UPLIFT

Developing and delivering an Upper Limb intensive Functional Training Programme in a rural health board

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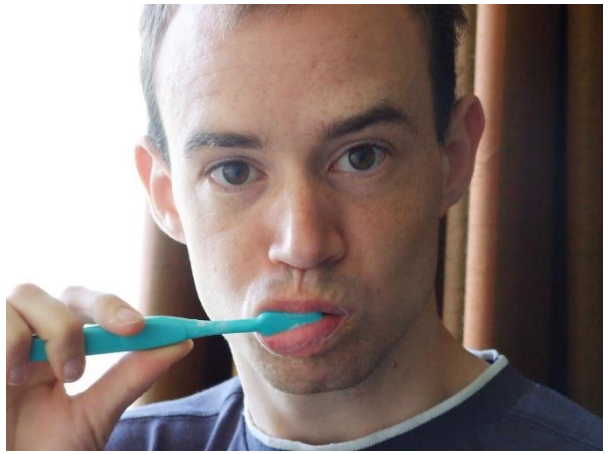


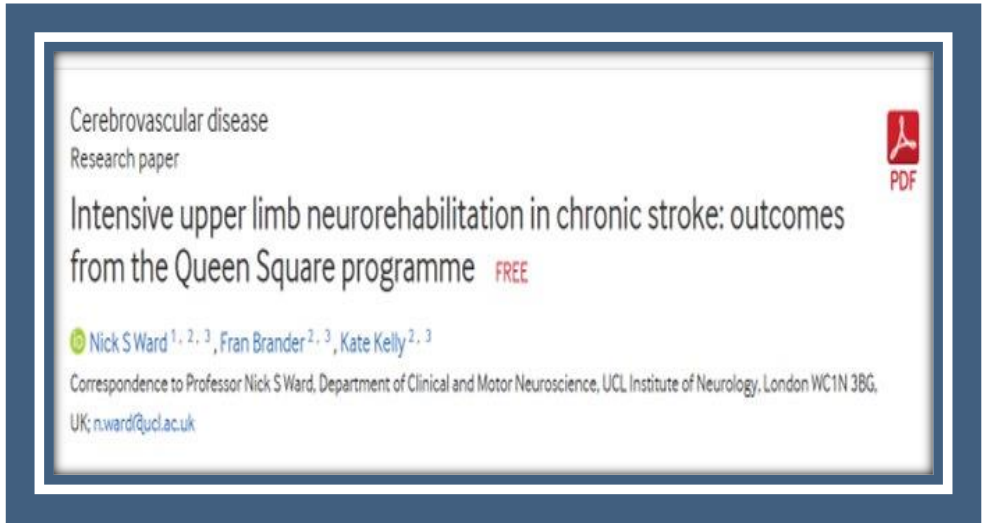
Evidence base and Guidelines

People with motor recovery goals undergoing rehabilitation after a stroke should receive a minimum of 3 hours of multidisciplinary therapy a day (delivered or supervised by a therapist or rehabilitation assistant focused on exercise, motor retraining and/or functional practice), at least 5 days out of 7, to enable the range of required interventions to be delivered at an effective dose

RCP Stroke Guidelines 2023

Approximately 70% of people experience loss of arm function after a stroke, and this persists for about 40%.

Current practice in the UK indicates too few rehabilitation sessions are dedicated to the upper limb and within sessions too few repetitions are achieved (Stockley et al, 2019).



Cerebrovascular disease

Research paper

PDF

Intensive upper limb neurorehabilitation in chronic stroke: outcomes from the Queen Square programme FREE

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Key Barriers in this Rural Setting:

- Large geography (travel time/cost).
- Shortage of suitable outpatient neurorehabilitation settings.
- Limited staff resource, knowledge, and access to intervention tools.

The project aimed to overcome these barriers by developing a hybrid model combining face-to-face and virtual sessions to deliver high-intensity, multidisciplinary therapy.

Aim:

To develop, deliver, and evaluate a hybrid high-intensity upper limb rehabilitation Programme for people with neurological conditions within a rural health board context, demonstrating that evidence-based, high-intensity programs are achievable and effective.

Key Objectives:

- **Service Delivery:** Co-design and deliver the 3-week intensive hybrid model.
- **Knowledge & Skill:** Train and upskill staff and patients/carers in evidence-based assessments and interventions.
- **Self-management:** Foster a long-term self-management approach using digital tools for remote monitoring.
- **Evaluation:** Assess patient outcomes, self-efficacy

DELIVERY

We used the data from staff questionaires and focus groups , alongside our evidence base to design an intensive upper limb training programme that would be sustainable to deliver in a rural healthboard.

