

Service Evaluation of an Upper Limb (UL) Exercise Group for Patients Following Hand and Wrist Injury or Acquired Upper Limb Conditions

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BACKGROUND

An upper limb (UL) exercise group was developed in line with current guidance from the Chartered Society of Physiotherapy (Stronger My Way, 2022) and Public Health England for exercise and physical activity (Gov.UK, 2019). The class was developed with the aim of increasing activity, strength and overall function, improving patients engagement within their day to day activities. The UL exercise group was established for patients to attend a once weekly 1-hour upper limb strengthening class in a community setting for 6 weeks.

Inclusion criteria: any patient willing to participate and engage. **Exclusion Criteria:** mobility issues, non-English speakers, patients who do not want to attend

AIM

The aim of the service evaluation was to evaluate the outcomes of the class using patient rated outcome measures (PROMs).

METHODS

Data collected period - January 2023 to January 2024.

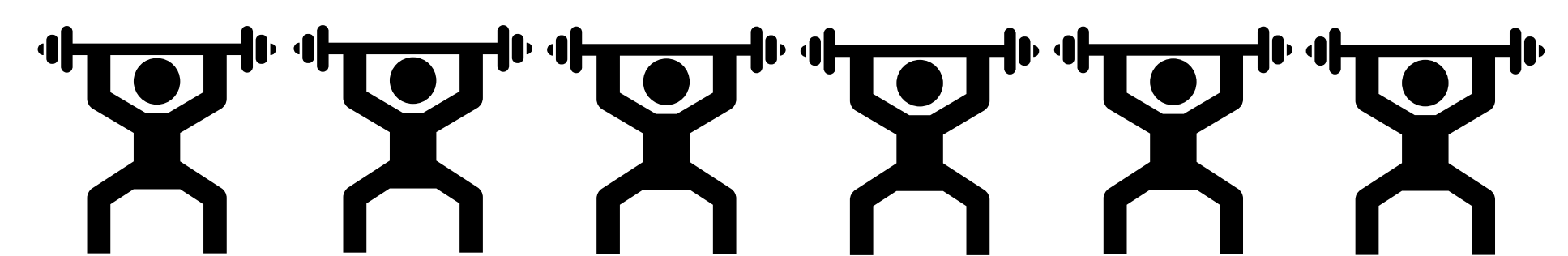
The primary outcome - **patient specific functional scale (PSFS).**

PSFS a valid, reliable and responsive outcome measure for patients with UL problems across a range of conditions (Hefford et.al, 2012). The minimal detectable change for an average score is 2 points (Stratford, 1995).

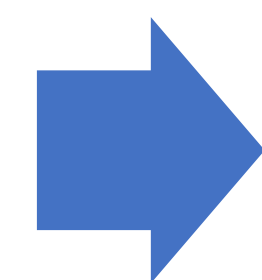
The PSFS was completed pre and post completion of the 6 week UL exercise group.

CLASS STRUCTURE

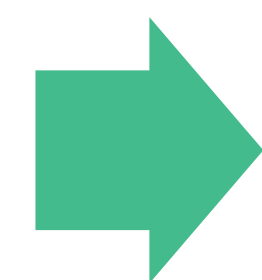
- 1x Weekly for 6 weeks
- 1 hour duration
- 9 stations
- 2 minutes on, 30 seconds off
- Variety of open chain exercises of whole upper limb quadrant



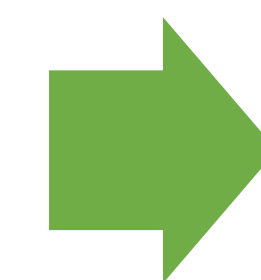
Patient referred and assessed by a hand therapist in clinic



Patient deemed appropriate for UL exercise group. Initial PSFS completed



Patient attends UL exercise group for 6 weeks



Seen as follow up post class by initial therapist, post-class PSFS is completed

RESULTS

Number of patients referred to the UL exercise group: **92**
Number of patients who completed the UL exercise group: **61 (66%)**
Number of patients who did not attend (DNA) and subsequently discharged: **31 (34%)**

Complete PROMs: **30 (32%)**
Incomplete PROMs: **31 (34%)**

Completed PSFS scores with minimal detectable change (≥ 2 points): **15 (16%)**
Completed PSFS scores with no minimal detectable change (< 2 points): **15 (16%)**

These results indicate that 50% of patients who attended a weekly UL exercise group for 6 weeks reported an improvement in their PSFS score. Weekly strengthening sessions are beneficial for a cohort of patients who have had a hand and wrist injury or acquired upper limb condition.

Limitations: low PROMS completion rate makes it difficult to draw definitive conclusions.

COMPLETED PROMS (30 patients)

Pt no.	Average PRE-PSFS	Average POST-PSFS	Score difference (≥ 2 points)
1	5.6	6.6	1
2	4	6.6	2.6
3	4	7.3	3.3
4	5.3	7.6	2.3
5	8	8.6	0.6
6	3.6	7.6	4
7	4	6.5	2.5
8	8.5	20	1.5
9	5	5	0
10	5.3	6	0.7
11	4.3	6.7	2.4
12	5.7	8.3	2.6
13	3.6	5.6	2
14	4	7.5	3.5
15	4.3	5.3	1
16	2.5	2.5	0
17	3.6	5.3	1.7
18	3	7.6	4.6
19	7	8	1
20	3.6	4.6	1
21	7.6	8.6	1
22	8	10	2
23	6.3	7	0.7
24	1	7	5
25	1	7	6
26	5	8.3	3.3
27	6	7	1
28	7.6	9.6	2
29	5	5	0
30	6	6.3	0.3

WHERE TO NEXT?

- Further work needs to be done to understand:
 - WHY 34% of patients referred DNA'd (either first appointment or subsequent).
 - WHY 34% of patients completed the class, however had incomplete PROMS.
- How can we ensure PROMs are completed for all our patients who attend and complete the class?
- Is the PSFS the most sensitive PROM to measure the objectives of the class which includes increased activity?
- How many patients are being discharged post the group class, meaning they no longer need further hand therapy intervention?

REFERENCES

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