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The Prognosis of Acute Low Back Pain in Primary Care in the U.S. A 2-Year Prospective Cohort Study

Wolf E. Mehling, MD¹, Viranjini Gopisetty, MD MPH¹, Elizabeth Bartmess-LeVasseur, MS¹, Mike Acree, PhD¹, Alice Pressman, PhD², Harley Goldberg, DO², Frederick M Hecht, MD¹, Tim Carey, MD MPH³, and Andrew L Avins, MD MPH^{1,2}

¹University of California, San Francisco

²Kaiser Permanente, Northern California, Division of Research

³University of Northern Carolina, Chapel Hill

Abstract

Study Design—Prospective cohort study

Objective—to assess the prognosis of patients presenting with acute low back pain (LBP) in a primary care setting in the U.S.

Summary of Background Data—Practice guidelines for acute LBP based on return-to-work outcomes underestimate the development of chronic pain in the primary care setting. Due to differences in inclusion criteria, chronic pain definitions and national health systems, prognostic cohort studies have reported a wide range of results limiting interpretation and generalization. Current data from carefully designed prognostic studies of acute LBP are lacking for the U.S. primary care system.

Methods—Members of a large health service organization were enrolled after seeking medical care for acute LBP, with or without sciatica, of up to 30 days duration, with no prior episode in the past 12 months and no history of spine surgery. We conducted phone interviews at baseline, six months and two years. Based on receiver operating characteristic analyses, a combination of global perceived recovery with pain intensity was used as primary outcome for chronic pain. Recurrence and multiple secondary outcomes were assessed to allow for comparison with other studies.

Results—605 patients had an average pain intensity of 5.6 (numeric rating scale 0–10) and disability of 15.8 (Roland Morris scale 0–24). Eight percent had declared sick leave between pain onset and baseline interview. 13% of 521 patients (86% follow-up) suffered from chronic pain at six months and 19% of 443 patients at 2 years. At six months, 54% had experienced at least one LBP recurrence, and 47% in the subsequent 18 months.

Conclusion—The prognosis of strictly-defined acute LBP, with or without sciatica, is less favorable than commonly stated in practice guidelines based on failure to return to work. Broad initiatives to develop new means for the primary and secondary prevention of recurrent and chronic LBP are urgently needed.

Correspondence: Wolf Mehling, MD, Osher Center for Integrative Medicine, 1545 Divisadero St., 4th floor, San Francisco, CA 94115.

Disclosures:

The manuscript submitted does not contain information about medical device(s)/drug(s).

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Keywords

Low Back Pain; Prognosis; Acute Pain; Chronic Pain

Introduction

Using return-to-work as outcome, 6 to 10% of patients with acute low back pain (LBP) are expected to develop chronic pain.^{1–3} These patients consume up to 75% of LBP-related health care expenses in the U.S.⁴, estimated at \$26.3 billion in 1998⁵ and even higher since⁶.

A recent systematic review of studies with patients of up to eight weeks of acute LBP reported the proportion of patients failing to return to work as 11%, at both three-to-six months [range 2%–20%] and one year [9%–13%].⁷ Proportions of patients developing chronic LBP were higher in primary care studies using outcomes of pain and function rather than return-to-work: 26% [2%–48%] at three to six months.⁷ All included studies were conducted outside the U.S. except one in 179 U.S. patients that was published over 20 years ago and had not excluded participants with chronic or recurrent LBP.⁸ These numbers are strikingly different from prognoses based on return-to-work.³

According to another systematic review of studies in patients with LBP of *less than 3 weeks duration* recruited from any kind of medical setting including specialty care, pain is expected to rapidly decrease by 58% [mean; range 12–84%] of initial levels within one month.³ Thereafter, pain continues to decrease more slowly, until three months, after which pain levels remain nearly constant.³ A similar course was seen for disability³ and in patients with sciatica included in only one study.⁹ The cumulative risk of at least one recurrence within 12 months was 73%.³

Another recent review reported that one-quarter to one-third of “acute” LBP patients had symptoms 6–12 months later,¹⁰ referencing two U.S. studies that included participants with pain of up to 10 weeks duration¹¹ and of any duration.¹²

In summary, studies in primary care settings appear to indicate that the prognosis of acute LBP is not as favorable as claimed in clinical guidelines based on return-to-work.¹³ The wide range in the reported probability of a poor outcome may be explained by differences in outcome definitions, duration of pain at study enrollment, clinic setting, and insurance and compensation systems.⁷ Poor outcomes may be underestimated when based on return-to-work, and overestimated in patients with a longer duration of LBP at study enrollment.