We secured a community venue for free and started to recruit and upskill the wider MDT to support with delivery of the pilot programme.

Linked with digital partners to deliver the virtual element of the programme and support with self-management.

We spoke with industry partners to see how they could partner with us – Saebo, NeuroVIrt, Stroke Association, and Disabled Sports Wales all said YES

We agreed our outcome measures and identified our pilot group of patients via the upper limb clinic and patients awaiting community intervention

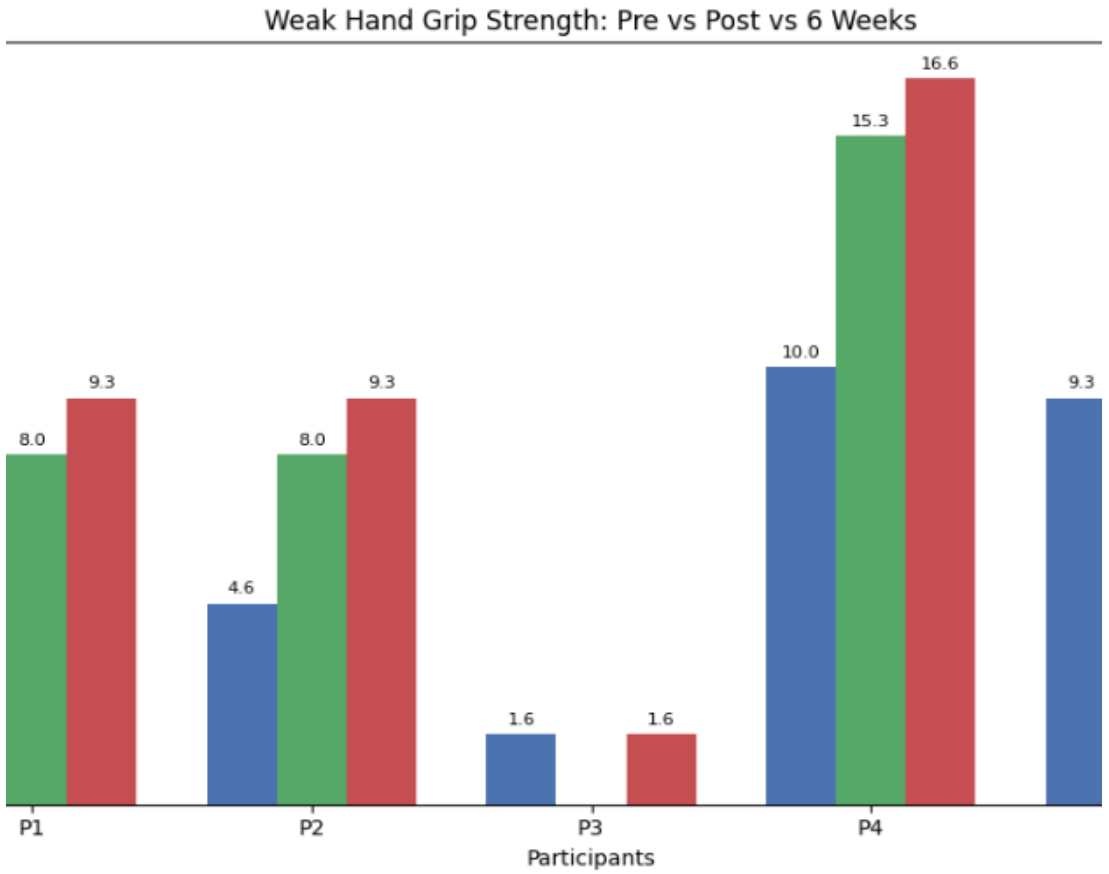
Arranged a day to set goal and complete our baseline measures.

UPLIFT Programme Model

	Monday 1st	Tuesday 2nd	Wednesday 3rd	Thursday 4th	Friday 5th	Saturday 6th	Sunday 7th
AM	10.00 - 11.30 Online group	self directed therapy	Self-directed therapy Neuro Virt	10.00 - 3.30 Community day **Carmarthenshire Living Well Centre, Building 1, Parc Dewi Sant SA31 3HB**	10.00 - 11.30 Online group	Self-directed therapy	Self-directed therapy
PM	Neuro Virt 15.00-16.30 PT – Rhiannon	Neuro Virt	15.30 - 17.00 O.T – Kerry		Self-directed therapy Neuro Virt	Neuro Virt Self-directed therapy	Neuro Virt Self-directed therapy
Don't forget to ….	Log onto PKB to record time and reflections	Log onto PKB and record time spent, and any reflections	Log onto PKB and record time spent, and any reflections	Log onto PKB and record time spent, and any reflections	Log onto PKB and record time spent, and any reflections	Log onto PKB and record time spent, and any reflections	Log onto PKB and record time spent, and any reflections

- Weekly 6-hour face-to-face therapy group.
- Two virtual therapy groups weekly.
- One OT and one PT in-home functional session weekly.
- PKB digital hub for remote monitoring.
- VR for intensive self-directed practice and ROM tracking.

