

## TRAK-ACL: web-based self-management resource for ACL rehabilitation

### Quick intro to yourself and any contact details you're happy to share

**Emma Dunphy.** I am an NIHR Clinical Doctoral Research Fellow and musculoskeletal physiotherapist at Homerton Hospital NHS Trust. Patient education is at the heart of my practice and I have an interest in improving access to physiotherapy care through the use of digital health. My PhD is in digital health at University College London. **Dr Kate Button:** My research interests are in the development of digital interventions to support self-management physiotherapy for people with musculoskeletal conditions. I am Senior Lecturer at Cardiff University. We have developed TRAK-ACL, a web based rehabilitation intervention following Anterior Cruciate Ligament Reconstruction (ACL). To access TRAK-ACL please email: [trakacl2020@gmail.com](mailto:trakacl2020@gmail.com)

### What physio services do you provide? (e.g. specialty, conditions, location, patient demographics)

TRAK-ACL is a website for patients who have recently had an ACL reconstruction. It has been designed by patients and physiotherapists to help support individuals rehabilitate their knee at home. TRAK-ACL has been tested in diverse clinical environments in acceptability studies and in a feasibility trial in two locations in the UK. The website is a step by step guide through full recovery. Its' content is divided into phase by phase exercises and education. It is rigorously evidence based and was developed in line with theories of behaviour change.



180 degree hop land

[MORE](#)  Prescribed?

Advice (optional)



Ankle

[MORE](#)  Prescribed?

Advice (optional)



Beginner skipping

[MORE](#)  Prescribed?



Lateral hop

[MORE](#)  Prescribed?

### What tools are you using to deliver your physio services digitally?



TRAK-ACL is a digital health intervention website that is easy to use and responsive on phones, tablets or computers. The functionality of TRAK ACL focuses on physiotherapy education: animations, videos, text and infographs are offered in each phase to provide learning opportunities, guidance and motivation. Over 200 exercise videos are organised by phase and type and they provide the user with the capability to learn and practice correct technique. Functions such as goal setting, progress logs and prompt emails engage users to their rehabilitation programme.

### How have these services replaced face to face contact?

Patient use TRAK ACL to support self-management. They can use fewer follow up appointments and show increased confidence to manage home exercises and monitor quality of movement. The

educational content includes; what to expect at each phase of rehabilitation, criteria to work towards and common challenges. This information and exercise allows patients who are too busy or have minimal access to physiotherapy to safely self- manage their rehabilitation. During COVID19, many recently ACL operated patients have no access to physiotherapy services. This website is an invaluable tool to support their self-management of rehabilitation.

### **What is the clinician's experience of using the digital tools?**

“As a junior physio I found it really useful in terms of information and a quick go to resource for reviewing milestones and do's and don'ts.... I quite relied on it and it fed me information. Especially band 5 physios who come into a trust new and it's a great learning tool to help you.”

“If we had much more digital contact with patients I would be very happy with that. We could be emailing patients and caring a lot remotely. Simple progressions and checking on exercises could save contact time, patients' own time and money I guess.”

### **Do you have any patient feedback on digital physio service offer?**

#### **Exercise prescription**

A well designed rehabilitation programme will also include details about how long you should carry out each exercise and guidance on the number of repetitions and sets and the effort levels that are required. This will need to be reviewed over the course of your treatment depending on your ability and comfort and fatigue levels. It will also vary depending on the goal of the exercises.



Animation 1: Physiotherapy home exercise

“You can't rate it highly enough really. It's somewhere to go and check on what you're supposed to be doing and make sure to do it right.”

“I think the videos are like a revolution! It's amazing ...but it's not like what you see on YouTube because you trust it.”

“Well TRAK works very well for me. Firstly, it makes me go to the gym. It really makes me because I think, oh god I haven't filled anything in to my log this week and it looks so bad. I love the videos; I look at them every time before I do

my exercise. Because I am paranoid about bad technique.”

“There are lots of exercises that people can do. And if it's too easy for you, you can move up different stages. Some harder ones and some easier ones... I think it gives you a focus and a way to approach it. It's like a weekly target to do it and not think of the long road.”

### **Any top tips to others exploring using digital tools in physio services?**

Patients spend a fraction of their time with a physiotherapist and they are required to carry out the rest of their rehabilitation independently. Digital tools provide opportunities to educate, motivate and support patients while they are self-managing.

Digital health interventions improve access to care and can offer a solution to the unwanted variations in care that naturally occur in the NHS. During COVID 19 and unprecedented number of patients who have recently had surgery will have no access to rehabilitation. We offer TRAK-ACL, an evidence-based guide to ACL rehabilitation, to meet the needs of patients in the absence of a physiotherapy service or alongside a scaled back physiotherapy service.