We sought to better define the prognosis of patients seen in a U.S. primary care setting with acute LBP of well-defined duration, with and without sciatica. To permit comparability across LBP studies we used one primary and multiple secondary outcome definitions of chronic LBP.

Methods

Design

We conducted a prospective cohort study of acute LBP patients, using telephone surveys at baseline and follow-up assessments at six months and two years. The study was approved by the Institutional Review Boards of the University of California, San Francisco and Kaiser Permanente, Northern California.

Participants (Table 1)

We defined acute LBP as nonspecific pain in the lower back, with or without sciatica, severe enough to seek medical care and not preceded by any spine surgery ever or LBP in the past year. Initially, we attempted to recruit patients with pain of less than two weeks duration. However, we found that scheduling a clinic visit and being seen took more than two weeks from pain onset in so many patients that this criterion of “acuteness” threatened the study’s feasibility. Thus, for pragmatic reasons, we decided to include patients with LBP for up to 30 days.

Participants were members of a large integrated health system. From February 2008 to March 2009, a computer generated a daily list of 18–70 year old primary care patients seen the day before for LBP. Patients were excluded if electronic medical records showed LBP in the preceding twelve months. The same day, an invitation letter was sent to these patients to contact the research team. A brochure briefly explained the study and offered a \$20 gift card for each interview but, to minimize false reporting, did not disclose the LBP duration criterion. Respondents were included if they matched the criteria for acute LBP, spoke English and had no fever, history of cancer, chronic inflammatory disease, fibromyalgia, chronic pain conditions, disabling psychiatric diseases or ongoing prescriptions for narcotics prior to the LBP episode. The sample represented the socio-economic and ethnic diversity of the population of health-insured adults in Northern California, with slight under-representation of both ends of socioeconomic status,¹⁴ and is described in Table 1.

Measures

The following self-reported clinical parameters were assessed at baseline: duration of current episode, history of prior episodes, pain-free interval before current episode, pain location(s), sciatica defined as pain extending below the knee, pain intensity by 11-point numeric rating scale (NRS) as average, worst and most tolerable pain or average bothersomeness, McGill Pain Questionnaire,¹⁵ Roland Morris (RM) Disability Questionnaire,¹⁶ days on sick leave and of reduced daily activities. Identical questions were asked at 6-month and 2-year follow-up interviews with the addition of a 6-point Likert scale for General Perceived Recovery (GPR) with answering options “fully recovered”, “much improved”, “slightly improved”, “same”, “slightly worse” and “much worse”.¹⁷

Outcome definitions

No consensus exists for defining the outcome of chronic pain for cohorts with acute LBP at inception.¹⁸ According to qualitative studies, single parameters such as pain or disability are not easily translatable into perceived recovery or chronic pain.^{19, 20}

Using ROC curves, Mehling et al. suggested a combined outcome criterion for studies of acute LBP requiring a binary outcome of recovery versus non-recovery.¹⁸ A combination of the GPR scale with a specific pain or disability level for patients self-classified as neither much improved nor worse (self-report as “slightly improved” or “same”) showed improved discrimination between recovered and chronic pain. The authors reported a cut-off of <3 for pain scores (and/or <4 for RM scores) as upper limits for recovery at follow-up for this *combined* criterion in the middle group and reported values for minimal important changes and minimal important percent changes compatible with perceived recovery.¹⁸

Von Korff suggested a definition of chronic back pain based on multiple measures of pain and disability for the past six months with Grades II or higher defining “clinically significant chronic back pain”.^{21–23} Because at the 6-month assessment this definition would have included the onset of the episode itself, this criterion was only applicable at the 2-year follow-up.

We applied a primary chronic pain outcome definition based on ROC curves.¹⁸ To allow for better comparison with other cohort studies, we analyzed our data according to additional secondary outcome definitions:

Primary definition of chronic LBP at follow-up:

not at least “much improved” on GPR scale combined with ≥ 3 pain [11-point NRS] in patients perceiving themselves as neither much improved nor worse (“same” or “slightly improved”).

