

# PRIMARY CARE INTERVENTIONS FOR LONG-TERM OUTCOMES AFTER STROKE: A SCOPING REVIEW OF REVIEWS AND RECENT TRIALS

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## Background

- Stroke is the third most important cause of disability burden (Feign et al., 2014, Lozano et al. 2012).
- In the UK 78% of stroke survivors are discharged home and live in the community (Intercollegiate Stroke Working Party, 2016).
- Stroke survivors report multiple long-term unmet needs (McKevitt et al., 2011; Pindus et al., submitted).
- An integrative account of primary care based interventions for long-term care of stroke is lacking.
- Key characteristics of successful interventions could help target future research efforts and inform care.

## Aim

- To provide an integrative overview of the scope and focus of generalist community delivered interventions to improve functional, physical and psycho-social outcomes in stroke survivors living in the community and their informal caregivers.

## Methods

- Established scoping review methodology (Arksey and O' Malley, 2005).
- Systematic search of 6 databases: Medline, EMBASE, PsycINFO, CINAHL, COCHRANE Reviews or Clinicaltrials.gov up to 06/2015.
- Inclusion criteria:** (1) peer reviewed systematic reviews and meta-analyses of randomised controlled (RCTs) and/or controlled trials, supplemented with most recent (2011-2015) trials, (2) interventions delivered in primary care and/or community, (3) by generalist healthcare professionals, (4) to adult stroke survivors and/or informal caregivers.
- Exclusion criteria:** (1) drug efficacy reviews/trials, (2) not published in English.

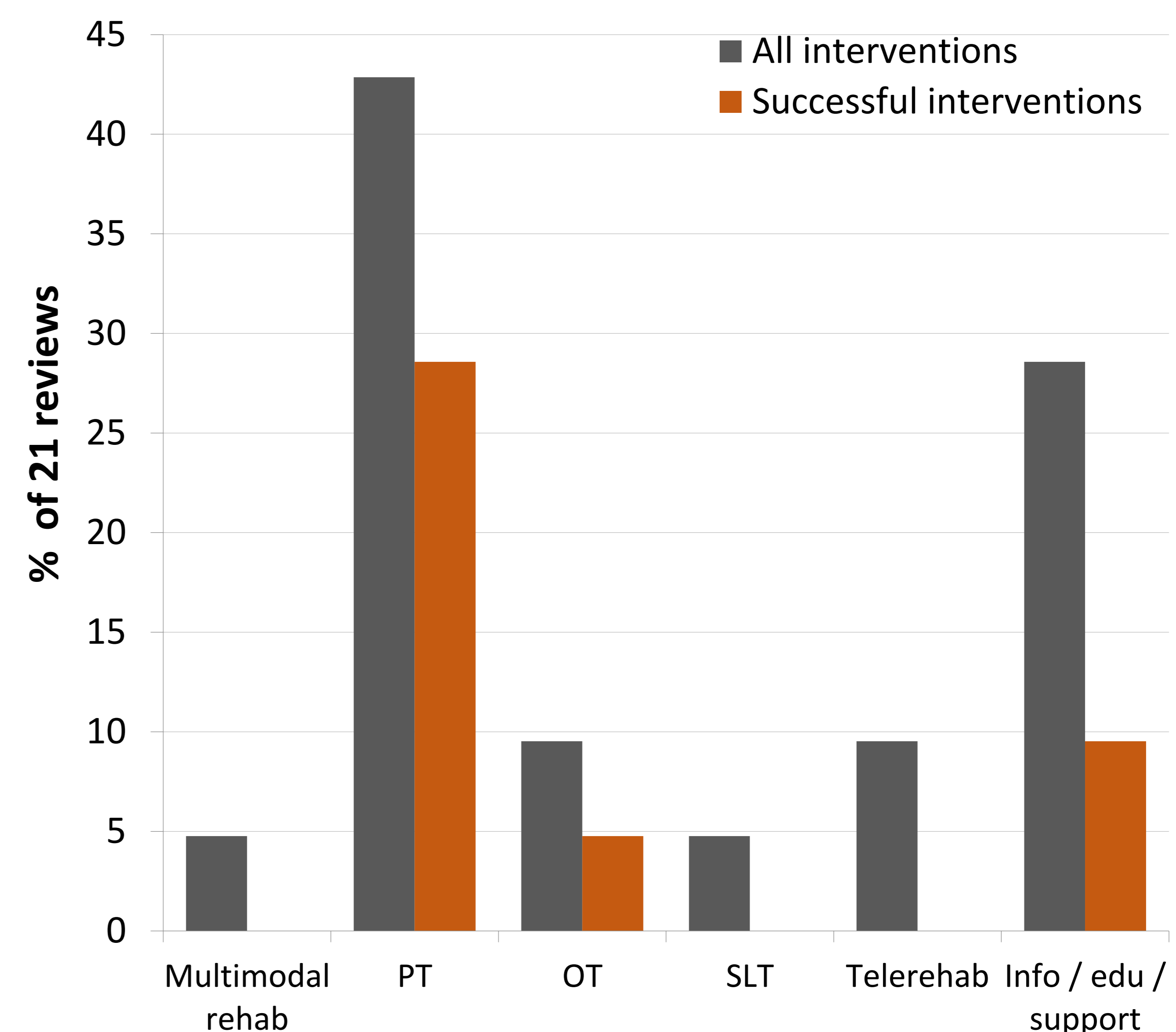
## Results

- 2,041 reviews and 1,839 RCTs and controlled trials were identified.
- Full texts of 94 reviews and 40 trials were assessed for eligibility.
- 21 reviews and 10 trials including 27,527 and 1,691 participants were analysed.

