy treatment/advice during this assessment.
- Three of the four patients had already been referred to physiotherapy as well as being referred to the orthopaedic clinic.
- Two patients had a physiotherapy referral created, and they received advice in the meantime.

In the neurosurgery clinic, one new patient was appropriate for assessment and treatment by the physiotherapist. This patient received physiotherapy treatment/advice during the assessment and a referral was made to physiotherapy to continue with rehabilitation.

The following list describes the specific outcomes for each of the six patients seen between the two surgeons' clinics.

1. An X-ray was requested and physiotherapy appointments were recommended with no appointment to be arranged to see the orthopaedic surgeon unless something unexpected was detected on the X-ray.
2. This patient was referred for an MRI to confirm a diagnosis. Follow-up by physiotherapist was recommended with no expectation that surgery would be needed.
3. This patient was referred for an MRI plus physiotherapy only.
4. This patient was pregnant, and imaging was not recommended until after the birth. A referral was made to physiotherapy.
5. This patient was referred to a surgeon but never wanted surgery. They were very happy to be given conservative management by a physiotherapist.
6. This patient had been referred for a neurosurgical appointment. They had a history of osteoarthritis of their back/hip and had an MRI scan which showed no change since their previous MRI. The person was given advice in clinic and referred to physiotherapy and is steadily improving.

## Results of the surveys conducted post-testing

This section contains a selection questions and responses from the survey.

### Results from six patients

*In your recent appointment for your back pain, were you aware that part of your assessment was completed by a physiotherapist?*

**All six answered yes.**

*From your perspective, how would you rate the care you experienced from a physiotherapist when compared to a doctor (registrar or surgeon)? [Four of the six had experience of both.]*

- *Better*
- *As good as*
- *Not as good as*

**All four who had received care from both a doctor and a physiotherapist answered that it was better – one noted it was substantially better, and one said that it was 'excellent'.**

Could you describe your experience of the appointment?

- *'Felt assessment and meeting the surgeon's sidekick [physiotherapist] went very well.'*
- *'Very informative, ongoing treatment outlined, MRI to be followed by further appointment with surgeon if necessary.'*
- *'The physiotherapist took me seriously, and was looking for ways to address my issues. Very good in helping me to understand my issue.'*
- *'Surgeon was very engaging, but I didn't really understand the medical terms and he talked surgery immediately. I wasn't really keen on surgery and asked if there might be alternatives, at which stage the physiotherapist was brought in – she really appeared to know what she was talking about, did a brief assessment, gave advice about what exercises I should be doing, which also reinforced and explained some exercises I was already doing. Her explanations of what was going on were also very helpful and easier to understand.'*
- *'Fine, nothing negative to say.'*

Survey 5 (appendices available on request): Could you tell us why you thought that?

- *'Suggested exercises have helped.'*
- *'I got the impression surgeons would rather be off doing something else.'*
- *'The surgeon talked about surgery and the outcomes/percentages. The physiotherapist explained what was going on in more detail and reinforced what I had learned. Together we decided that we would try physiotherapy first, then come back to the surgeon to decide if surgery was necessary.'*
- *'The physiotherapist seemed to have more time than the surgeon.'*

Survey 6 (appendices available on request: Could you tell us why you thought that?

- *'Happy to be referred to a physio. Felt very comfortable that physio was all that I needed. Have been doing the given exercises religiously.'*
- *'They explained everything. Felt pain had been going on for too long (over a year).'*

How did you feel overall about the outcome of your appointment?

- *'Positive – physio asked me what exercise I had been told to do by physio in Bay...I am to make an appointment at Wellington Hospital physio department – which I will do after the school holidays as I am babysitting my grandchild.'*
- *'Excellent treatment from physio as a result. Very grateful for help. I continue to improve.'*
- *'Quite good. Felt very comfortable with the way things were explained to me and what I can expect to take place from now on.'*
- *'Very good, very positive. The physiotherapist was keen to get started with me, the surgeon seemed to be unsure why he was involved [ie, why patient had been referred to him]. The exercises have been very effective.'*
- *'Good, at least hopeful about physiotherapy and won't need surgery if comfortable enough, but would think about surgery if this wasn't the case.'*
- *'What I expected, initially felt it might all be a bit of a waste of time seeing the surgeon as I was pregnant. Surgeon reassured me that now that I was in the system, he could book me in for imaging when/if needed.'*

From your perspective, is there anything that would have made it better?

- *'No, it was quite good having the "double act". I didn't walk away feeling like I hadn't gotten anywhere and was reassured by the surgeon that the appointment wasn't a waste of time.'*

- Realises it is a waiting game.
- Went in with no expectations, so from that point of view, no. However, feels if he had been seen earlier by a physiotherapist, things would have been much different (i.e. would have moved him much more quickly to where he is now).
- Probably no, just would have liked to have been seen sooner.

### ***In summary***

We were able to survey all six patients who were seen by our physiotherapist in the surgical clinic setting. Of those six, four had been seen previously by a surgeon or surgical registrar and two had not. All four felt that the care they experienced was better than they had experienced previously; all six were happy with the physiotherapist being a part of their care in a surgical clinic; and all mentioned that they found the physiotherapist's explanation of both what their issue was and how treatment could be approached was easier to understand than the surgical team's explanation.