Secondary definitions of chronic LBP at follow-up:

1. not at least “much improved” [GPR] combined with ≥ 4 disability [24-point RM] in patients perceiving themselves as neither much improved nor worse (“same” or “slightly improved”);
2. not at least “much improved” [GPR] combined with $<64\%$ pain improvement [NRS] in patients perceiving themselves as neither much improved nor worse (“same” or “slightly improved”);
3. not at least “much improved” [GPR];
4. “same” or “worse” [GPR];
5. ≥ 3 pain [11-point NRS];
6. ≥ 4 disability [24-point RM];
7. Pain and disability Grade II or higher [Von Korff] at 2 years.

We used Stata11 software for standard descriptive statistics.²⁴ For the two follow-up assessments participants’ binary classification of chronic pain versus recovered were compared by Bowker’s and Stuart–Maxwell tests.²⁴

Results

605 patients fulfilled eligibility criteria and were interviewed within 30 days of a new-onset LBP episode. This represents 25% of the 2,454 screened who responded to invitations mailed to 42,650 patients seen for *any* kind of LBP during the twelve months of recruitment. These patients sought medical care for considerable pain (mean intensity 5.6; standard deviation (SD) ± 1.8 ; median 6) and disability (mean RM score 15.8; SD ± 4.7 ; median 17). By the time of the baseline interview, patients reported more than 50%-reduced daily activity for an average 8 days (SD ± 7), and 23% had lost 3–30 days from work or school (including 14 self-classified “unemployed”, 7 of whom were students, and 10 “retirees”), yet only 8% had declared sick leave (Tables 1, 3).

521 patients (86%) completed a 6-month follow-up interview and 443 another interview at 2 years (73% from baseline, 85% from 6-months). Table 2 shows mean values for pain and disability at baseline and follow-up for each level of perceived recovery.

Depending on the definition used, 9 to 35% of this primary care cohort continued to have considerable symptoms at 6 months (Tables 3, 4). Using the primary outcome criterion, 13% of patients (95% confidence interval (CI): 10–16%) suffered from persistent pain at six months and 19% (CI: 15–22%) two years after pain onset.

Study participants received “usual care” as provided and prescribed by their physicians and chosen by patients: between the first clinic visit and 6 months, 184 patients (35%) received physical therapy (an average 5 sessions [median 4; range 1–60]); 98 patients (19%) underwent spinal manipulation, (an average 8 sessions [median 6; range 1–40]); 99 (19%)

did yoga; 29 (6%) received acupuncture, (an average 4 sessions [median 4; range 1–10]) and 35 (7%) reported other therapies, such as exercises, stretching, massage and physical measures.

At 6-month the most frequently reported LBP-related disability symptoms¹⁶ were: 41% changed positions frequently to try to get comfortable; 31% tried not to bend or kneel down; 20% found it difficult to turn over; 19% walked more slowly than usual; 19% had to hold on to something to get out of an easy chair; 17% stood only for short time periods; 17% used a handrail with stairs; and 16% avoided jobs around the house, slept less well or found it difficult to get out of a chair.

Average pain and disability scores did not improve from 6 months to two years; only worst pain improved slightly (Tables 2, 3). Regardless of how chronic pain was defined, no further improvement was observed between 6 months and 2 years after initial pain presentation (Table 4): 15 to 40% still had considerable symptoms at two years.

However, upon further analysis (Table 5), the 82 patients (19% of 443) who had chronic LBP at the 2-year follow-up according to our primary outcome definition were not identical to the 56 patients (13% of 443) who were classified as having chronic LBP at six months ($P = 0.01$). Two-thirds (37 of 56) had recovered by two years and 63 of the 387 patients (16%) who were classified as recovered at six months, were now classified as chronic.

Recurrent pain was defined as a new episode of LBP with at least one pain-free week before that episode. Fifty-four % of patients (CI: 49–58%) experienced at least one recurrence within the first 6 months, and 47% (CI: 42–52%) experienced a recurrence between 6 months and 2 years (Table 4).

At 2-year follow-up, we applied the chronic pain severity grading suggested by Von Korff,^{21, 22} which grades pain severity into 4 categories: I: low disability-low intensity pain; II: low disability-high intensity pain; III: high disability-moderately limiting; IV high disability-severely limiting. Similar to our primary outcome, 84 patients (19%) fit the definition of “clinically significant chronic back pain”²³ (Grade II: 42 (9.5%); Grade III: 22 (5.0%); Grade IV: 20 (4.5%)). The majority (51) of these 84 patients met both criteria; 33 patients were classified as chronic according to Van Korff but not according to our criteria. An additional 30 patients met our primary outcome criteria for chronicity (perceived recovery and pain in the past week) but were classified as Grade I according to Von Korff (based on 6-month recall of pain), whereas 33 patients were classified as chronic according to Van Korff but not according to our criterion.