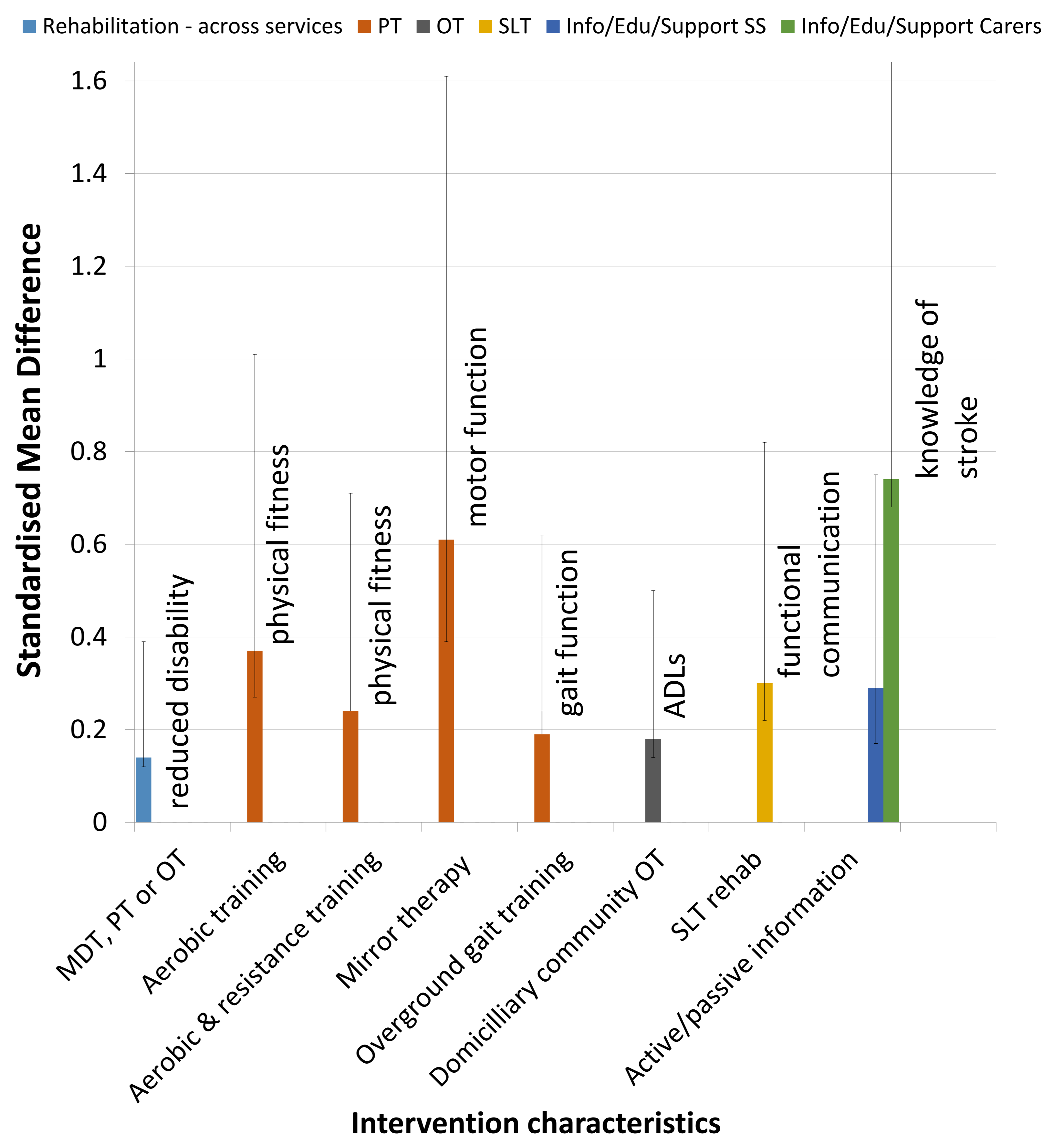
## Key findings

- 13 (62%) reviews and 5 (50%) trials reported positive small to medium size effects of interventions on long-term outcomes after stroke (see figures 1 and 2 for review findings).
- Only 19% (n=4) of reviews and 10% of (n=1) of trials included caregivers.
- 43% (n=9) of reviews and 60% (n=6) of trials focused on physical function (e.g. mobility, balance, physical fitness).
- Increased interest in psycho-social outcomes was observed in recent trials: 33% of trials compared to 19% of reviews addressed caregiver burden or quality of life (QoL) in survivors.
- Two reviews reported positive effects of information provision on depression in survivors (Smith et al., 2010), and education and support interventions on QoL in caregivers (Lee et al., 2007).
- 60% of positive review and trial findings related to physical (e.g. mobility, fitness, balance) and functional (activities of daily living; ADLs or disability) outcomes.

**Conclusions** Although stroke survivors report many unmet long-term psychological needs, primary care interventions focus on their physical health and global function. Since psychological outcomes are related to functional recovery after stroke, interventions aimed at improving survivors' and caregivers' long-term mental health are also needed.



**Fig 1.** Percentage of all (n=21) reviews and those with positive findings (n=13) by intervention type.



**Fig 2.** The effects of primary care and community based interventions on long-term outcomes after stroke by type and outcome based on 9 reviews. Error bars present 95% confidence intervals. Primary outcomes plotted against the confidence intervals. *Note.* Four reviews (intervention type: physiotherapy and education) reporting positive mean differences were not captured. The exclusion of these reviews did not modulate the findings. ADL: Activities of Daily Living; MDT: multidisciplinary team; PT: physiotherapy; OT: occupational therapy; SLT: speech and language therapy; SS: stroke survivors.