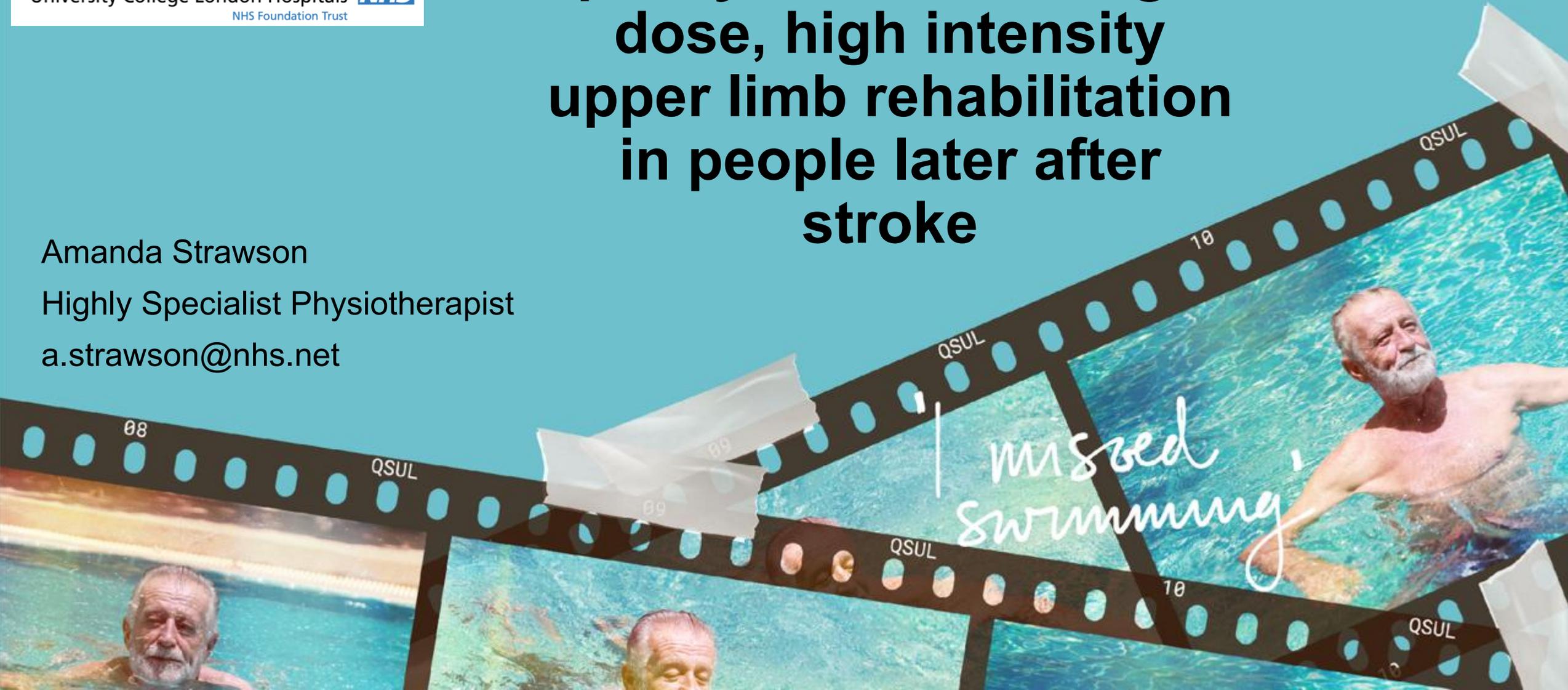


Investigating changes in quality of life after high- dose, high intensity upper limb rehabilitation in people later after stroke