As other cohort studies excluded patients with sciatica, we examined whether the inclusion of patients with sciatica at baseline (27%) affected the prognosis. The proportion of Grade II severity (Von Korff) chronic LBP patients depended on the presence or absence of sciatica: 25% of patients with sciatica at baseline suffered from Grade II or higher severity at 2-years versus 17% without sciatica (OR = 1.6; CI 1.0–2.6). The corresponding proportions for the composite primary outcome were similar: 22% and 17%, respectively. Approximately two-thirds of patients with chronic pain at 2 years (56 of 82) had sciatica at baseline.

Discussion

Depending on the definition used, between 9 and 35% of this primary care cohort had clinically significant symptoms at 6 months and did not further improve in the subsequent 18 months. This, however, does not confirm prior reports’ findings that improvements in pain or disability that last more than 3 months are unlikely.³ Two-thirds of patients, who were classified as having chronic LBP at six months, had recovered by the 2-year follow-up,

whereas 16% of those, who at six months were classified as recovered, were classified as chronic pain patients at two years. This may be explained by the high recurrence rate, namely 47%, in the period between six months and two years and underscores the fluctuating and recurrent course of LBP following an episode of acute LBP. Recurrence or fluctuation, in turn, may explain the differences we observed for chronic pain classifications according to definitions that use a 6-month or 1-week recall.

All participants were seen exclusively in primary care clinics. Our study differed from other studies, such as a recent cohort study conducted in Australia,¹³ in that physical therapy or chiropractic offices were not included. We included patients with sciatica in our study if they were not scheduled for surgery. Sciatica was present in a quarter of patients at onset and improved in most cases. However, our data show that studies which exclude patients with sciatica are likely to present a better prognosis than our cohort.

Definitions for acute and chronic LBP used in prior research studies vary widely.²⁵ Commonly, LBP is classified by its time course as a new-onset LBP of less than 4 or 6 weeks duration²⁶, and chronic LBP as duration of more than 3 or 6 months. However, it has been argued that definitions based on duration alone are problematic and do not give appropriate justice to the often recurring and fluctuating clinical course.^{27–29} In this study we used rigorous entry criteria for acute LBP: a first clinic visit within 1 month of onset, no history of LBP in the prior 12 months, and no history of spine surgery or other painful conditions. To our knowledge, no other studies with similarly stringent criteria for acute LBP in a primary care setting have been conducted in the U.S. in recent years.

As there is no consensus about appropriate outcome definitions for chronic pain, results among LBP studies lack homogeneity. Our study addresses that challenge by providing data for a primary outcome definition suggested previously¹⁸ and additional outcome definitions used in prior studies.

A limitation of this study is that we only interviewed patients who responded to a mailed invitation letter. That letter included most of the eligibility criteria except pain duration and was sent to patients with many kinds of LBP, including chronic LBP, recurrent LBP and upper back pain. In order to minimize false reporting, the eligibility criterion of a specific pain duration was only revealed after the phone screening. Therefore, this inception cohort is a small proportion of all the patients seen for LBP of any length in that HMO setting during the time of enrollment. We do not have comprehensive information for the patients who did not respond to our invitation. We know, however, that 1) our patient sample was similar in key characteristics (age, sex, ethnicity, education, income) to the insured patients of that HMO according to membership surveys,¹⁴ and 2) respondents were slightly older and slightly more likely to be female than non-respondents, which is common for respondents in membership surveys of this HMO.¹⁴

Another limitation is loss to follow-up: 85% of 6-month respondents followed up at 2 years. If patients feeling worse at 2 years were more likely to participate in the follow-up than those who had recovered, our finding that numerous outcomes were worse at 2 years than at 6 months could have been due to responder bias. However, such bias should have resulted in an increase of the *proportion* of chronic patients and not the *absolute numbers* of chronic patients, as we found in our study: 47 patients had not improved (“same” or worse) at 6 months, whereas 68 patients had not improved at 2 years (Tables 2, 3). As shown in Table 4, of those 381 patients classified as recovered at 6 months, 37 needed to be reclassified as chronic at 2 years, whereas of the 82 patients classified as chronic at 6 months, only 19 were reclassified as recovered at 2 years. We suggest this implies that in our study population, the general risk of a recurrence of LBP, even for people who felt they were recovered at 6

months, outweighs the chances of improvement for those who suffered chronic pain at 6 months.

