

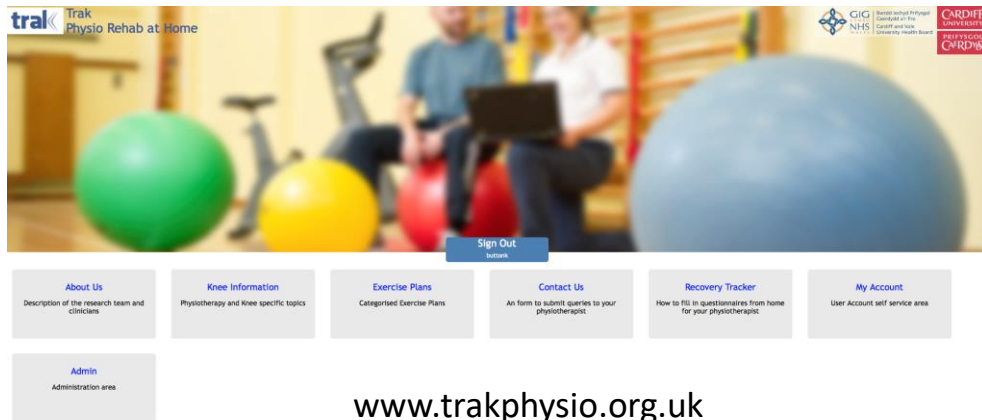
Implementation of TRAK : a web-based intervention to support self-care in knee rehabilitation



