Health Economic Impact of Physiotherapy –Examples from the CSP

"Physiotherapy Works V" is a series of information papers produced for the Chartered Society of Physiotherapists (CSP, UK) in conjunction with Health Economists that outline the beneficial health economic impact of physiotherapy on a number of conditions.

The cost savings included reductions in admission and readmission rates, length of hospital stays, use of prescription medicines and health staff absenteeism

The following is a summary of a sample of the research based findings that show where physiotherapy has reduced the cost burden (improved clinical outcomes are implicit).

1. Reduction in length of hospital stay through early mobilisation of patients in Intensive Care Unit⁴

A Physiotherapy led early mobility protocol showed a decrease in ICU and hospital length of stay (average 14.5 v 11.2 days) and an average cost savings of 7% on standard patient care costs.

2. Reduction in length of hospital stay for people with COPD³

Intensive multidisciplinary outpatient pulmonary rehabilitation programme including physiotherapy is an effective intervention in the long and short term and resulted in reduced length of hospital stay.

3. Reduction in length of hospital stay for patients following pulmonary lobectomy³

Intensive respiratory physiotherapy following pulmonary lobectomy reduced mean hospital stay from 8.3 to 5.7 days. Further findings included a reduction in rates of mortality, pneumonia and lung collapse.

4. Reduced length of hospital stay and admission to institutional care for people with strokes¹⁵

Physiotherapy in the very early stage for people with strokes (mobilising within 24 hours) and at high intensity leads to better outcomes. In the UK, physiotherapy stroke rehabilitation is increasingly based in the community in specialist stroke services. Early supported discharge (within 24 hours) has been shown to be clinically effective in people with mild or moderate disability. It has also been shown to reduce long term dependency, admission to institutional care and length of hospital stay.

5. Reduced length of hospital stays and future hospital admissions for people with Dementia⁵

An intensive physiotherapy in-patient service and follow up home service for people with dementia showed reductions in length of hospital stays and future hospital admissions. (58% of the people were able to return home).

6. Reduced length of stay in patients with cancer¹²

Physiotherapy has been shown to reduce length of inpatient stays

7. Reduction in hospital admissions and IV antibiotics through physiotherapy outreach programmes for people with Cystic Fibrosis¹⁴

The programme resulted in substantial health care savings by significantly reducing the need for IV Antibiotic treatment and hospital admissions. Increased participation rates were also found.

8. Reduction in readmission rate through pulmonary rehabilitation post COPD exacerbation³

Showed a 26% reduction in readmission rate with cost effectiveness demonstrated.

9. Reduced admissions with Physiotherapist-led Falls Prevention programme in the community¹⁰

The programme showed a reduction in admission due to falls in the home (32%), in institutional care (27%) and in the street (nearly 40%) over a 10year period in Glasgow.

10. Reduction in admissions, GP and Hospital Consultant visits through a Physiotherapy-led MDT service for people with Multiple Sclerosis (MS)⁹

The service over a 6-month period resulted in decreased GP and Hospital Consultant visits and hospital bed days in 38 people with MS, thereby reducing the inappropriate use of inpatient beds.

11. Cost savings in managing early stage breast cancer related Lymphoedema prospectively¹¹

A cost comparison study showed that the cost of managing the above was 80% less per patient when using a prospective physiotherapy surveillance model compared with reacting to symptomatic presentation.

12. Reduction in prescription medicines in self-referral programmes²

Self-referral pilots in 6 NHS sites in England between 2006 and 2008 reduced the number of associated NHS costs particularly for investigations and prescribing; 75% didn't require prescription medicines. It also reduced work absence.

The average cost benefit self-referral to the NHS-Scotland was estimated (2009) at £2.5million p.a.1

13. Reduced health service staff absenteeism²

Triaging to facilitate easy access to staff for MSK physiotherapy rehabilitation (consistently the most common reported type of work related illness since records began in UK and half of sick absence in the NHS is caused by musculoskeletal disorders (MSD) and 30% of primary care referrals) meant 53.3 % could stay at work, 21.7% returned to work within 8 days and the remainder within 30 days resulting in substantial savings on agency staff. Two government departments in NI offered this service to staff and 80% indicated that physiotherapy prevented their absence from work

14. Physiotherapy as the more cost effective option:

i. Cheaper and more clinically effective than drug treatment for urinary incontinence⁶

ii. Health Technology Assessment showed that intensive pelvic floor training and lifestyle changes were the most clinically and cost effective first line strategy⁶

iii. Recent NICE review found 5 studies on cardiac rehab were cost effective when compared with traditional care. Physiotherapy exercise focused cardiac rehab programmes are more effective than other cardiac interventions⁷

Extracts from *Physiotherapy Works* have been summarised (January 2014) with kind permission of the CSP (UK).

1. Chartered Society of Physiotherapy, UK "Physiotherapy Works....and we have the evidence" Annual Report 2009 CSP, UK

2. Chartered Society of Physiotherapy, UK "Physiotherapy Works – Occupational health, June 2011

3. Chartered Society of Physiotherapy, UK "Physiotherapy Works – Chronic Obstructive Pulmonary disease, June 2011

4. Chartered Society of Physiotherapy, UK "Physiotherapy Works – Critical care, October 2011

- 5. Chartered Society of Physiotherapy, UK "Physiotherapy Works Dementia Care, January 2012
- 6. Chartered Society of Physiotherapy, UK "Physiotherapy Works Urinary incontinence, January 2012
- 7. Chartered Society of Physiotherapy, UK "Physiotherapy Works Cardia rehab, January 2012
- 8. Chartered Society of Physiotherapy, UK "Physiotherapy Works Musculoskeletal disorders, January 2012
- 9. Chartered Society of Physiotherapy, UK "Physiotherapy Works Multiple Sclerosis, January 2012
- 10. Chartered Society of Physiotherapy, UK "Physiotherapy Works Fragility, fractures and falls, January 2012

11. Chartered Society of Physiotherapy, UK "Physiotherapy Works – Lymphoedema, October 2012 12. Chartered Society of Physiotherapy, UK "Physiotherapy Works – Cancer survivorship, November 2012

- 13. Chartered Society of Physiotherapy, UK "Physiotherapy Works Rehabilitation, June 2013
- 14. Chartered Society of Physiotherapy, UK "Physiotherapy Works Cystic fibrosis, October 2013
- 15. Chartered Society of Physiotherapy, UK "Physiotherapy Works Stroke, October 2013