In conclusion, we conducted a prospective cohort study in a primary care setting and found that in our sample the patient-reported prognosis of a rigorously-defined new episode of acute LBP, with or without sciatica, is less favorable than commonly stated in practice guidelines based on return-to-work.

Only 8% of this population reported sick leave, and return-to-work was of minor importance in this population. Primary care outcomes based on patients' self-report do not coincide with outcomes based on return-to-work. It appears that almost all patients employed prior to the onset of acute LBP return to work, but that working with ongoing symptoms and residual disability may be common.

Our results show that the proportion of patients with clinically significant chronic LBP at six months after the first onset of acute pain is not likely to diminish in the subsequent 18 months. Although two-thirds of those classified as chronic pain patients at six months may still experience recovery in subsequent months, the high recurrence rate maintains the proportion of chronic pain patients at the same level. This result underscores the urgent need for broad initiatives to develop new means for the primary and secondary prevention of recurrent and chronic LBP.

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Key Points

A prospective cohort study included 605 patients from a large health service organisation who presented with acute low back pain of up to four weeks in primary care clinics in the U.S. and were interviewed at baseline, six months and 2 years.

Patients had an average pain intensity of 5.6 (numeric rating scale 0–10) and disability of 15.8 (Roland Morris scale 0–24). Eight percent had declared sick leave between pain onset and baseline interview.

13% of patients had chronic pain at six months and 19% at two years.

Table 1Patient Characteristics (*N* = 605)

		Mean (SD)	
Age		50.5 (12.6)	
		N	%
Sex	Female	339	56
Ethnicity	American-Indian	2	<1
	Asian-American	71	12
	African-American	51	8
	Latino-American	39	7
	Caucasian-American	395	65
	Other/Mixed/no answer	47	8
Foreign born		106*	18
Education	Some High School	4	1
	High School	66	11
	Some College	165	27
	College Degree	209	35
	Graduate School	161	26
Combined Household Income in \$	10,000	2	<1
	10,000 – 24,999	12	2
	25,000 – 49,999	81	13
	50,000 – 74,999	116	20
	75,000 – 99,999	98	16
	100,000 – 149,999	134	22
	150,000	108	18
	no answer	54	9
Employment Status	Full time	357	59
	Part time	76	13
	Unemployed seeking work	11	2
	No paid work, not seeking	26	4
	Retired	135	22
Lost days from work	0	178	30
	1–2	128	21
	3–30	135	23
	n/a	158	26
Ever on sick leave for prior episodes of LBP		148	24
Days of less than 50% of usual activity mean days (\pm SD) [median], range 0–10		8 (\pm 7)	[7]

		Mean (SD)	
Duration of LBP at baseline interview, mean days (\pm SD) [median], range 2–30		17 (\pm 8)	[14]
	0	269	45
	1–2	124	21
Days in bed since onset of pain	3–4	113	19
	5–10	71	12
	11–21	22	4

* mean years in US: 27 [range 1–65]

Table 2
 Mean Values and Standard Deviation (SD) for Pain and Disability at Baseline, 6-Month and 2-Years

	N (%)		average pain mean (SD)		worst pain mean (SD)		Roland-Morris mean (SD)	
	6-mo	2-year	6-mo	2-year	6-mo	2-year	6-mo	2-year
total at baseline	605		5.4 (1.8)		8.5 (1.5)		16 (5)	
total at follow-up	521	443	1.2 (2.0)	1.4 (2.2)	2.1 (3.0)	1.9 (2.8)	4 (5)	4 (5)
completely recovered	169 (32)	142 (32)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	1 (2)
much improved	254 (49)	182 (41)	1.0 (1.6)	1.1 (1.7)	2.3 (2.7)	1.7 (2.4)	4 (4)	4 (5)
slightly improved	51 (10)	51 (12)	3.0 (3.0)	2.5 (2.0)	5.1 (2.5)	3.5 (2.6)	8 (5)	8 (5)
same	31 (6)	36 (8)	4.0 (2.6)	4.0 (2.8)	6.1 (3.0)	4.8 (2.8)	9 (6)	8 (6)
slightly worse	9 (2)	24 (5)	4.0 (1.2)	4.7 (2.4)	6.1 (1.4)	5.9 (2.5)	10 (4)	9 (5)
much worse	7 (1)	8 (2)	6.6 (1.8)	6.1 (2.4)	8.6 (1.6)	8.0 (2.3)	15 (7)	14 (8)