Kate Button & Irena Spasic

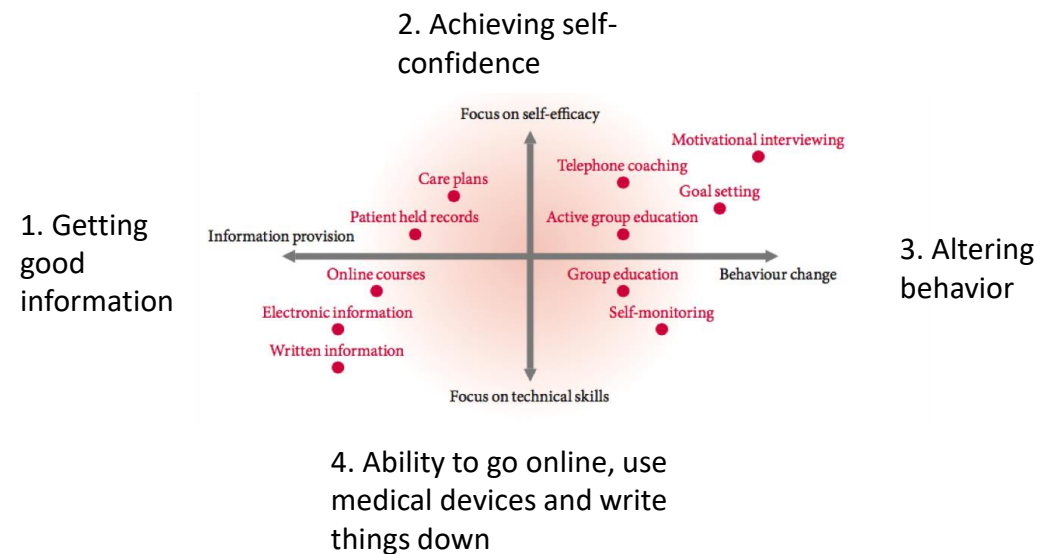


Background

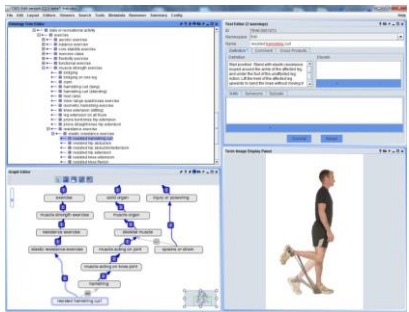
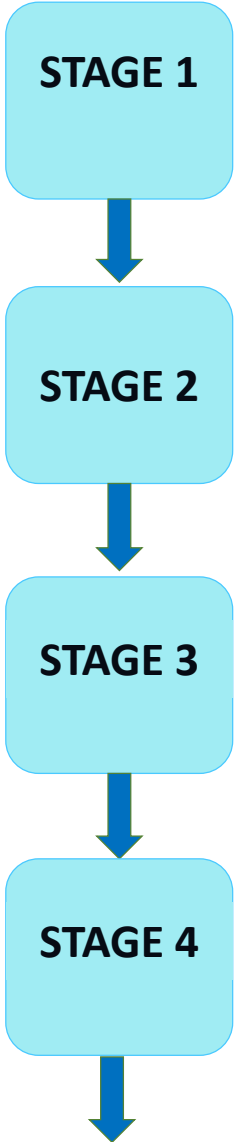


www.trakphysio.org.uk

Briggs 2012; Button et al 2013; DeSilva 2011



Web based rehabilitation



<http://bioportal.bioontology.org/ontologies/3210>



UK WIDE SURVEY & SYSTEMATIC REVIEW

ONTOLOGY DEVELOPMENT

USABILITY & ACCEPTABILITY SELF-CARE REVIEW

IMPLEMENTATION



Button et al 2012; 2013 & 2015; Spasic et al 2015

Aim

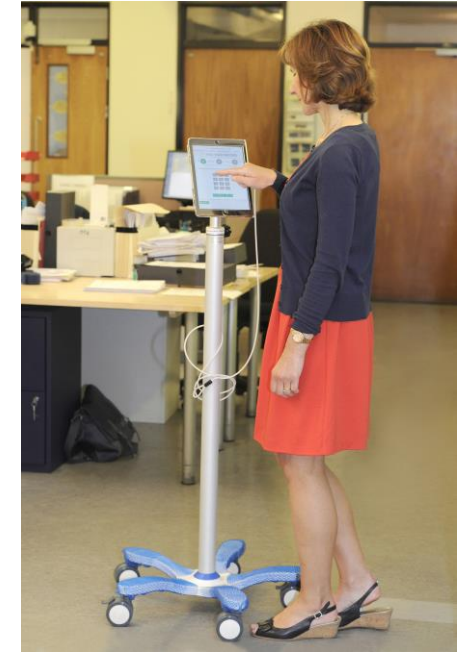
To evaluate the impact of TRAK implementation on the patient, clinician and organisation

Participatory action research approach with embedded cohort study

- SET-UP PHASE
- PHASE 1: Early implementation
- PHASE 2: Embedding in routine care

Set-up phase

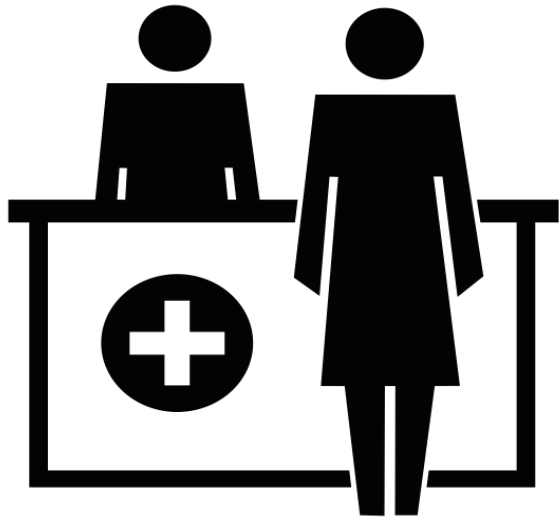
- Integrating TRAK into NHS IT infrastructure
- Recruiting and training physiotherapists



