



ACLD (Anterior Cruciate Ligament Deficient) Induction Clinic & Rehabilitation Class | Service Evaluation

Background

Historically, at GSTFT, patients with any ACL pathology have been managed together in weekly exercise classes. Anecdotally and through qualitative data collection, Physiotherapists felt that they were unable to effectively manage both the post-operative and ACL deficient (ACLD) populations due to high class numbers. After an internal service evaluation and audit, a unique ACLD pathway was established to separate out the ACLD population, and better manage both ACL cohorts. This included a specific fortnightly ACLD Induction Clinic and ACLD rehabilitation class.

Aims/Purpose

1. Evaluate the demand for the ACLD pathway, including the new ACLD rehabilitation class, and analyse patient demographics, including using the EQ5D and KOOS PROMs.
2. Ensure the ACLD pathway is utilised correctly, by monitoring patients being referred and their appropriateness for the class.
3. Start analyzing the data and trends of patient attendance and onward management in the ACLD rehabilitation class and begin early root cause analysis.
4. Commence a systematic review around the quality of pre-operative physiotherapy intervention and how this effects outcomes post-operatively, in order to guide the temporality and content of our ACLD rehabilitation class.

Data Collection/Method

Data was manually extracted from our electronic patient records (PIMS, EPR and e-noting) and stored in a secure Excel spreadsheet over a 10 month period, where it was structured for further analysis.

ACLD Induction Clinic Results (aims 1&2)

92% 91% 81% 71%

New patient appointment slot utilisation

Appropriate referrals

New patient attendance rate

Main referral source: Orthopaedics

What is the ACLD Induction Clinic?

A fortnightly clinic led by a Band 7 MSK Physiotherapist. Availability for 4 new patients to attend each clinic. Referrals vetted directly from GP's, Orthopaedics or MCATTs. Inclusion criteria: confirmed ACLD diagnosis, acute or chronic and for either conservative or surgical management. Exclusion criteria includes patients who do not have a confirmed ACLD diagnosis, and those who do not speak English. The ACLD Induction class provides education, assessment and individual goal setting in order to make an informed and jointly agreed decision for the most suitable ongoing ACLD patient pathway.



Confirmation and explanation of medical diagnosis, including anatomy and biomechanics education



Clinical decision making for ACLD management with individualised goal setting



Research and evidence around Physiotherapy management for ACLD individuals



Barriers to recovery or return to function or sport



Physiotherapy physical examination



ACLD information leaflet

13.6% discharged with self-management



79.7% get referred to the ACLD Rehabilitation Class

ACLD Rehabilitation Class

A fortnightly rehabilitation class that runs alongside the ACLD Induction clinic. The class is structured so that patient's will attend 6 sessions over a 12 week period.

- 4 New Patient slots
- 15 Follow-up slots

Class Objectives:

1. Optimise knee function prior to surgery – achieve terminal knee flexion and extension, minimise swelling, optimise quadriceps and hamstring strength.
2. Conservative management for surgery avoidance and self-management – goal focused rehabilitation.

The class consists of various exercise stations, focusing on improving range of movement, strength, CV endurance, balance and neuromuscular control. Patients are reviewed and objective measures completed at the 1st, 4th and 6th sessions.

Objective Measures:

Quadriceps strength (leg press), Hamstring strength (hamstring curl), Star Excursion Balance Test (SEBT), Hop Tests (Single Leg Hop, Single Leg Triple Hop, Single Leg Diagonal Hop Test).

Results (aim 2):

With ongoing implementation of our new pathway, inappropriate referrals into the ACLR rehabilitation class reduced further from 36% to 7%.

Results (aim 3):

63% of patients DNA the rehabilitation class.
47% of patients only attend between 0-2 sessions.
The average number of sessions attended was 2.68

Impact on ACLR Rehabilitation Class:

Waiting time to access the ACLR rehabilitation class now < 1 week.