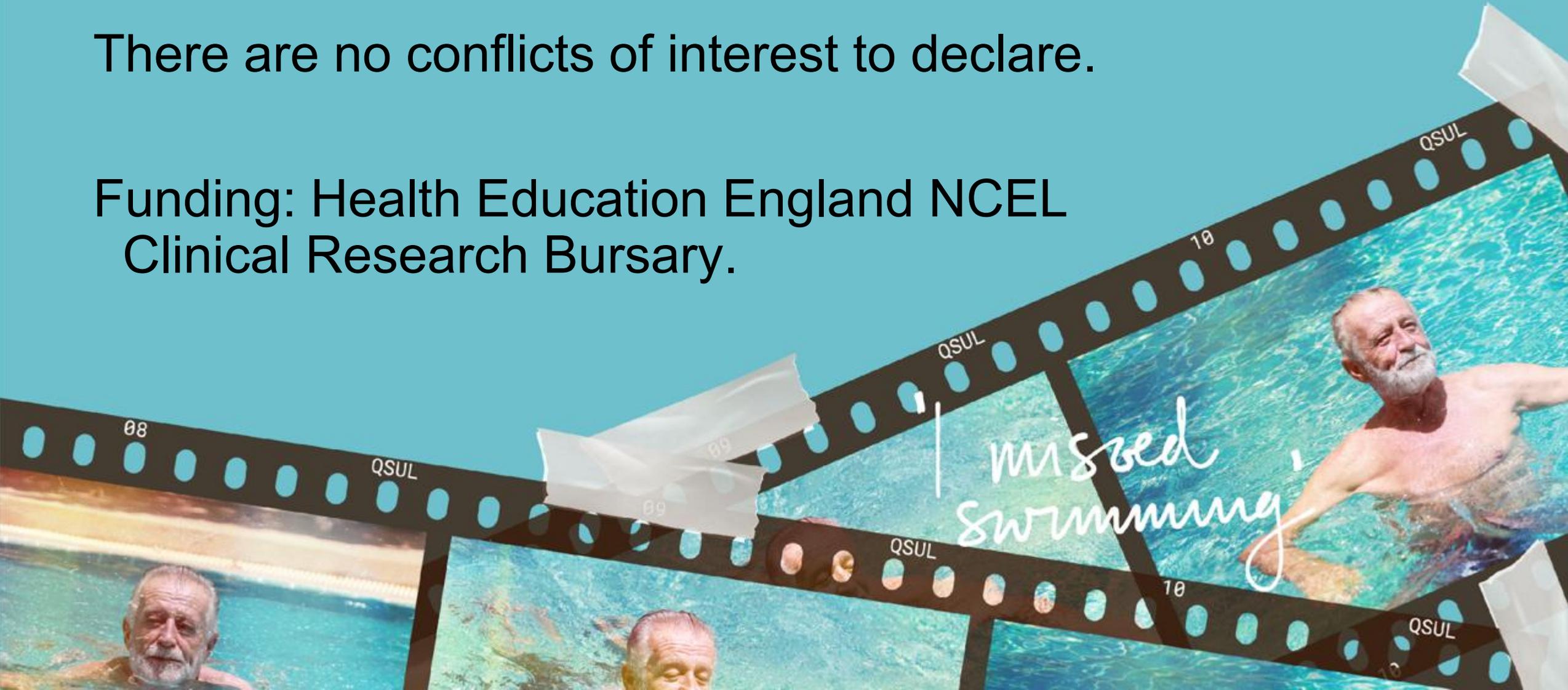
Amanda Strawson
Highly Specialist Physiotherapist
a.strawson@nhs.net



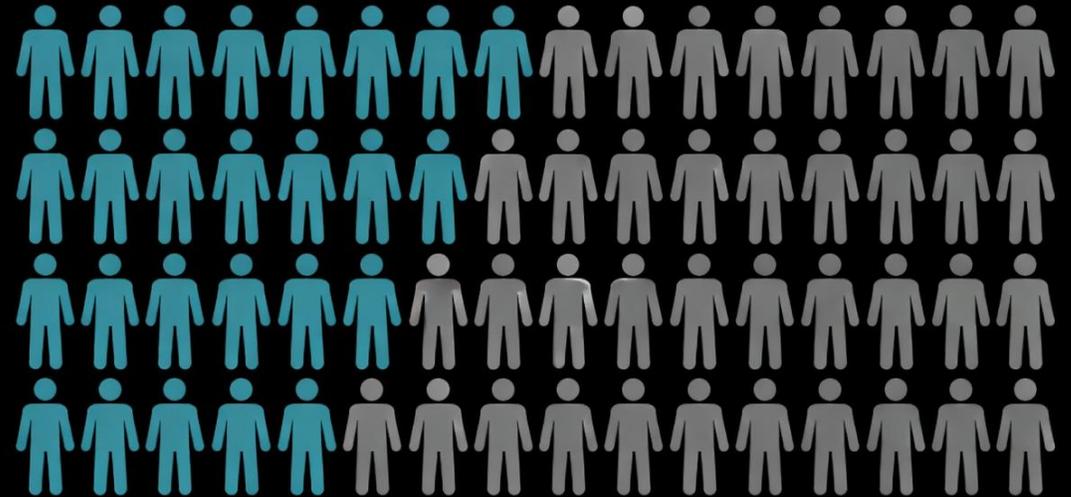
Disclosure statement

There are no conflicts of interest to declare.

