Physiotherapy works 🗸

STOKE

Stroke is the largest cause of complex disability in the UK, and approximately one-third of stroke survivors are left with disability and rehabilitation needs. (1, 2)

Physiotherapists play a pivotal role at every stage of the patient pathway, helping individuals to reach their full physical potential and functional ability and to reintegrate into society. Physiotherapists are also involved in preventing stroke and stroke recurrence, and improving the nation's health by promoting healthy active lifestyles. Within a multidisciplinary team, physiotherapists rehabilitate patients from acute care to the home setting, and provide long-term community support.

Physiotherapy is clinically effective throughout the patient pathway

Emerging evidence shows that physiotherapy very early after stroke (mobilisation within 24hrs) and at high intensity leads to better outcomes^(3,4) and is cost effective.⁽⁵⁾ A minimum of 45 minutes of physiotherapy five days a week is recommended.^(5,6)
To meet these requirements some physiotherapy departments are providing weekend services. Sevenday service models offer potential

cost savings for the health service. (7)

Size of the problem

- In the UK:
 - An estimated **152,000** people annually have a stroke⁽⁸⁾
 - There are approximately 1.1 million stroke survivors⁽⁸⁾
 - Stroke accounts for 240,456 inpatient episodes of care⁽⁸⁾
- **76 per cent** of stroke survivors have physical deficits⁽⁹⁾
- The prevalence and burden of stroke is expected to increase in future decades due to the increasingly ageing population and the improvements in hyper-acute care resulting in the increased number of individuals surviving their stroke.^(1,5)

Cost of the problem

UK annual health and social care costs to manage stroke and its consequences are **£4.6 billion**, with healthcare accounting for **40 per cent** of the total. Informal care costs and productivity losses due to mortality and morbidity contribute a further **£1 billion** each, giving total costs of **£6.6 billion**. (10, 11)

76%
of stroke
survivors have
physical
deficits(9)

The National Stroke Strategy⁽¹²⁾ and National Institute for Health and Care Excellence Stroke Quality Standard⁽¹³⁾ recommend intensive rehabilitation immediately after stroke, across a seven-day service, with a skilled multidisciplinary team to limit disability and improve outcomes.^(5,12)



Physiotherapy stroke rehabilitation is increasingly based in the community. It is recommended that all stroke survivors with residual stroke-related problems are followed up by specialist stroke services within 24 hours of discharge from hospital. (5) Early Supported Discharge (ESD) teams fulfil this role and are clinically effective, especially when patients return home with mild or moderate disability. (14,15) Physiotherapists offer a range of evidence-based

Case study

Northern Devon Healthcare Trust stroke therapy team have developed a high-quality, seamless, specialist, integrated, equitable service including an ESD team for a rurally dispersed population.

The service builds on a typical ESD model with physiotherapists working flexibly across the patient pathway. Care includes a fitness and self management programme, psychological screening and intervention, vocational support, and integration with other community, health, social care and voluntary services. Where rehabilitation needs cannot be met by generic community services, input from the ESD team extends beyond six weeks. Outcomes include:

- Length of stay reduced by six days from 22 days, saving £833,700
- Hospital readmission rates reduced from 6 per cent to 3 per cent through strengthened links with community nurses
- 13 per cent more patients returning home as opposed to a care home, saving over £75,500 per person. (16)

interventions depending on the patient's clinical needs and goals. Treatment may include gait re-education, constraint-induced movement therapy, task-specific training and falls management.^(5, 9)

Following the acquisition of independent prescribing rights in England, physiotherapists will play an increasingly important role in areas such as spasticity management. Through new technologies such as telemedicine, patient access to rehabilitation will also improve. (18)

Long-term management

Physiotherapists are ideally placed to provide services that support individuals to re-integrate into their community. Physiotherapists have skills in promoting physical activity, reablement, and empowering individuals through self-management techniques.⁽¹⁹⁾

FURTHER INFORMATION

CSP Enquiry Handling Unit

Tel: 0207 306 6666

Email: enquiries@csp.org.uk

Web: www.csp.org.uk









Acknowledgements

Thanks to Michelle Price (Consultant Therapist for Stroke and Neurorehabilitation, Powys Teaching Health Board & ACPIN representative), Louise Briggs (AGILE National Executive Committee Officer), Stroke Association, Joyce Craig (Craig Health Economics Consultancy Ltd), Emma Cork (Stroke Therapy Service Lead, Northern Devon Healthcare Trust), Imogen Scott Plummer (CSP Research Advisor).