Challenges

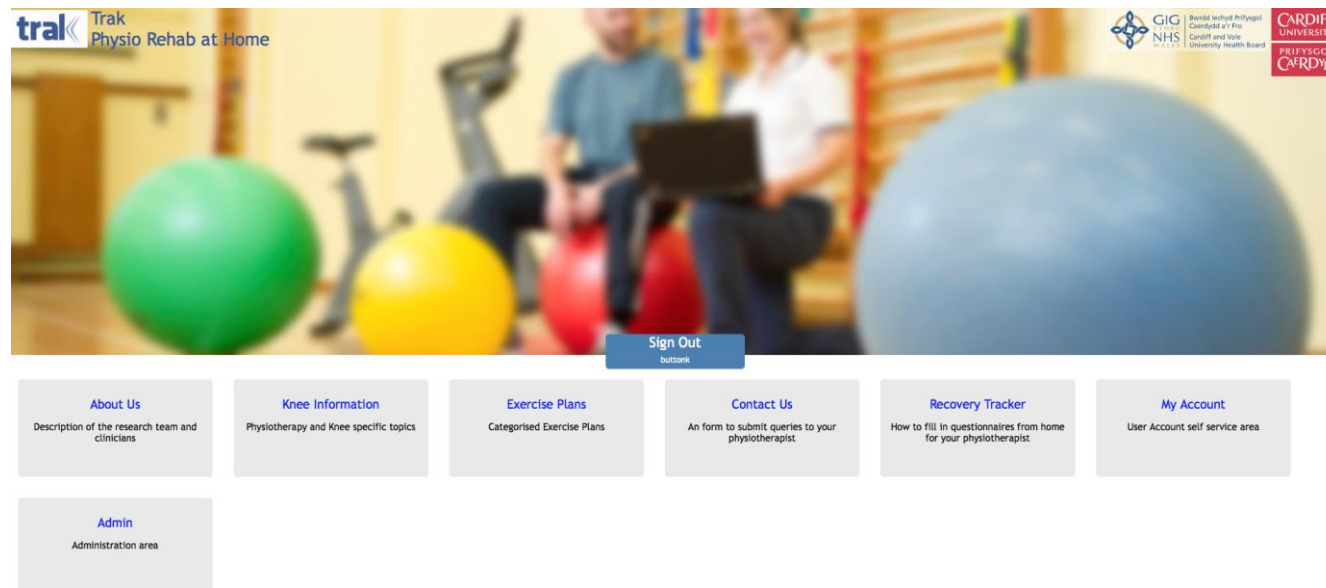
- Software version (IE9), operating systems, computer access, wifi
- Information governance - Data storage
- Research burden to clinicians
- ½ hour appointment

Phase 1: Early implementation



TRAK functionality – video demonstration

Patient video 1



The screenshot displays the TRAK website interface. At the top left, the logo reads "trak Trak Physio Rehab at Home". On the right, there are logos for "GIG NHS", "Bristol School of Physiotherapy", "Cardiff and Vale University Health Board", "CARDIFF UNIVERSITY", and "PRIFYSGOL CARDIFF". The main content area features a video player showing a blurred scene of a physiotherapist and a patient in a gym setting with exercise balls. Below the video is a "Sign Out" button with "butzank" underneath. A navigation menu consists of several grey boxes with blue text:

- About Us**: Description of the research team and clinicians
- Knee Information**: Physiotherapy and Knee specific topics
- Exercise Plans**: Categorised Exercise Plans
- Contact Us**: An form to submit queries to your physiotherapist
- Recovery Tracker**: How to fill in questionnaires from home for your physiotherapist
- My Account**: User Account self service area
- Admin**: Administration area

Phase 1: Early Implementation Patient and Clinician Interviews

... whether they are good with technology and they want to access technology.

Digital divide

*I think initially it was more that **I wasn't too confident** with it, I didn't know what the exercises were on it, so it is a case of planning of what I was going to do with the patient, having **some time** before they came in to prep myself with TRAK so then I can go confidently "right, here you are, this is your phase, these are your exercises"*

Usability

I would say if you have the skills required to do online shopping that would be more than sufficient.