Funding: Health Education England NCEL
Clinical Research Bursary.



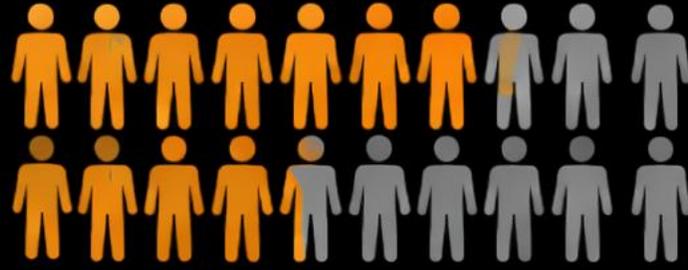
“They have saved his life and brought him back from the brink and then left him there, in effect giving up on him. As though he should be grateful to just be alive with no quality of life.”



45%

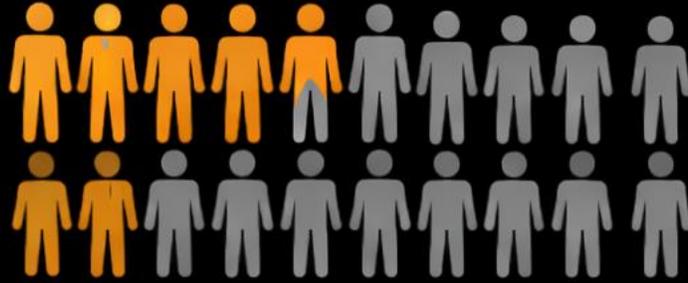
of ALL STROKE SURVIVORS

Feel Abandoned When They Leave Hospital



Immediately after stroke:

70-80% of stroke survivors have some degree of upper limb (arm/hand) deficit



At 3-6 months:

40-60% still have persistent upper limb impairment



At 6 months or longer:

30-50% have moderate to severe ongoing arm/hand dysfunction

Intensive upper limb neurorehabilitation in chronic stroke: outcomes from the Queen Square programme, *Nick S Ward, Fran Brander, Kate Kelly*



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

Nick S Ward,^{1,2,3} Fran Brander,^{2,3} Kate Kelly^{2,3}

ArmA (b)

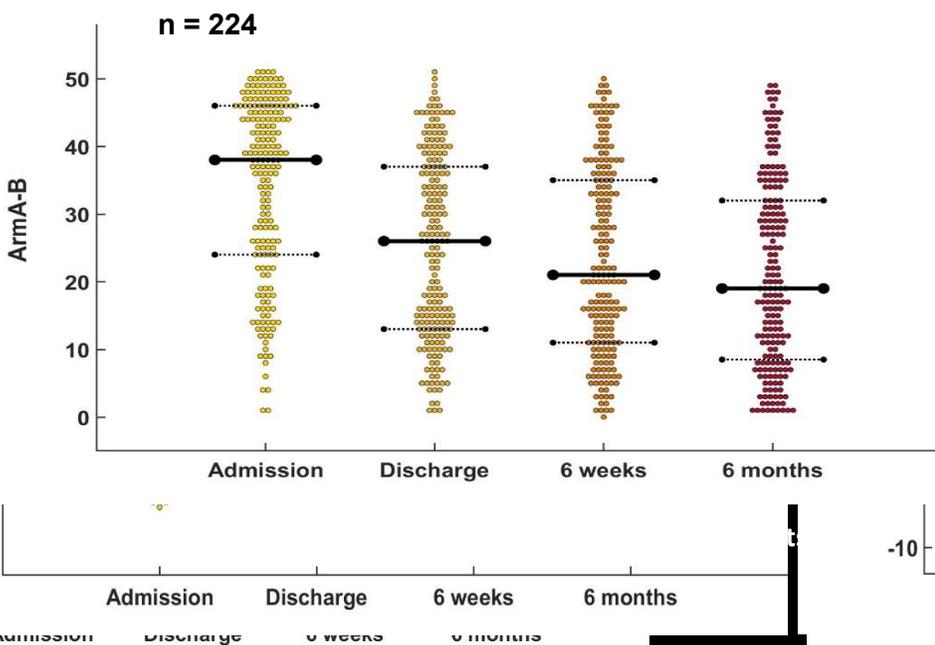
CAHAI 12

Mod
n = 224

n = 224

Fugl-Meyer (Upper Limb)

