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Background

Poor Upper Limb (UL) function post stroke has been well documented (Pollock et al 2014). While evidence exists to support intensity of rehabilitation and task specific training, it is not known how much knowledge or confidence about best practices in UL rehabilitation exist in therapists working in stroke rehabilitation.

Aim

This work explored experience, knowledge and confidence regarding post-stroke UL rehabilitation in physiotherapists, occupational therapists and support workers working in post-stroke rehabilitation in Scotland. A secondary aim was to identify potential training needs.

Methods

Between January – June 2024, a survey was created using JISC online surveys. A link was distributed using social media (X), emails to distribution lists including therapy managers across Scotland, special (stroke / neurology) interest groups and personal contacts. The target sample was 150 respondents based on an estimated 10% response from practitioners in Scotland. The design enabled a snapshot of current knowledge, confidence and practices related to post-stroke upper-limb rehabilitation. The target population was Physiotherapists, Occupational Therapists, and support workers who had at least three months of experience working with stroke patients within Scotland.

Discussion

In general, scores for knowledge about interventions was higher than confidence in applying them during rehabilitation. Electrical stimulation was used by 43% of therapists but knowledge was rated as 64%. Constraint Induced Therapy was used by only 7% and confidence was reported as low by 70%. There was variation reported in outcome measure use, most commonly used were the Nine Hole Peg test (68%) and Motor Assessment scale (23%). Many other measure were used by a small number of therapists. This makes evaluation of effectiveness of interventions challenging and is a barrier to collation of any national data.

References

Pollock A, Farmer SE, Brady MC, Langhorne P, Mead GE, Mehrholz J, van Wijck F. (2014), Interventions for improving upper limb function after stroke. Cochrane Database of Systematic Reviews Issue 11. Art. No.: CD010820. DOI: 10.1002/14651858.CD010820.pub2

National Clinical Guideline for Stroke (2023) *National Clinical Guideline for Stroke for the UK and Ireland*. London, UK: Intercollegiate Stroke

