# Evaluation of a rolling rehabilitation programme for patients with non-specific low back pain in primary care: an observational cohort study

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## INTRODUCTION

Low back pain (LBP) is the leading cause of disability worldwide [1]. Exercise programmes such as the back rehabilitation programme (BRP) are effective for the management of patients with non-specific low back pain (NSLBP). However, the BRP has been associated with long waiting times, poor attendance and high attrition rates [2].

In an attempt to improve attendance, the format of the BRP was changed to a continual rolling programme. The number of sessions and duration of each session was reduced. In addition, the exercise element was individualised to the patient's needs. To date, the effectiveness of the rolling programme has not been investigated.

## PURPOSE

- To examine the effectiveness of the BRP on a Patient Reported Outcome Measure (PROM) and fitness levels in patients with NSLBP.
- To investigate if the rolling programme enhances attendance when compared to attendance rates of the original programme.

## APPROACH

**Design: S**ervice evaluation using a retrospective observational cohort design.

**Sample:** All patients with NSLBP who had attended the BRP during a 12 month period (2014).

**Outcome measures:**

•Bournemouth Questionnaire (BQ) to measure patient reported health outcomes. A change in the scores from baseline to post BRP of ≥47% indicates a clinically significant improvement.

•Three fitness tests, the 1 minute sit-stand; 1 min step test and 5 minute walk test.

**Data Analysis:**

Baseline data was collected pre programme and post programme at week 6. Clinical effectiveness of the programme was determined by measuring the percentage change in BQ from baseline to post programme. Wilcoxon Signed rank test was used for statistical analysis.

Attendance rates: a comparison was made between attendance at the 2014 rolling programme and the attendance at the standard 2012 programme which was the last year in which the sequential approach was used.

## RESULTS

•88% of patients had an improved BQ score post intervention

•56% had a post BRP BQ score change of ≥47% indicating a clinically significant improvement

•The median pre/baseline BQ score was 37 and the median post score was 14 (Figure 1)

•95% had an improved sit to stand test

•88% had an improved step test

•95% had an improved walk test

•All results were statistically significant ($p < 0.0001$)

•62 patients attended the rolling BRP in 2014 and 41 (66%) patients completed, whereas 36 patients attended the standard sequential BRP and 12 (33%) completed

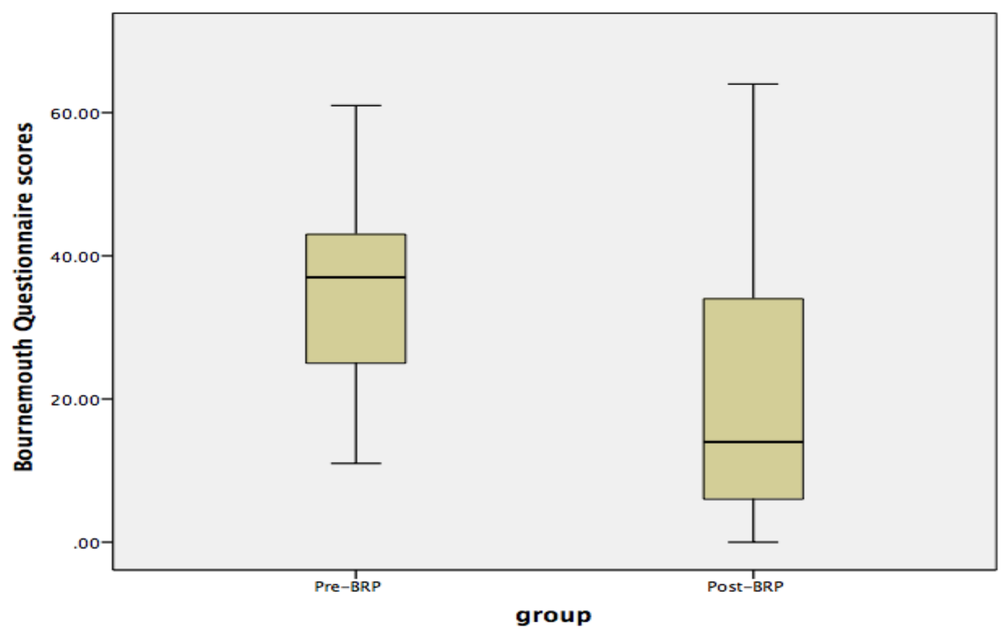


Figure 1. Box and whisker plot of pre and post BRP scores

## CONCLUSION & RECOMMENDATIONS

This study suggests that the continual rolling BRP was effective in improving patient reported outcomes and fitness.

The rolling format also appears to enhance attendance.

As such, the rolling BRP should be considered by practitioners as an effective management strategy when treating patients with NSLBP.

## FURTHER INFORMATION

Acknowledgments: The Authors thank the members of the back pain working party, in particular Sam Bolton, and departmental manager Linda Atherton.

Arden K, Fatoye F, Yeowell G. (2016) Evaluation of a rolling rehabilitation programme for patients with non- specific low back pain in primary care: an observational cohort study. Journal of Evaluation in Clinical Practice DOI: 10.1111/jep.12595

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