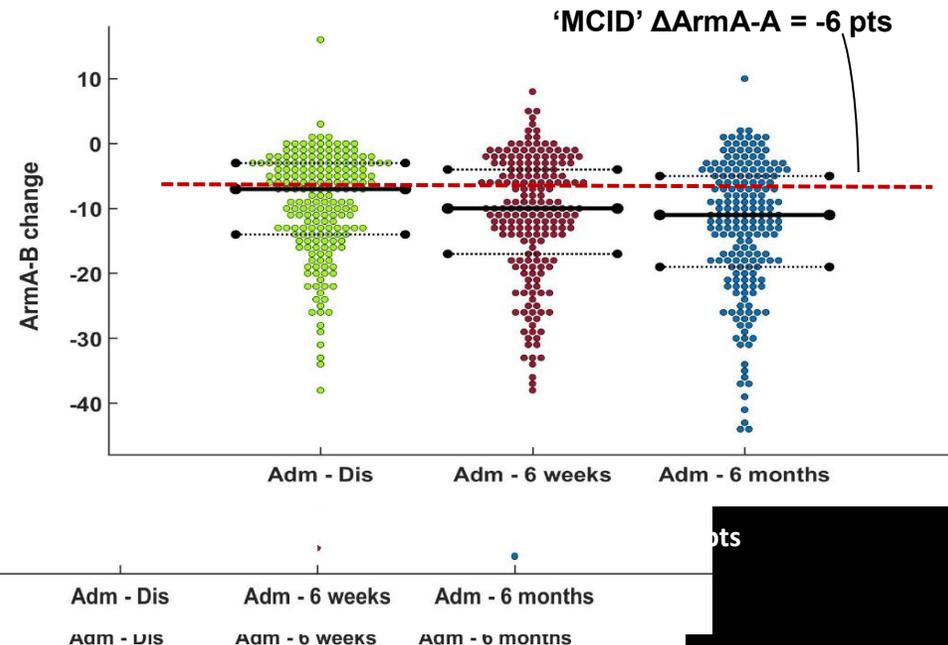
CAHAI



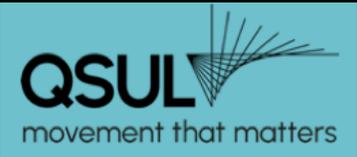
Median FM-UL 26 pts 34 pts 35 pts 37 pts

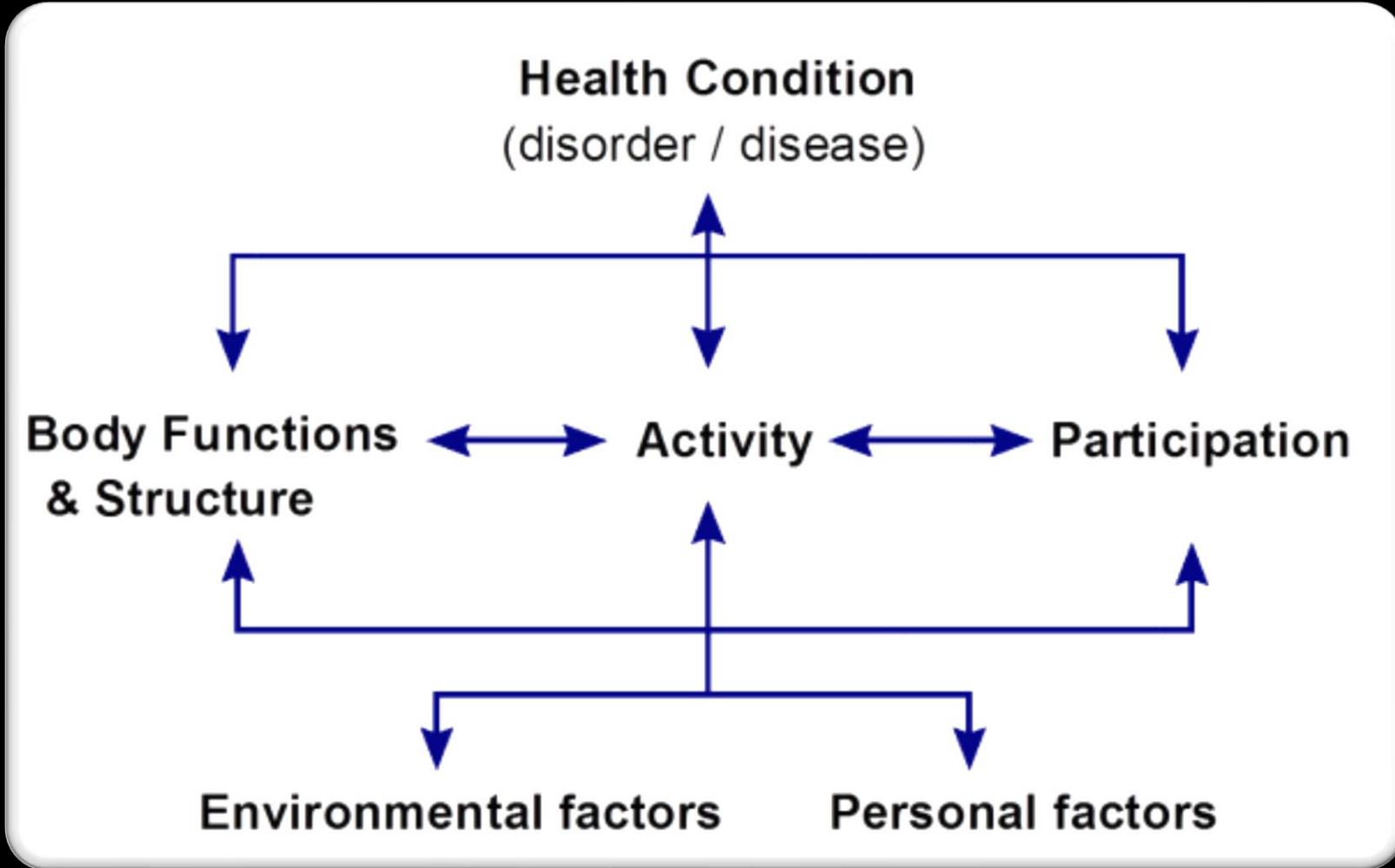
Individual Change in ArmA (b)

