Outcomes of a community-based rehabilitation programme for Chronic Low Back Pain

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Background

Chronic Low Back pain (CLBP) is the leading cause of musculoskeletal related disability worldwide and places a significant economic and resource burden on a country's health system.[1]

Internationally, there is growing evidence that community-based initiatives to support the assessment and management of chronic musculoskeletal conditions are effective in providing timely support, promoting self-management, and reducing ongoing health costs.[2]

This study reports on the outcomes of a community-based initiative developed in partnership between Te Whatu Ora, regional primary care practices, and a community rehabilitation provider to improve the assessment and management of CLBP patients living in the greater Waikato region.

CLBP patients were referred from regional general practice and triaged to be assessed by either an Orthopaedic Specialist or a Physiotherapist working within a community-based rehabilitation clinic. Patients assessed by the Physiotherapist were stratified by complexity into a rehabilitation pathway that included either low or high intensity components of self management education modules, Physiotherapy, and a series of supervised exercise classes over a 6-12 week period.

Aim

To determine the symptomatic, functional, and self-efficacy impacts of a community-based rehabilitation programme for CLBP patients living in the Waikato region.

Methods

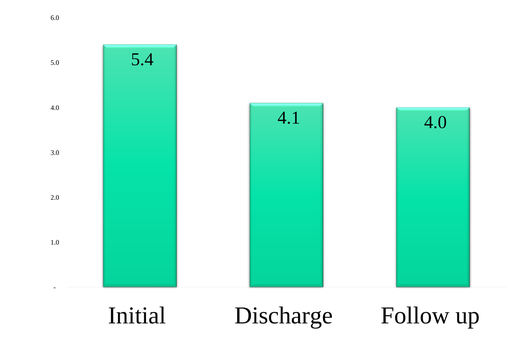
An observational study of a cohort of CLBP patients (symptom duration greater than six weeks) referred over a 12-month period for a 6-12 week rehabilitation programme.

Self-reported measures were completed at intake, discharge, and at one year follow up for a range of measures including; pain (Numeric Pain reporting Scale (NPRS)), function (Oswestry Disability Index (ODI)), health status (VR12), health service utilisation (number of CLBP related specialist and doctor appointments), and medication dependency (daily usage of pain medication).

Results

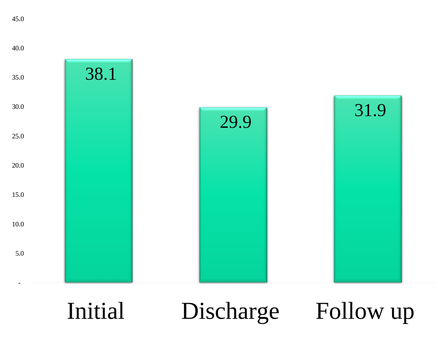
519 clients entered and completed the community-based programme over a 12 month period (Oct 2022 – Oct 2023)

Pain levels



The group achieved an average 1.3/10 point improvement in pain scores (NPRS) from assessment to discharge

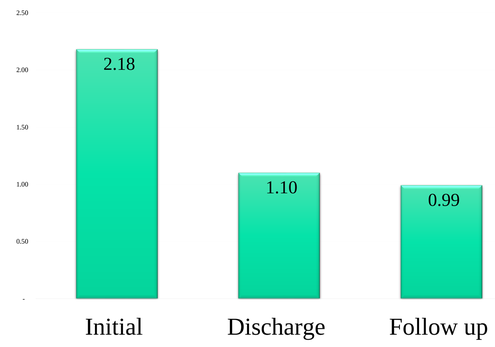
Functional Disability



The group achieved an average 8.2 point (21%) improvement in Oswestry Disability Index scores from assessment to discharge

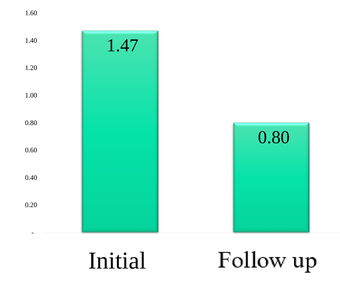
CLBP related Health Service utilization rates

GP appointments



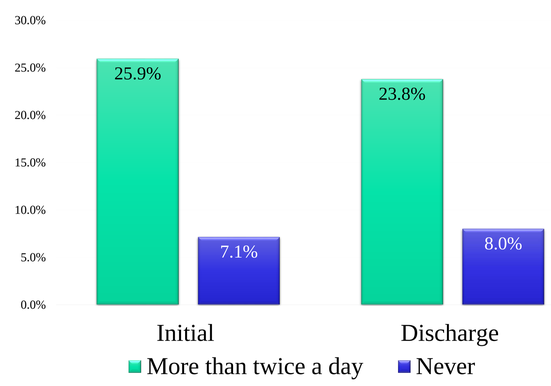
The group achieved an average 55 % reduction in the number of CLBP related GP consultations from assessment to the 12 month follow up checkpoint

Other Health professionals



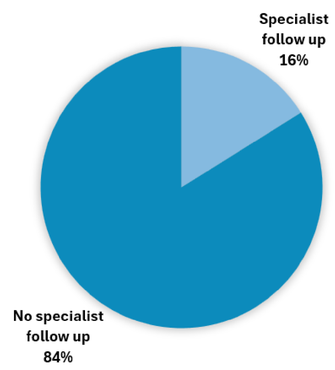
The group achieved an average 45 % reduction in CLBP related visits with other health professional from assessment to follow up

Pain medication



The proportion of patients that used daily pain medication reduced by 2.1 % and those not using medication increased by 0.9% from assessment to follow up

Tertiary level support



Approximately 84% of patients reported that they did not have a follow up consultation with a specialist within the 12 month follow up period

Conclusion

The findings of this observational study indicate that community-based rehabilitation for individuals with Chronic Low Back Pain can have a positive impact on health outcomes and ongoing healthcare resource utilization rates.

The reported sustained improvement in pain and function for up to 12 months after the competition of the programme suggests a general improvement in self-management strategies for the group.

The relatively low proportion of patients requiring a subsequent specialist follow up, and the reduction in ongoing health provider visits and pain medication utilization, highlights the potential for such programmes to reduce the strain on limited healthcare resources.

Further research is required to determine the long-term outcomes for this group, including external validation and quantification of the cost benefits achieved across primary, secondary and tertiary care levels.

References

1. Hancock MJ, Kongsted A, Louw Q, Ferreira ML, Genevay S, et al. What low back pain is and why we need to pay attention. Hartvigsen J, Lancet. 2018;391(10137):2356–67.
2. Fourney DR, Dettori JR, Hall H, Härtl R, McGirt MJ, Daubs MD. A Systematic Review of Clinical Pathways for Lower Back Pain and Introduction of the Saskatchewan Spine Pathway. Spine. 2011;36:S164–71.

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