Integration into practice

Self-care

The main thing I've been looking at is how to plan my sessions. Rather than just doing it on a week by week basis, I could forward plan and goal plan.

Need to go through TRAK with physio first for guidance and direction, to gain confidence and understanding.

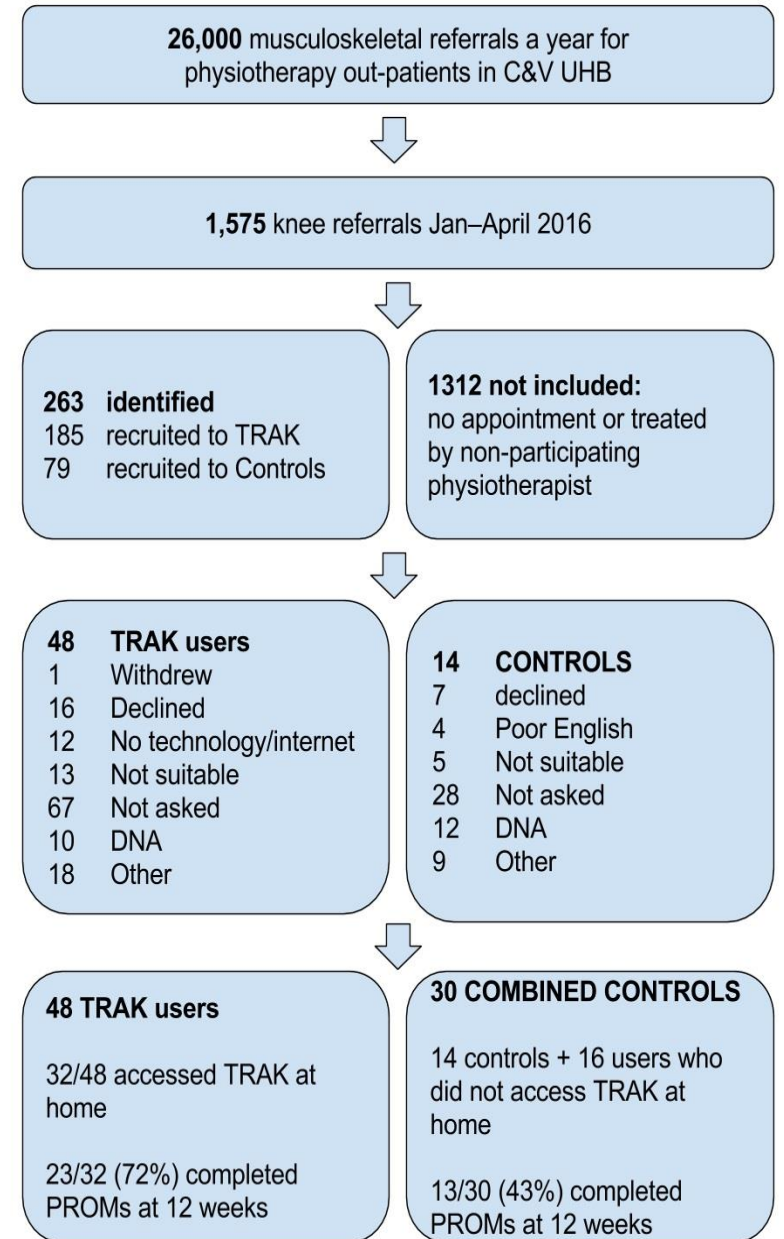
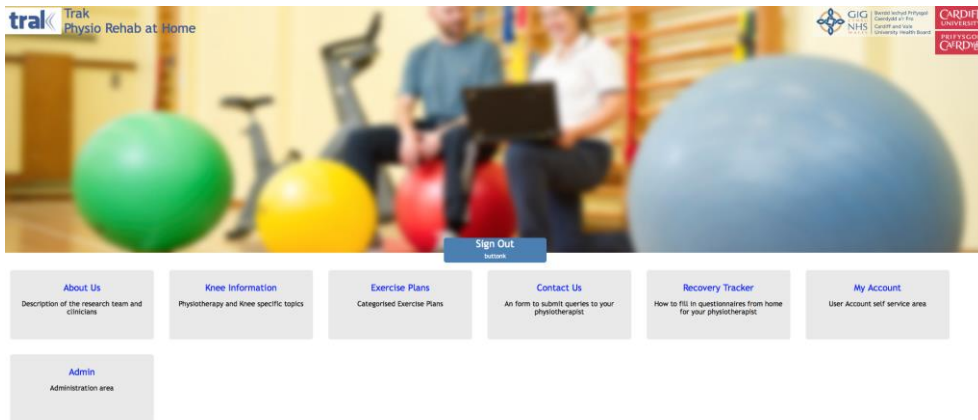
User requirements