Conclusion:

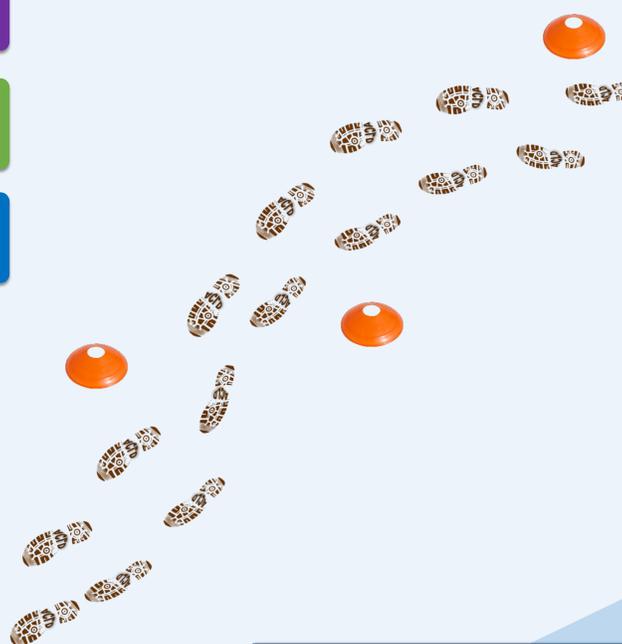
This pathway has been effective in allowing better management and more immediate access to our services for the ACLR cohort. The ACLD Induction clinic has shown good utilisation. The main pathway for these ACLD patients is into the ACLD rehabilitation class which has shown moderate utilisation. A high DNA rate of ACLD Induction clinic patients has been identified, with a high drop-out rate after 0-2 sessions. It is unknown why there is low ACLD rehabilitation class utilisation and a high DNA rate:

- Are patients receiving sufficient education and advice and are happy to continue independently?
- Is it the fact that the classes are fortnightly and are only at a certain time of the week limiting the flexibility for attendance?
- Or, is it due to their impending surgery date?

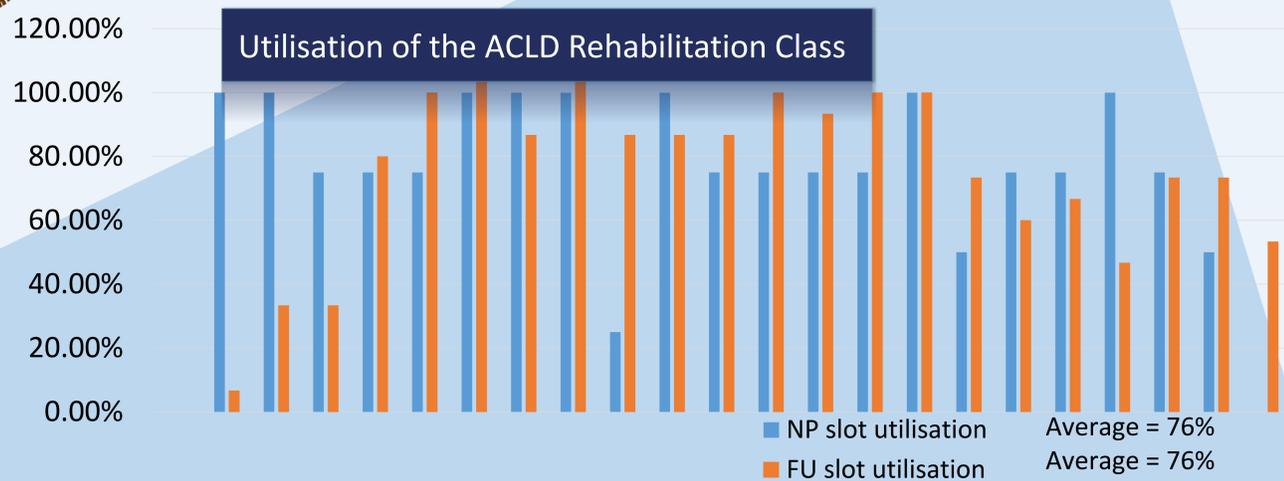
Implications:

This service evaluation and development has been momentous in allowing better management of our post-operative ACL population at GSTFT, and to begin specific, individualised and evidence based rehabilitation of our ACLD cohort. Literature highlights the value of pre-operative rehabilitation.

However, further questions can be asked around its quality, prescription and content. Questions that we hope to answer through our systematic review to further guide rehabilitation in this area.



Utilisation of the ACLD Rehabilitation Class



References: Culvenor AG, Barton CJ ACL injuries: the secret probably lies in optimising rehabilitation British Journal of Sports Medicine 2018;52:1416-1418.