Individual change in CAHAI 12



Median ΔFM-UL 6 pts 7 pts 9 pts







Original research article

CLINICAL REHABILITATION

Clinical Rehabilitation
1–16

© The Author(s) 2025

Article reuse guidelines:

sagepub.com/journals-permissions

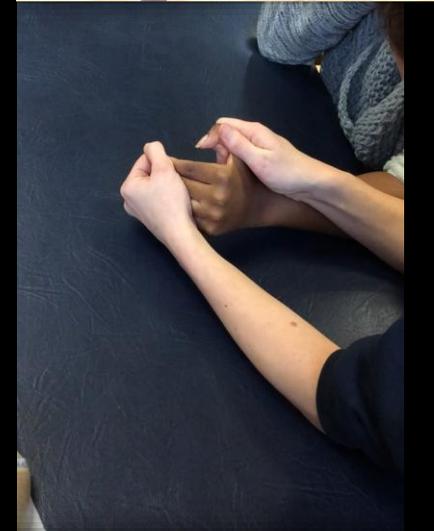
DOI: 10.1177/02692155251363439

journals.sagepub.com/home/cre



Investigating changes in quality-of-life after high-dose high-intensity upper limb rehabilitation in chronic stroke survivors: A mixed-methods analysis of the Queen Square Programme

Amanda Strawson¹ , Jill J Francis^{2,3}, Fran Brander¹, Kate Kelly¹, Mark Haddad² and Nick S Ward^{1,4}



Letter to the editor

CLINICAL REHABILITATION

Clinical Rehabilitation

2025, Vol. 39(12) 1684–1686

© The Author(s) 2025

Article reuse guidelines:

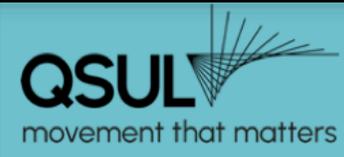
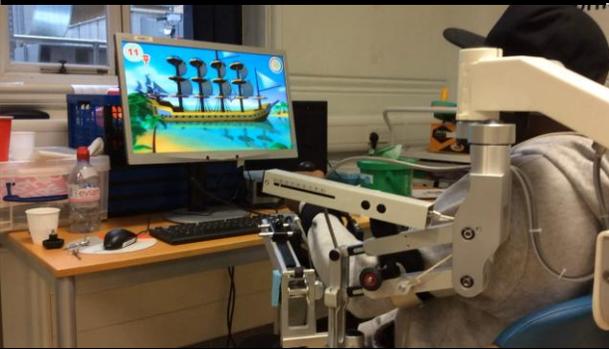
sagepub.com/journals-permissions