Results

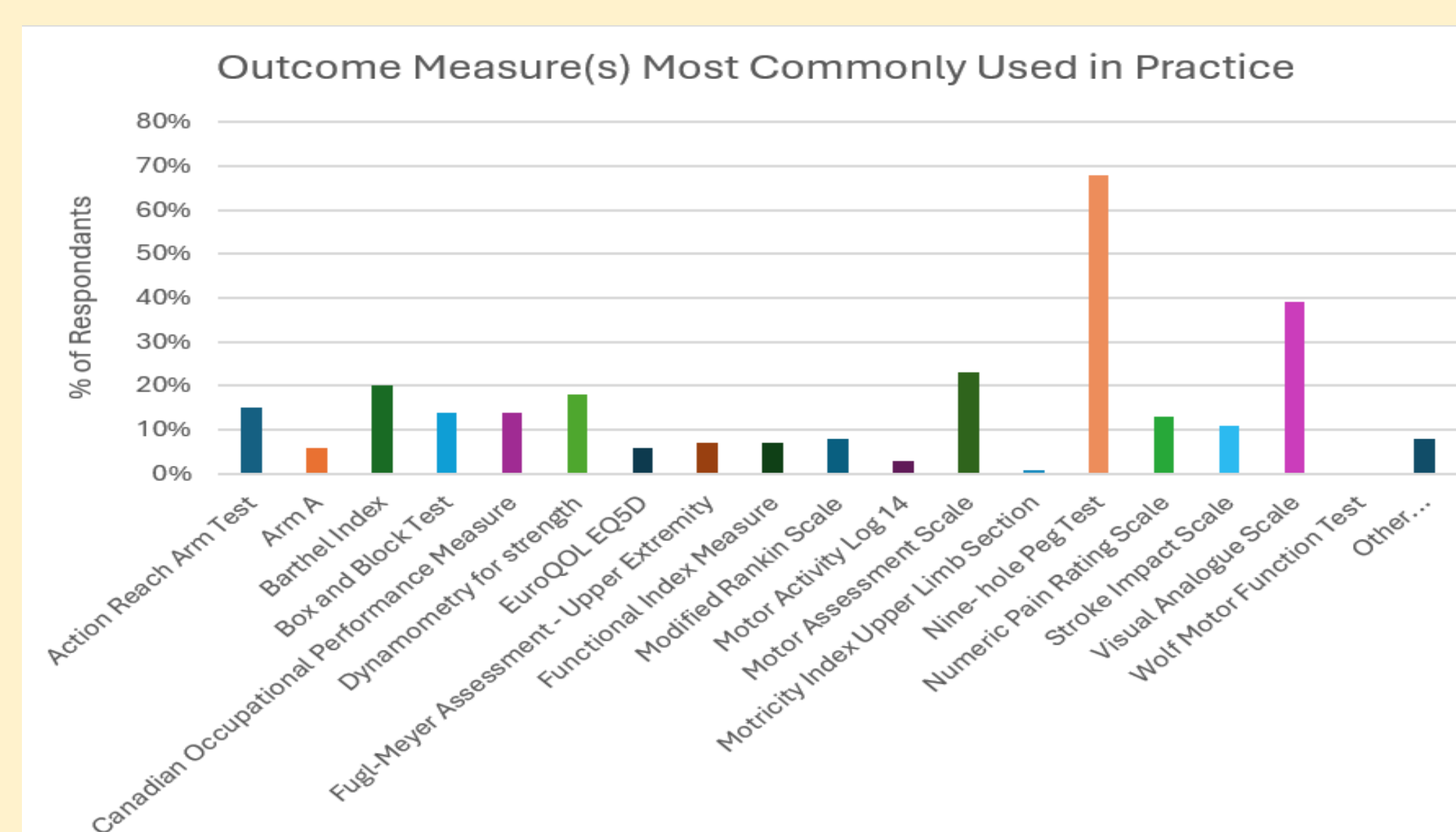
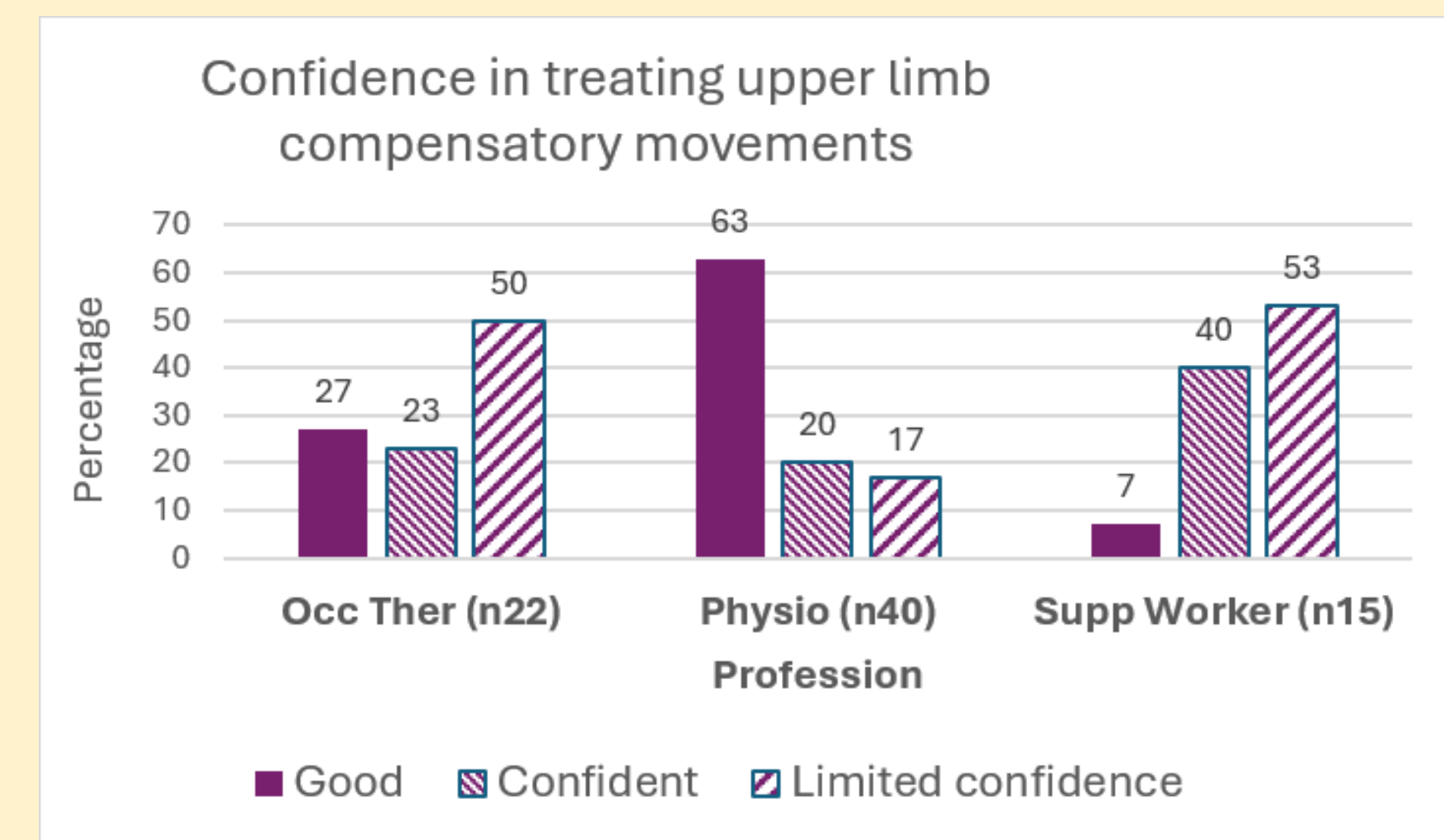
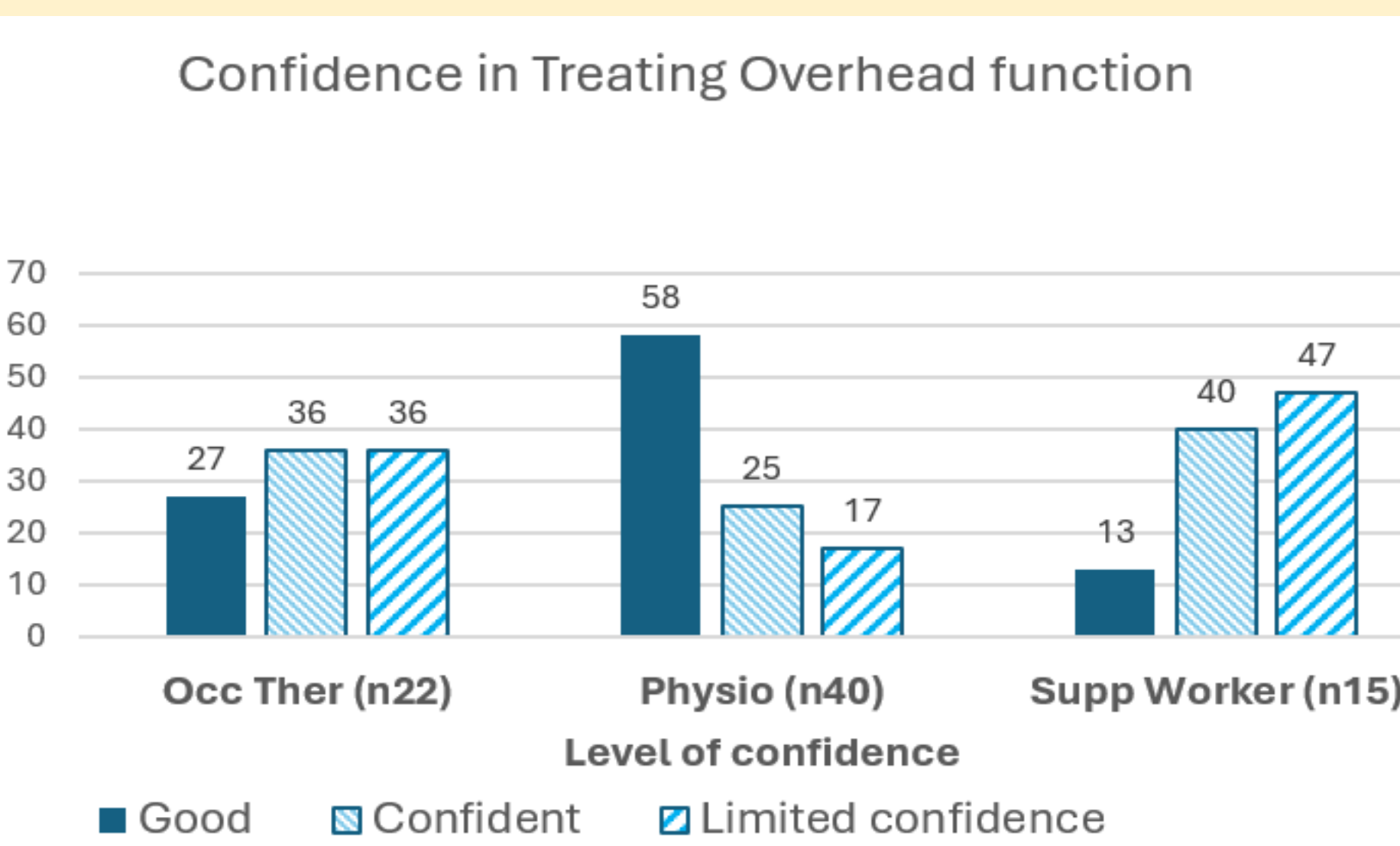
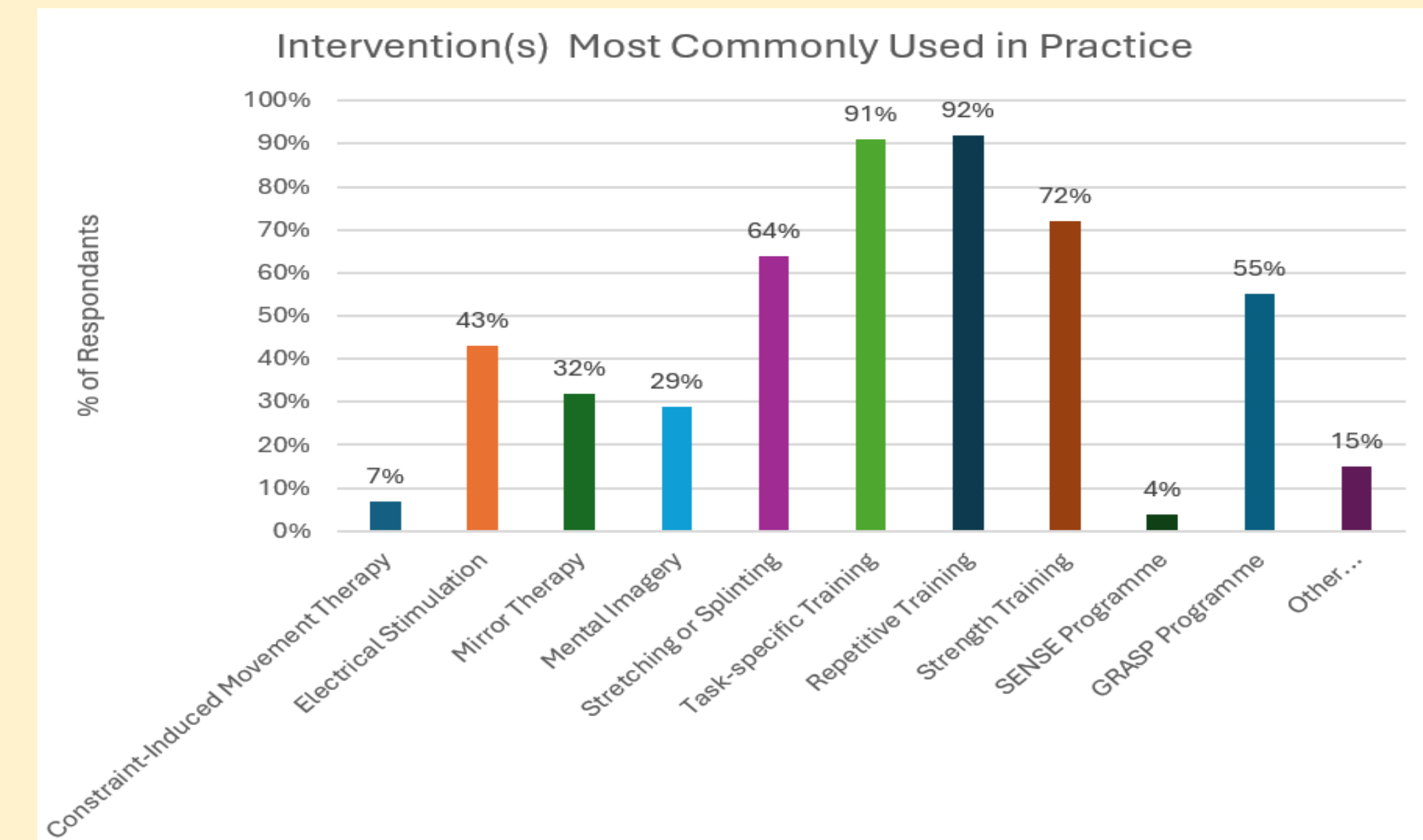
Results: 77 people responded (52% Physiotherapists, 29% Occupational Therapists; 19% support workers). 42% of respondents had worked in stroke rehabilitation more than 10 years, 12% between 5-10 years, 31% between 2-5 years and 15% less than 2 years.

Some key findings of note included:

The top 3 most commonly used interventions were Repetitive training (92%), Task specific training (91%), strength training (72%). Some interventions advocated in guidelines, e.g. electrical stimulation were used by less than half the respondents.

Two thirds of responders (64%) always prescribed self-practice outwith therapy sessions.

In general, for every intervention, over 80% of respondents felt confident in providing treatment. However 29% were 'not at all' or only 'slightly confident' in treating overhead arm function; and a third (34%) were 'not at all' or only 'slightly confident' in treating compensatory movements.



A variety of outcome measures were reported to be used in practice.



Clinical Implications and recommendations

There is a difference in knowledge, confidence and implementation of some interventions that are recommended in national stroke guidelines. There are profession specific differences. These findings will be used to develop more targeted training resources for therapists and support workers working in stroke rehabilitation. Future work may include running focus groups to explore knowledge and confidence with particular evidence-based interventions to identify barriers to implementation/knowledge translation. The findings should aid national discussions on collation of a Stroke Rehabilitation data set.