So it could be useful to have "do not do these exercises"

Gives them the ability to take control of their rehab. When they come in they get reliant on us.

Phase 2: Integration into practice

12 Weeks
Offered to all patients



Phase 2: Integration into practice

SUCCESSSES

- TRAK still being used
- Successful integration
- 67% (32/48) accessed TRAK at home
- Shift in working practice
- Videos of therapeutic benefit
- Transferrable to other settings – Homerton NHS Trust
- Funding for self-care workshop

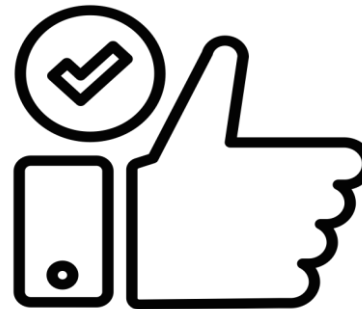
CHALLENGES

- 29 patients had co-produced exercise plans (if no plan didn't access at home)
- Only 11 exercise plans updated over time
- Poor engagement with email contact
- Patients struggled to progress their own exercises
- A training package for integration of self-care & eHealth

Patient Rated Improvement - questionnaires

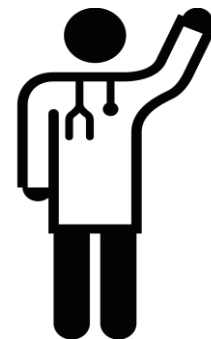
- **Less pain**
- **Fewer symptoms**
- **Higher Function**
- **Higher quality of Life**
- **More Physically Active**

Variable	TRAK users baseline	TRAK users follow-up	Natural control baseline	Natural control follow-up
Mean Age years (SD)	49.4 (18.2)		41.7 (21.5)	
Gender (frequency)	Females 19, Males 12		Females 20, Males 10	
Physiotherapy attendances (SD)		5.58 (2.87)		4.95 (2.42)
Mean KOOS pain (SD)	57.21 (21.56)	68.68* (16.32)	61.8 (20.21)	67.69 (21.68)
Mean KOOS symptoms (SD)	53.03 (19.68)	61.64* (21.38)	62.03 (16.71)	68.77 (19.27)
Mean KOOS ADL (SD)	66.17 (24.22)	74.33* (20.09)	67.80 (22.94)	73.85 (23.53)
Mean KOOS Qol (SD)	38.69 (19.11)	53.88* (20.83)	40.87 (19.91)	50.08 (21.12)
Mean Physical activity MET (SD)	1954.48 (2362.79)	3238.71* (2649.06)	3124.78 (2348.47)	2954.46 (3370.94)



Next...

- TRAK is still in use
- Increase TRAK functionality
- Spread to primary care 'big 3 project'
- Spread body part
- eHealth & self-care integration into consultation



Conclusion



tells me what to do, shows me what to do and I do it

part of me would always want to know that that was always there.

I found the videos really useful because you can actually check to see your doing them correctly

I think the more you use it, better you'll become on it so more efficient you will be with it.



Acknowledgement: Thomas Edwards, Mark Collins, Kevin Nicholas
<https://thenounproject.com>