OUTCOMES



- Grip Strength
- Goal attainment score

PATIENT	GAS SCORE	OUTCOME
Patient 1	+2	Exceeded expectations (Strong improvement)
Patient 2	-1	Minimal improvement
Patient 3	NA	Data missing
Patient 4	+2	Exceeded expectations (Strong improvement)
Patient 5	-1	Minimal improvement
Patient 6	-1	Minimal improvement
Group Mean	0.20	Moderate improvement (Not clinically significant)

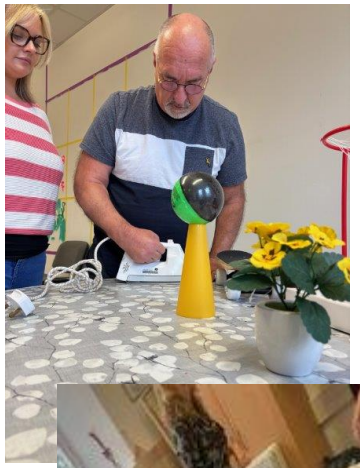
Quality of Life EQ5DL, overall stayed the same for the participants, only one participant improved their QoL

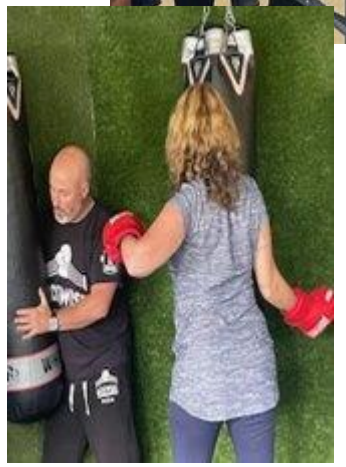
MOST SIGNIFICANT CHANGE

"Increasing ability to use affected arm in day-to-day activities. Feels like there is light at the end of the tunnel and a pathway back to a more "normal" version of me (even if the speed of progress often seems frustratingly slow"

"Seen huge changes to my affected limb my wrist and hand is more useable and overall more use improved mental health too."

“The improvement in cognitive function is the most significant change. That is because it was at such a low level before I was unable to function in a way that I needed to effect a recovery that I am experiencing”





IMPACT

METHOD	Standard Service Delivery	UPLIFT programme	Minutes Increase
Face to face group	0	360mins	360mins
Virtual Group	0	180mins	180mins
Face to face at home	90mins	180mins	90mins
Guided self-management exercises at home	30mins	630mins	600mins
TOTAL	120 mins (2 hrs)	1,350 mins (22.5 hrs)	1,230 mins (20 hr increase)

INCREASE IN UPPR LIMB INTERVENTION TIME - 1025%
EXCEED STROKE CLINICAL GUIDELINES

COST based on standard model

TOTAL COST OF THERAPY TIME - £18.144.00

COST based on UPLIFT model

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TOTAL COST OF THERAPY TIME - £4,950.00

COST SAVINGS ADOPTING HYBRID UPLIFT MODEL - £13,194.00

If we can roll this hybrid model out to each locality – 3 times a year – that's a saving of 39,582

Conclusions

The hybrid intensive upper limb rehabilitation programme is feasible and effective within a rural health context.

The model delivered meaningful functional gains, improved quality of life, and resulted in high patient and staff satisfaction.

The use of technology successfully supported efficiency and accessibility while maintaining therapeutic intensity, aligning with Prudent Healthcare principles.

NEXT STEPS

Scale-up: Aim to deliver the UPLIFT programme **three times annually** across each county within Hywel Dda University Health Board.

Maximise Opportunities: Link with Tritech Mentor and utilise financial support from within Health board to improve ongoing delivery and evaluation of UPLIFT programme

Operational Efficiency: Develop structured pathways and checklists to streamline delivery and reduce administrative burden.

Resource Enhancement: Secure access to a wider range of rehabilitation tools, including Functional Electrical Stimulation (FES) and dynamic splints.

Knowledge Sharing: Ongoing education and training to therapists within Health board. Share findings with national networks (e.g., NCIG) and at conferences to support wider adoption across Wales.

THANKYOU FOR YOUR TIME

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