DOI: 10.1177/02692155251380853

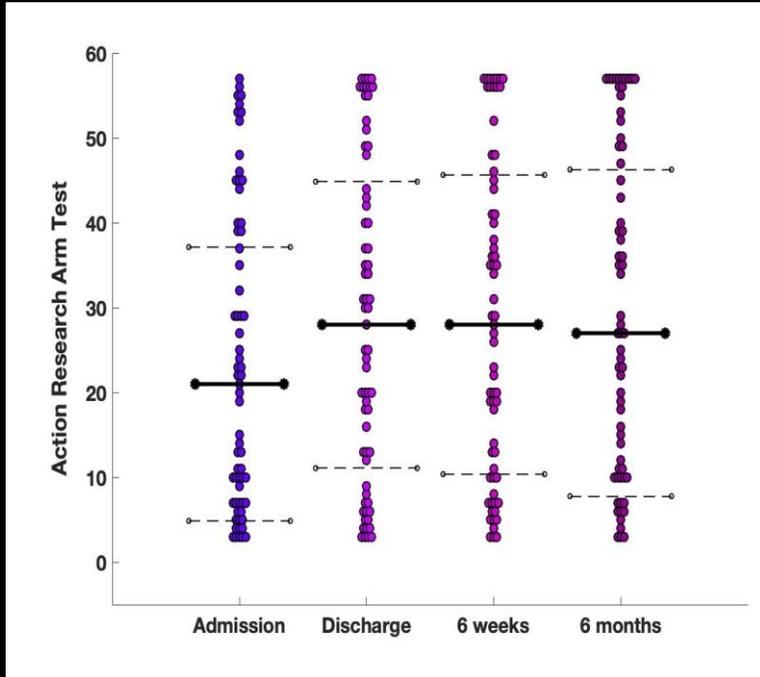
journals.sagepub.com/home/cre



Response to letter to the editor regarding ‘Investigating changes in quality-of-life after high-dose high-intensity upper limb rehabilitation in chronic stroke survivors: A mixed-methods analysis of the Queen Square Programme’

