

The Cost of Chronic Musculoskeletal Pain: How to Stop the Revolving Door

Ajay Clare^{1,2}, Tamzin Bunton², Sarah MacNeil^{2,3}, Stephanie Jarrett^{1,2}

¹Psychological Medicine Clinical Academic Group, South London & Maudsley NHS Trust

²Department of Anaesthetics, Lewisham Healthcare NHS Trust

³Department of Physiotherapy, Lewisham Healthcare NHS Trust

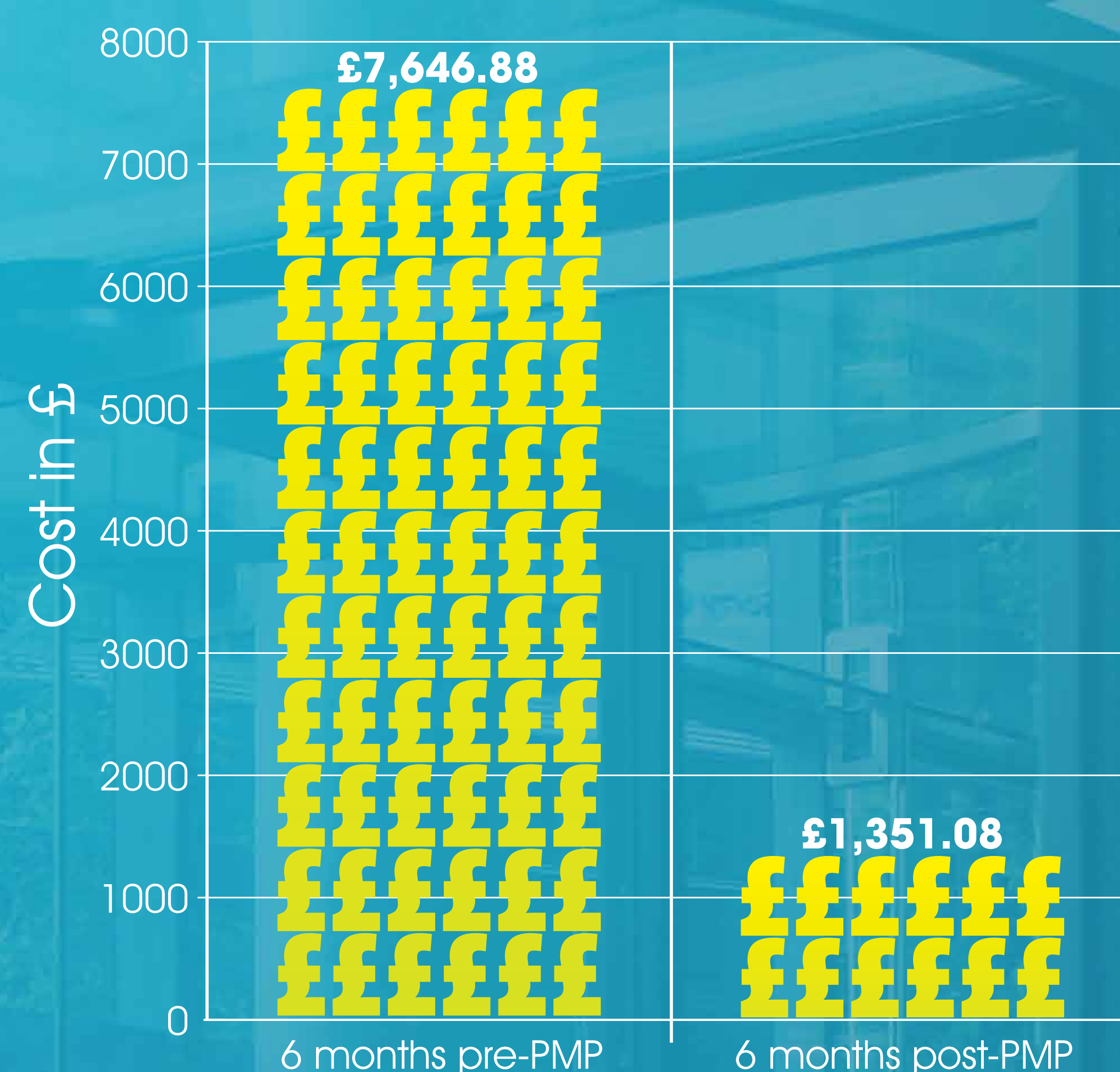


Introduction:

Patients with chronic musculoskeletal pain can spend many years seeking help, often getting stuck in a 'revolving door' seeing a variety of specialists¹. This has a significant impact on NHS resources. The cost to the NHS of chronic non-malignant back pain alone is estimated to be £12.3bn per year and over half a billion pounds is spent annually by the NHS on pain medication². Research has shown that a comprehensive, multi-disciplinary group pain management programme (PMP) is an effective way of helping patients with chronic pain³. However, in the current economic climate, it is also important to examine the cost-effectiveness of treatments.

Few studies have sought to examine the impact that PMPs can have on healthcare use and those that have often rely on patients' self-reports to judge the number of outpatient appointments attended. One study⁴ obtained data from hospital databases (as opposed to patient self-report) and found no significant difference in healthcare use from 6 months pre-PMP to 9 months post-PMP. However, other studies have found PMPs reduce health care use in patients with chronic pain⁵. Given the conflicting evidence, the present study aimed to use robust data collection from the hospital appointment system to examine whether an outpatient PMP could reduce health care use (specifically secondary care consultations) in patients with chronic musculoskeletal pain.

Total cost of all secondary care appointments (n = 30)



Method:

Data for 30 patients who attended the PMP in three separate groups were included in the present study. Each patient attended their group programme for three hours a week over ten weeks. Data regarding the number of *pain related* secondary care consultations 6-months pre-PMP and 6-months post-PMP were collected from hospital databases. These included outpatient appointments for Orthopaedics, Pain Clinic (including the individual psychology service), Rheumatology and Neurology. Only appointments that patients attended, or those classed as 'did not attend' (and therefore cost the PCT money) were counted in the analysis. The cost of these appointments was calculated based on the hospitals' 2010-2011 outpatient tariff⁶.

Discussion:

