

Accident Compensation Corporation claim status and benefit type is associated with low back pain outcomes

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Compensation schemes for injury and injury recovery are important, as there is an association between compensation-related factors and poorer health outcomes following injury.¹ There are few previous data investigating outcomes of low back pain sufferers in relation to the support received from the Accident Compensation Corporation (ACC), or social welfare system in New Zealand, and no studies specifically examine low back pain (LBP) outcomes by benefit type. Recent publications have shown that some injury or illness outcomes are worse where the ACC do not provide financial support,^{2,3,4} while another reports no difference in outcomes between ACC and non-ACC supported patients receiving lumbar spinal fusion surgery.⁵ For LBP treated non-surgically, our previous study reports a negative correlation between ACC claim status (accepted, or not) and benefit status (on a benefit, or not); poorer outcomes were shown for individuals receiving a benefit and without an accepted ACC claim.³ What was unclear is whether specific benefit type (sickness [SB], unemployment [UB], invalids [IB], domestic purposes [DPB]) is predictive of outcome in LBP patients without an accepted ACC claim; we therefore examined the relationship between benefit type and LBP outcomes for those without accepted ACC claims for LBP.

Details on our methodology have been published previously.⁶ In brief, a prospective cohort study of patients presenting with a

new episode of LBP was undertaken. The study was approved by the Lower South Regional Ethics Committee (LRS/08/03/008). Patients attending primary care practitioners were recruited across New Zealand, and sent questionnaires at weeks zero, three, six and twelve, then six months. Questionnaires were based on the Multinational Musculoskeletal Inception Cohort Study statement addressing risk factors for the development of persistent LBP.

Variables of interest included function (Oswestry Disability Index), pain (visual analogue scale), physical and mental health (Physical and Mental Component Scale Short Form 12 Health Survey Questionnaire), fear-avoidance beliefs (Fear-Avoidance Beliefs Questionnaire), and helplessness (pain catastrophising scale). Patients were grouped into those having a LBP ACC claim accepted, and those that did not. In total, 124 ACC claim-accepted patients, and 188 ACC claim-not-accepted were included; 168 patients completed all surveys. ACC-claim-not-accepted patients were further grouped by benefit groups (on or not on benefit), including DPB (n=12), SB (n=11), UB (n=6), and IB (n=4). Mean time on benefits (baseline) was 423 in DPB, 203 days in SB, 216 days in UB, and 304 in IB. Numbers were not adequate to allow significance testing between groups; drop-out accounted for a reduction in benefit participants from 33 to 18 (55%) at three months, and to 13 over six months.

Despite the small group numbers, some trends in LBP outcomes were apparent across the different time frames for those in different benefit classes. Specifically, trends highlighted the performance of UB who were either worse or unchanged for all measures at six months, while every other group improved across most measures. UB were the only group to worsen over time for functional limitation, mental health, pain, and helplessness; at 6 months they were unchanged in fear avoidance beliefs about work and physical activity, and were worse for physical health (with SB). The best results over six months were observed for DPB (the only ones to improve in FABQ Physical Activity) while SB and IB improved in most assessed categories.

A possible explanation for UB poor performance compared to other benefit groups may include a lack of motivation for improvement; previous studies have indicated that work participation and resource provision have positive effects and are predictive of outcomes for LBP recovery,⁷ with musculoskeletal disorders being more difficult to cope with for

those with fewer resources, like money or secure social frameworks.⁶ Without work as a stimulus, motivation may be low to actively engage in seeking and facilitating improvement. Further, there are many factors that influence recovery from LBP, including management of resources such as social support,^{8,9} employment,^{8,9} and treatment;¹⁰ lack of work prospects may also have contributed to UB patients poorer performance.

Even though study numbers were limited, the existence of trends between the different benefit groups points to a pressing need to examine LBP outcomes in non-ACC supported individuals to more closely determine modifiable risk factors for poor outcome in those individuals on benefits. In particular, the UB category, because of the trends observed suggesting their performance is worse than other benefit groups. Further data are required to support these preliminary findings, and to explore the relationship between LBP outcome and benefit type for those people with and without accepted ACC claims for their injury.¹

Competing interests: Nil**Author information:**

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