### **Results from two surgeons**

*In relation to patient assessment/clinical discussion, was the quality 'better', 'as good', or 'not as good' compared to a registrar/house officer/medical student?*

1. *'The assessment was as good as one of my junior registrars and better than a house officer or medical student.'*
2. *'Better than a registrar. At least, better than the rather inexperienced registrars we get sent.'*

*Why?*

1. *'Better as more clinical detail and management plan actioned and appropriate.'*
2. *'I think experience counts for a great deal in the initial assessment. Knowing what "red flag" questions to ask is actually only a small part of the package for the majority of these patients. Having the extra dimension of a physiotherapy perspective may reveal root causes – and treatment options – for a significant number of patients.'*

*What benefits/added value did you experience or envisage, utilising a physiotherapist in this role?*

1. *'People will feel like they are being treated earlier and less patients for the FSA clinic [surgical].'*
2. *'Rapid access. Screening for surgically significant problems at an early stage. Early direction towards a recovery programme – with follow-up to redirect those who fail to progress.'*

*Are there any other comments you would like to add?*

1. *'I think it's a great system [having an expert MSK physiotherapist in the orthopaedic clinic] definitely worth continuing.'*
2. *'Physios seem more attuned in the [multitude of] other musculoskeletal problems our patients typically have. I suspect these are often ignored in medical specialist clinics.'*

### **Reflections from our first test of change, of physiotherapy-led assessment following the referral of patients for spinal issues**

- All four people who had been seen by a surgeon or surgical team previously felt that they experienced better care. The two surgeons agreed that the physiotherapy assessment was at least better than less experienced registrars, house officers and medical students, so would consider it a safe option to run alongside the surgical clinic.
- Patients indicated they were happy to hear the news that they don't, or may not, need to have surgery, and were keen to engage in nonsurgical treatment.
- There is a likelihood that patients would experience more appropriate service and more rapid access to the correct service.

- Waiting times to see a surgeon are likely to be reduced for those patients who really do need a surgical opinion.
- There appeared to be no issues with the physiotherapist being an MSK 'specialist' in their own right.
- Respondents welcomed the idea of a physiotherapist being able to discuss treatment options with the surgical teams.
- It was thought that there is a possibility of reducing unnecessary MRI imaging (but patients will be referred on if necessary – ie, if conservative management does not resolve the issue sufficiently).

## Next steps

We have only 'dipped our toes in the water', but we have learned a lot by testing the idea of having a 'specialist' MSK/orthopaedic physiotherapist in the surgical clinic setting to triage spinal referrals. This initial test has provided us with confidence that if implemented more fully it could result in benefits for patient and staff experience, it could reduce waiting times, and it could possibly reduce MRI scanning. It was also thought patient outcomes would be improved if they were seen sooner by the most appropriate person.

We have put in a business case for 1.2 FTE suitably trained and qualified physiotherapists. If this is successful, we aim to access specialist training available in New Zealand for physiotherapists to triage and treat where appropriate in their own right within a surgical clinic. This would then lead to a further evaluation of the service and its results, including staff and patient experience and more quantifiable data.

## Working as a co-design team

Our team comprised two consumers who had both been through the system for MSK issues and who both ended up in physiotherapy after long journeys, with excellent outcomes, two MSK outpatient physiotherapists (one manager/clinician and one clinician), and two surgeons in a consultative and supportive role. Working with the consumers gave an extra perspective on what questions consumers might respond to and how best to word questions in an understandable way. The consumers did many of the patient surveys and seemed to be able to elicit responses that might have been more difficult for a staff member.

The consumer advisors felt that having a physiotherapist much earlier in the mix of their own MSK issues would have been beneficial. It was very interesting for them to be a part of surveying other people with similar experiences and finding, almost unanimously, that these people (who had experienced both surgeons and physiotherapists) felt the same way. One of our concerns as a team was that some consumers and their GPs see surgeons as being the 'gold standard' specialist for all spinal issues. However, we were surprised that none of the consumers felt this way. Although one or two GPs reported that they had felt this way in the past, they reported that they might change their views if they felt the pathways were easier to refer to and meant shorter waiting times.

The physiotherapists participating in the neurosurgical and orthopaedic clinics were surprised at the number of consumers who hadn't seen physiotherapists before being referred to surgeons. They felt that physiotherapy would be an appropriate first treatment option for many patients. Of course, some may still need to be referred on to surgeons, but many will not. This has been noticed anecdotally in the past, but reinforced by people we observed. A prime example was of a patient being referred to a neurosurgeon, who simply had what physiotherapists term 'postural syndrome' – ie, an intensive course of postural correction would likely eliminate all symptoms. They had waited eight months to see a neurosurgeon and had worried for the whole eight months.

The two surgeons involved have been engaged, supportive and interested to see the different tack a physiotherapist might take to the same issue they are seeing. They are both committed to this being a pathway that they would like to see introduced as soon as possible.

From a project lead perspective, it has been gratifying to see the passion and commitment to this project from the whole team, and has been reassuring to have the different experience and perspectives of all project team members adding up to a more rounded and holistic approach to project work.

## The project team

Name	Role	Email	Organisation
Emma Robinson	Consumer	<a href="mailto:emmarobinson@actrix.co.nz">emmarobinson@actrix.co.nz</a>	
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