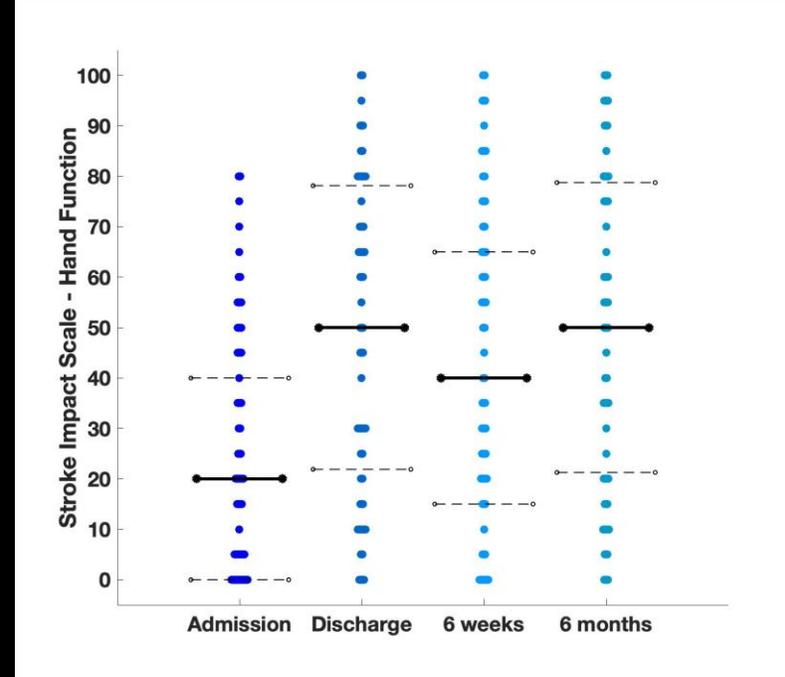


ACTIVITY - ARAT



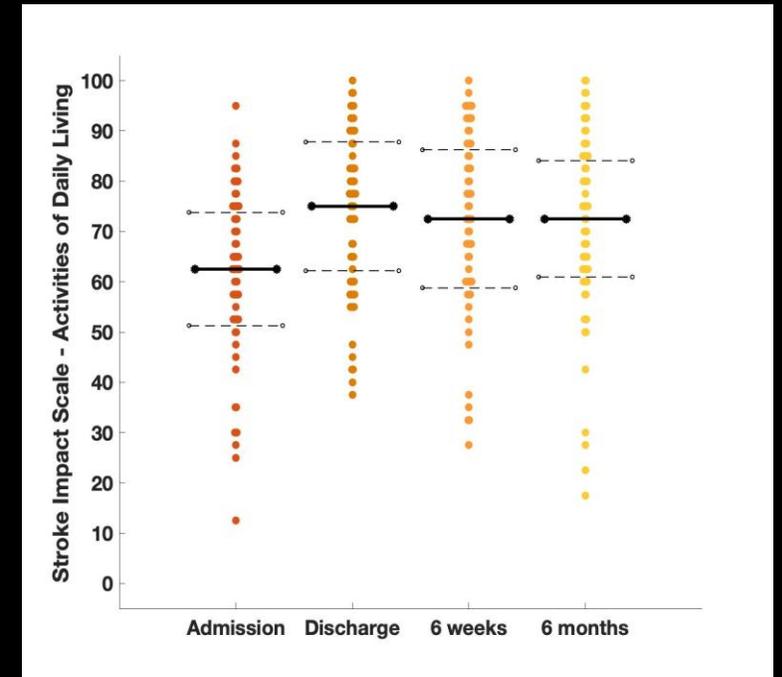
MCID Δ ARAT = 6 pts

HAND FUNCTION



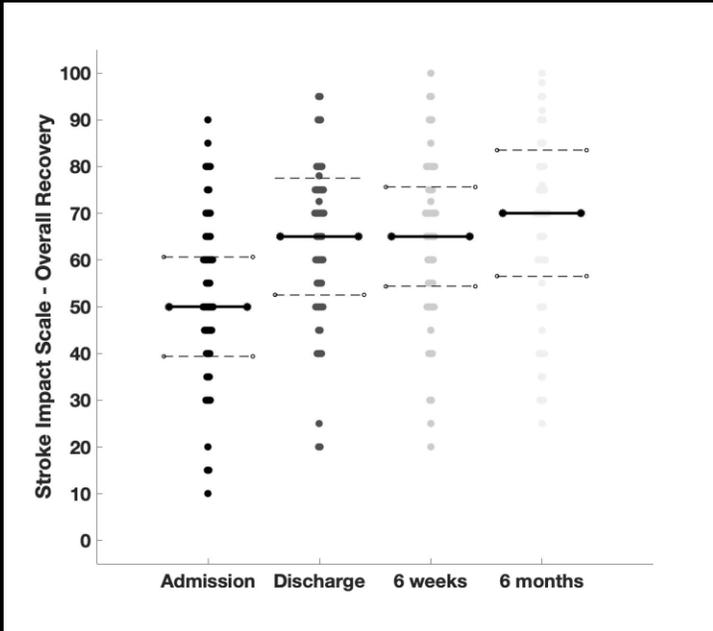
MCID Δ SIS-hand function = 17.8 pts

ACTIVITIES OF DAILY LIVING

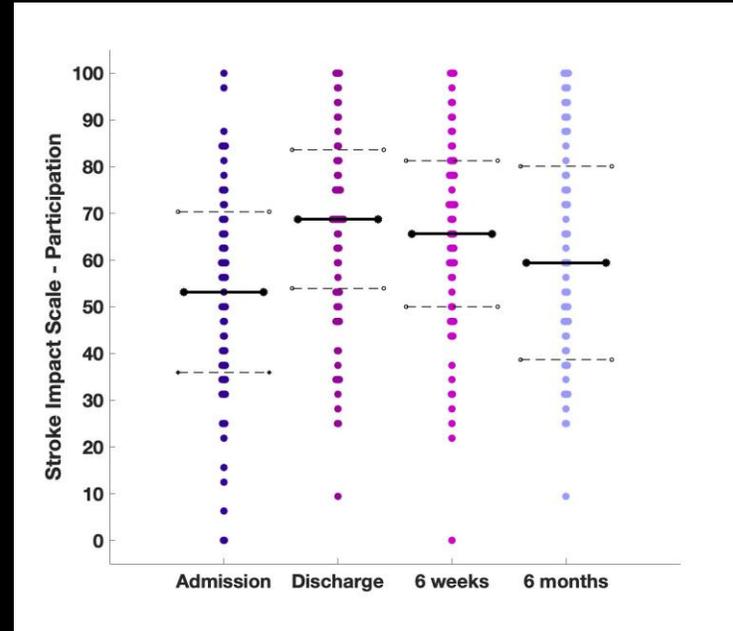


MCID Δ SIS-ADL's = 5.9 pts

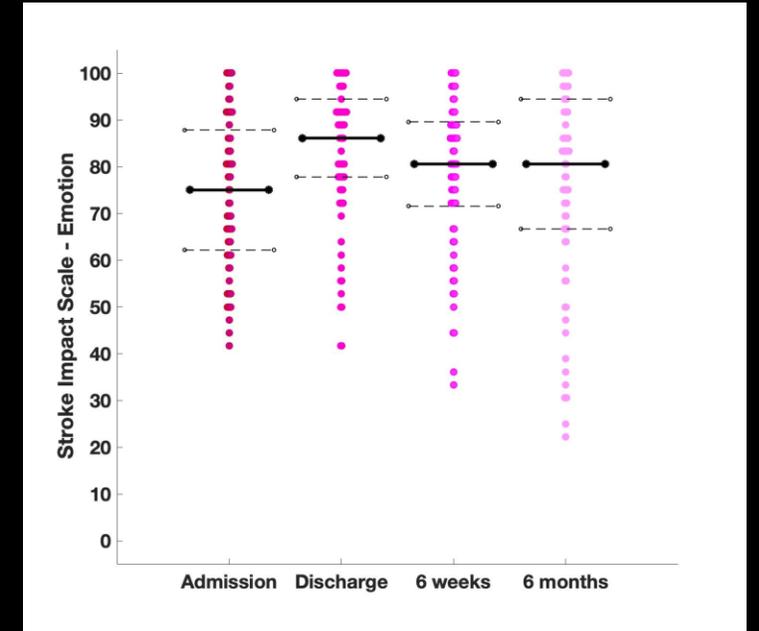
OVERALL RECOVERY



SOCIAL PARTICIPATION



EMOTION





SHARED THEMES

Beliefs About Recovery

Hope and expectations about the potential for recovery



Negotiating Confidence and Independence

Balancing self-belief with independent action



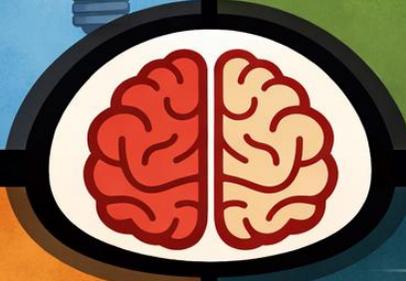
Altered Roles and Identity

Adjusting to changes in roles and relationships



The Motivation Puzzle

Factors that drive engagement in rehabilitation



“Yes, your **mind has to think you can** – even though you don’t know, you really don’t know. You have to **think you can recover.**”

“To be honest, I **just get on with it**, I don’t think about whether I can do it or not. I **just know what I can do and I get on.**”

“I’m still very **upset** about it, I still don’t **cope** with it very well.”

“I **don’t feel like me**. I was quite an outgoing person, and always on the go and everything, and it **sort of stopped me in my tracks.**”

“It just makes you realise that there are **more important things** too, than money and looking good.”

“I have a lot of things I think I want to do... I would like to go and see my daughter in Ireland and maybe do it on my own, that’s another **big thing for me.**”

“I feel that I’m so **dependent** on my husband, and friends and family. They don’t seem to mind, **but I mind.**”

