

# UPLIFT – Upper Limb Intensive Functional Therapy: A Hybrid Model in a Rural Health Board

Tanya O’Sullivan and Renee Groenevelt,  
Hywel Dda University Health Board

Contact: [Tanya.Osullivan2@wales.nhs.uk](mailto:Tanya.Osullivan2@wales.nhs.uk)  
[Renee.Groenevelt@wales.nhs.uk](mailto:Renee.Groenevelt@wales.nhs.uk)

## Background:

Upper limb deficits are common in people with neurological conditions and significantly impact independence. Evidence recommends multidisciplinary, high-intensity rehabilitation, but these programmes are not routinely offered in HDUHB or elsewhere in Wales.

### 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.

## Aims and Objectives:

**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 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, service efficiency, and potential for scale-up.

## Approach:

**Co-design:** Informed by a questionnaire completed by 47 clinicians and 3 focus groups with patients and carers.

**The UPLIFT Hybrid Model (3-Week Intensive):** Combines structured, high-intensity therapy through:

- One 6-hour in-person group session per week.
- Two remote video-based therapy sessions per week.
- One in-person home session per week with OT and PT.

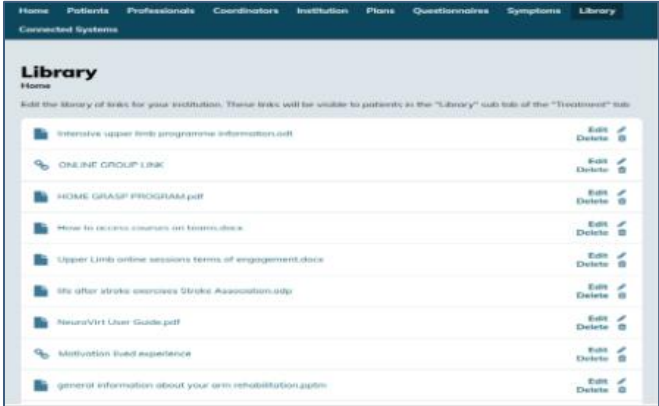
**Digital Platforms to enable self management:**

- Patient Knows Best (PKB): Used as the digital hub for educational resources, communication, and issuing personalised weekly intervention plans to self manage at home.
- Virtual Reality (VR): Secured free loan of six NeuroVirt headsets for self-directed home practice, tracking usage and functional range of movement.

Example of timetable

	Monday 8th	Tuesday 9th	Wednesday 10th	Thursday 11th	Friday 12th	Saturday 13th	Sunday 14th
AM	10.00 - 11.30 Online group	Self-directed therapy	Self-directed therapy	10.00 - 3.30 Community day	10.00 - 11.30 Online group	Self-directed therapy	Self-directed therapy
PM	Self-directed therapy	13.45-15.15 PT-Rhiannon	13.30 - 15.00 OT - Tanya	Carmarthenshire Living Well Centre, Building 1, Parc Dewi Sant SA31 3HB	Self-directed therapy	Self-directed therapy	Self-directed therapy
Don't forget to ....	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	Log onto PKB and record time spent, and any reflections

Example of Patient knows best platform



## Outcomes:

**Therapy Intensity:** The hybrid model increased upper limb intervention time by 1025%, delivering a minimum of 22.5 hours/week of intervention.

**Functional Gains (GAS):** Two of the five measured participants exceeded expectations on the Goal Attainment Scale (GAS +2 score).

**Physical Gains:** Average grip strength increase of 4.52 kg in three weeks.

**Quality of Life:** Three participants reported an improvement in their quality of life.

**Staff Development:** All staff involved reported improved morale, enhanced teamwork, and increased confidence in delivering evidence-based interventions.



Examples of a face to face therapy day



## 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)

**Financial Efficiency:** Achieved a **cost saving of £13,194.00** for six patients compared to a traditional face-to-face service delivery model.

**Patient Experience:** Patients reported positive experiences, highlighting peer support and feeling "given the skills and tools to continue" their rehabilitation.

**Holistic Recovery:** Significant improvements noted in independence, overall quality of life, and in cognitive function (reduced fatigue, better concentration).

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

"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)."

## Key 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.
- **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:** Share findings with national networks (e.g., NCIG) and at conferences to support wider adoption across Wales.