SD: Standard Deviation

Average pain: mean values for average pain in past week [range 0–10]

Worst pain: mean values for worst pain in past week [range 0–10]

RM: Roland Morris functional disability score [range 0–24]

Table 3Prognosis of Acute Low Back Pain in Primary Care

	Baseline	6 months	2 years
Sciatica (period before baseline interview; between interviews)	27%	25%	10%
Sciatica (at day of interview):	10%	4%	2%
>50% reduced activity levels for at least one day in past week.	92%	12%	35%
“discomforting” or worse (McGill):	79%	25%	32%
“distressing” or worse (McGill):	39%	8%	12%
“horrible” or “excruciating” (McGill)	13%	2%	5%
Mean pain intensity [range0–10]:	5.6 (±1.8)	1.2 (±2.0)	1.4 (±2.2)
Mean pain bothersomeness [range0–10]:	6.5 (±2.3)	1.2 (±2.3)	1.4 (±2.2)
Mean pain intensity when most tolerable	2.6 (±1.8)	0.6 (±1.3)	0.8 (±1.6)
Mean pain intensity when worst	8.6 (±1.4)	2.2 (±3.0)	1.9 (±2.8)
Mean Roland Morris score [range 0–24]:	15.8 (±4.7)	3.6 (±4.8)	4.4 (±5.4)
On sick leave for LBP:	8%	<1%	<1%

Table 4**Chronic Pain Outcomes at 6 Months and 2 Years According to Various Definitions (95% Confidence Intervals)**

<i>Primary outcome:</i>	6 Months	2 Years
defined as not at least “much improved” and including “only “slightly improved” [*] with pain ≥ 3 out of 10 (continuous or recurrent): [N= 70 of 521; 82 of 443]	13% (10–16)	19% (15–22)
<i>Secondary outcomes</i> (see definitions in the text of the ‘Methods’ section):		
1) defined as “not improved” and including “only slightly improved” [*] with disability ≥ 4 on 24-point RM scale	16% (13–19)	23% (19–27)
2) defined as “not improved” and including “only slightly improved” [*] with pain <64% improved from baseline:	14% (11–17)	20% (16–24)
3) defined as not “fully recovered” nor “much improved”: [*]	19% (15–22)	27% (23–31)
4) defined as “same” or “worse”: [*]	9% (7–11)	15% (12–19)
5) defined as pain intensity of ≥ 3 out of 10 pain in past week:	21% (18–25)	26% (21–30)
6) defined as Roland-Morris disability score ≥ 4:	35% (30–39)	43% (38–47)
7) defined as Grade II or higher according to Von Korff et al. ²²	-	19% (15–23)
<i>Additional outcomes of interest used in prior LBP studies:</i>		
Not “fully recovered” [*] :	68%	68%
Pain intensity of ≥ 4 out of 10 average pain in past week:	15%	18%
Bothersomeness of ≥ 4 out of 10:	19%	17%
Roland-Morris score ≥ 5:	30%	34%
Roland-Morris score ≥ 7:	22%	25%
Roland-Morris score ≥ 9:	14%	20%
Pain greater than willing to tolerate:	18%	21%
Pain “discomforting” or worse according to McGill	25%	32%
Pain less than 64% improved from baseline	26%	31%
Recurrence of LBP in follow-up period (pain-free interval ≥ 1 week):	54% ^{**} (49–58)	47% ^{***} (42–52)

^{*} using a 6-point General Perceived Recovery scale with answering options “fully recovered”, “much improved”, “slightly improved”, “same”, “slightly worse” and “much worse”

^{**} 237 or 68% of “not fully recovered” and 40 or 8% of now “fully recovered” at 6 months; 277 or 54% of all.

^{***} 93 or 31% of “not fully recovered” and 43 or 30% of now fully recovered at 2 years; 136 or 31% of all had a recurrence between 6 months and 2 years.

Table 5

Change in Recovery and Chronic Pain Classification from 6 Months to 2 Years ($N = 443$) (classification based on the primary outcome definition, see 'Methods' section)*

at 6 months	Recovered	Chronic	Total
at 2 years			
Recovered	324	63	387
Chronic	37	19	56
Total	381	82	443

* Bowker's test for table symmetry = 0.01; Stuart–Maxwell test for marginal homogeneity = 0.01.