References

- 1. Scarborough P, Peto V, Bhatnagar P, et al. Stroke statistics 2009. London: British Heart Foundation; 2009. URL: http://tinyurl.com/nkpcfur
- 2. Murray CJ, Lopez AD. Mortality by cause for eight regions of the world: Global Burden of Disease Study. Lancet. 1997 May 3;349(9061):1269-76.
- 3. Cumming TB, Thrift AG, Collier JM, et al. Very early mobilization after stroke fast-tracks return to walking: further results from the phase II AVERT randomized controlled trial. Stroke. 2011 | lan;42(1):153-8. URL: http://tinyurl.com/o3unpsj
- 4. Kwakkel G, van Peppen R, Wagenaar RC, et al. Effects of augmented exercise therapy time after stroke: a meta-analysis. Stroke. 2004 November 1, 2004;35(11):2529-39. URL: http://tinyurl.com/ogqubqj
- 5. National Institute for Health and Care Excellence. Stroke rehabilitation: long term rehabilitation after stroke. CG162. London: National Institute for Health and Care Excellence; 2013. URL: http://tinyurl.com/qzlp7g7
- 6. Intercollegiate Stroke Working Party. National Clinical Guideline for Stroke. 4th. London: Royal College of Physicians; 2012. URL: http://tinyurl.com/7k3d37y
- 7. Brusco NK, Shields N, Taylor NF, et al. A Saturday physiotherapy service may decrease length of stay in patients undergoing rehabilitation in hospital: a randomised controlled trial. Australian Journal of Physiotherapy. 2007;53(2):75-81.
- 8. Townsend N, Wickramasinghe K, Bhatnagar P, et al. Coronary heart disease statistics 2012 edition. London: British Heart Foundation; 2012. URL: http://tinyurl.com/qbmg4gp
- 9. Intercollegiate Stroke Working Party. National Sentinel Stroke Clinical Audit 2010 Round 7: Public Report for England, Wales and Northern Ireland 2010. URL: http://tinyurl.com/neycvtq

- 10. Nichols M, Townsend N, Luengo-Fernandez R, et al. European cardiovascular disease statistics 2012. Brussels: European Heart Network; 2012. URL: http://tinyurl.com/qd4xf9l
- 11. Saka Ö, McGuire A, Wolfe C. Cost of stroke in the United Kingdom. Age and Ageing. 2009 January 1, 2009;38(1):27-32. URL: http://tinyurl.com/p7zm2dy
- 12. Department of Health. National stroke strategy. London: Department of Health; 2007. URL: http://tinyurl.com/q46xv6f
- 13. National Institute for Health and Care Excellence. Stroke quality standard. London: National Institute for Health and Care Excellece; 2010. URL: http://tinyurl.com/gbosz85
- 14. Saka Ö, Serra V, Samyshkin Y, et al. Cost-effectiveness of stroke unit care followed by early supported discharge. Stroke. 2009;40(1):24-9. URL: http://tinyurl.com/od6dojl
- 15. Fearon P, Langhorne P. Services for reducing duration of hospital care for acute stroke patients. Cochrane Database Syst Rev. 2012;9:CD000443. URL: http://tinyurl.com/opmpnkd
- 16. Craig J, Murray A, Mitchell S, et al. The high cost to health and social care of managing falls in older adults living in the community in Scotland. Scottish Medical Journal.[in press]
- 17. The Chartered Society of Physiotherapy. Practice guidance for physiotherapist supplementary and/or independent prescribers in the safe use of medicines. 2nd ed. 2nd. London: The Chartered Society of Physiotherapy, 2013. URL: http://tinyurl.com/oqwdlfl
- 18. Schwamm LH, Holloway RG, Amarenco P, et al. A review of the evidence for the use of telemedicine within stroke systems of care: a scientific statement from the American Heart Association/American Stroke Association. Stroke. 2009 July 1, 2009;40(7):2616-34. URL: http://tinyurl.com/nf5qhq8
- 19. Lennon S, McKenna S, Jones F. Self-management programmes for people post stroke: a systematic review. Clinical Rehabilitation. 2013;27(10):867-78.