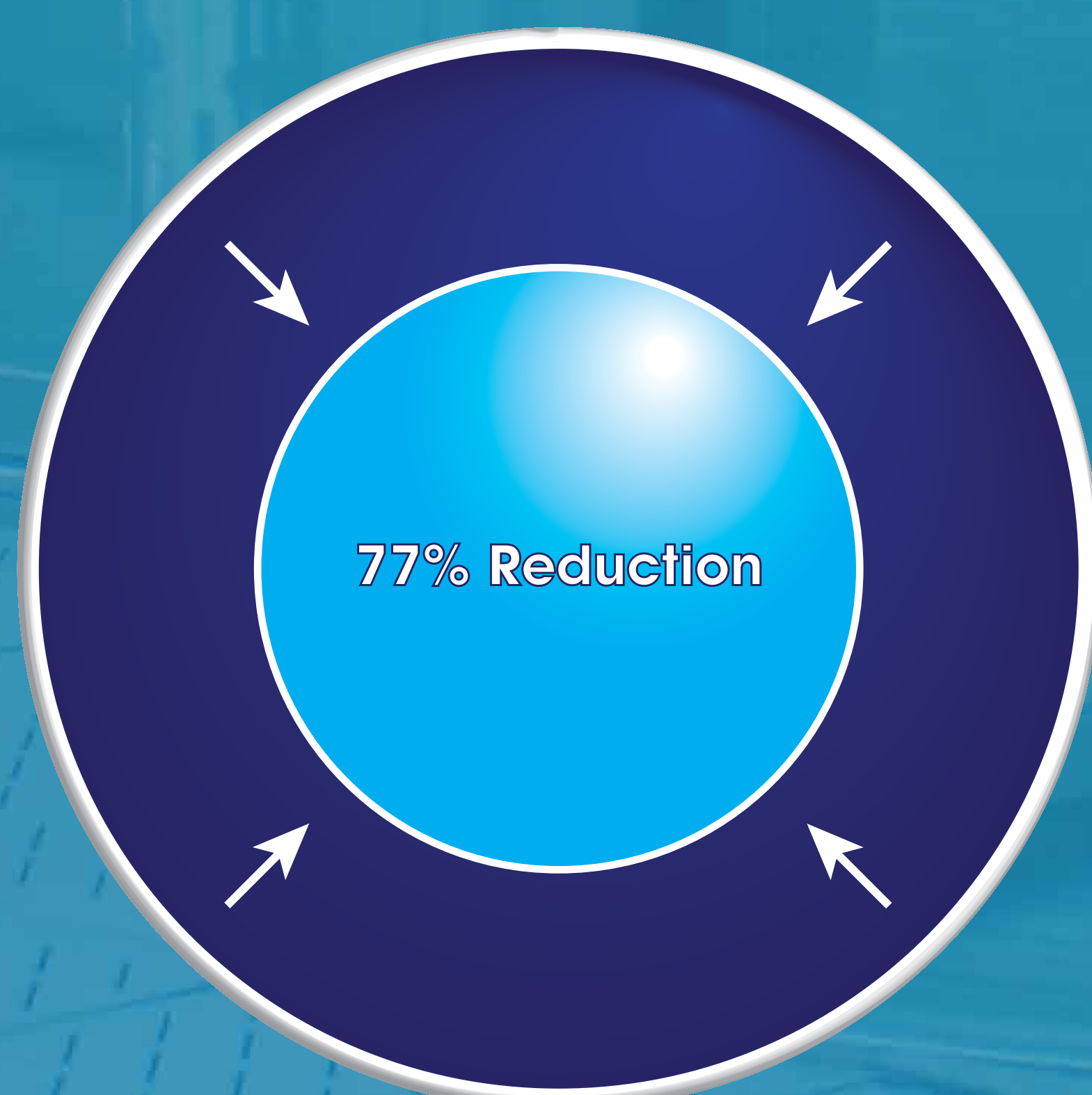
The present study found that patients who attended a PMP showed a decrease in secondary care consultations 6 months post PMP. They no longer went round 'the revolving door', attending appointments with different specialists for help with their pain. This finding builds upon results of a small number of previous studies (which have predominantly used self-report data from patients). PMPs can be incorrectly viewed as an expensive service by commissioners, which can make them an easy target when trying to save money. However, the results of this study show that there is a clear reduction in health care use if a PMP approach is adopted, which results in significant financial savings for the PCT.

Conclusion: PMPs provide a way of reducing health care use in patients with chronic pain and stops them from revolving around health care services

Results:

Data were analysed using a Wilcoxon signed-rank test and a significant reduction in the number of secondary care consultations was found 6 months post-PMP ($T = 2$, $p < .00025$, $r = -.50$). This represents a 77% reduction in hospital appointments.

Reduction in number of secondary care appointments 6 months post PMP



References

1. Blyth, F. M., March, L. M., Brnabic, A. J. M., & Cousins, M. J. (2004). Chronic pain and frequent use of health care. *Pain*, **111**, 51-58.
2. Chief Medical Officer (2008). *150 years of the Annual Report of the Chief Medical Officer: On the state of public health*. Department of Health.
3. Gatchel, R. J., & Okifuji, A. (2006). Evidence-based scientific data documenting the treatment and cost-effectiveness of comprehensive pain programs for chronic nonmalignant pain. *The Journal of Pain*, **7(11)**, 779-793.
4. Thomsen, A. B., Sørensen, J., Sjøgren, P., & Eriksen, J. (2002). Chronic non-malignant pain patients and health economic consequences. *European Journal of Pain*, **6**, 341-352.
5. Turk, D. C. (2002). Clinical effectiveness and cost-effectiveness of treatments for patients with chronic pain. *The Clinical Journal of Pain*, **18**, 355-365.
6. University Hospital Lewisham (2010). *2010-2011 Outpatient Attendance Tariff*.