“I know that I could if I worked really hard at it, **but I also know that I’ve got other stuff going on**, and I don’t really have the **time** to do that.”

'You know it's more like. It's easier for me to forget the life I had before my stroke and **consider the stroke as a starting point.**'

GROUP 1 & GROUP 2 INDIVIDUAL THEMES

Group 1



Getting on with life

Participants focused on adjusting to their abilities and moving forward, emphasizing recovery and social participation.

Group 2

Hidden Negative Effects

Participants dealt with pain, fatigue, depression, and uncertainty about managing these "invisible" struggles.



Loneliness

Participants described boredom, loneliness, and social isolation



"I also have.. short-term memory loss... I think that's a massive problem with people who've had strokes, is because it's a **hidden effect is the fatigue, and also depression and anxiety.**"

"I haven't got **much of a life** really."



Intensive upper limb rehabilitation (QSUL) **improves upper limb activity and quality of life** in people later after stroke.



At **6-month follow-up**, improvements in quality of life were **sustained in several domains**, though not universally.



Benefits extended **beyond physical function**, influencing broader aspects of health and wellbeing.



For some individuals, **mental health and psychosocial factors strongly shaped quality of life and participation**.



Intensive neurorehabilitation programmes should **consider multiple outcome domains** to ensure a truly **holistic approach**.



Acknowledgements



Professor Nick Ward



Dr Mark Haddad



Professor Jill Francis
Associate Professor
Kate Hayward



Fran Brander
Kate Kelly
All the QSUL therapists
& stroke survivors!!

