

# Hospital referrals for low back pain: more coherence needed

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## SUMMARY

**Low back pain is a common reason for hospital referral but little is known of the resulting workload in different specialties. All new outpatient attendances for conditions with low back pain were recorded over one month in a teaching hospital and a district general hospital.**

**The patients were seen in at least ten specialties and two-fifths of them had been seen previously with the same symptom in another department. In the two hospitals, low back pain accounted for 15% and 12% of all new outpatient attendances. A more coherent referral policy is needed.**

## INTRODUCTION

Low back pain is a common symptom in the community: 38% of the adult population report having had low back pain in the past month<sup>1</sup>. Although much of this pain may be trivial and short-lived, each year at least 5% of the adult population consult their general practitioner with a new episode<sup>2</sup>. Many of these episodes are associated with persistent symptoms and disability<sup>3</sup> and referrals to secondary care are common. Indeed, low back pain is probably one of the major reasons for outpatient referral. Patients with low back pain are referred to several different hospital departments, both specialist and general, as well as to direct-access physiotherapy, and some with acute pain are seen in accident and emergency departments. There are, however, no data on the workload in hospital clinics, either overall or by specialty, from this disorder. With the development of primary care groups, evidence about existing patterns of outpatient utilization will form a crucial contribution to the planning and commissioning of care.

In this report we present data on a one-month survey of all new clinical referrals to two hospitals, to determine the proportion of all new referrals related to low back pain and their distribution across the specialties.

## PATIENTS AND METHODS

The survey was undertaken in two hospitals—a major teaching hospital with a recognized interest in the management of chronic pain in general and low back pain in particular, which was also the site of a tertiary referral neurology/neurosurgery unit; and a district general hospital in a metropolitan area. Neither hospital had a dedicated ‘acute low back pain referral service’. In both hospitals, over four weeks, all new outpatient attenders were identified prospectively by a short doctor-completed questionnaire fixed to the front of the patient record. In this, the doctor seeing each new clinic attender at all relevant clinics (see Table 1) was asked, ‘Is back pain, at least in part, the reason for this referral?’ He or she was also asked to indicate, using a shaded manikin, whether pain was present in an area bordered by the twelfth rib and gluteal folds—a definition for low back pain based on previous work<sup>1</sup>. Similar data were obtained during the same period from the accident and emergency departments and from direct care referrals to physiotherapy at both sites. Validation of the reports was undertaken at the teaching hospital by retrieving the care records of all those notified as having back pain, to determine the proportion in which low back pain was mentioned.

## RESULTS

The survey covered 211 outpatient clinic sessions in the teaching hospital and 172 in the district general hospital. In the one-month period, 213 (15%) and 181 (12%) of all the 1399 and 1459 referrals of new outpatient attenders at the two hospitals, respectively, were thought in part to be due to low back pain (Table 1). A further 163 (3%) at the

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Table 1 New low back pain (LBP) attenders by clinic specialty

Clinic	Teaching hospital			District general hospital		
	All new clinic attenders	No. (%) with LBP	% of all new LBP referrals	All new clinic attenders	No. (%) with LBP	% of all new LBP referrals
Orthopaedics	196	96 (49.0)	45.1	387	101 (26.1)	55.8
Rheumatology*	121	44 (36.4)	20.7	88	24 (27.3)	13.3
Neurology	36	1 (2.8)	0.5	—	—	—
Neurosurgery	56	13 (23.2)	6.1	—	—	—
Pain clinic	34	14 (41.2)	6.6	32	14 (43.8)	7.7
General medicine	188	7 (3.7)	3.3	295	10 (3.4)	5.5
Gynaecology	190	9 (4.7)	4.2	248	2 (0.8)	1.1
Urology	39	3 (7.7)	1.4	167	17 (10.2)	9.4
Geriatrics	41	5 (12.2)	2.3	—	—	—
Other medical surgical specialties	265	7 (2.6)	3.3	188	4 (2.1)	2.2
Physiotherapy	232	14 (6.0)	6.6	54	9 (16.7)	5.0
Total	1398	213 (15.2)	100%	1459	181 (12.4)	100%
Accident and emergency	5147	163 (3.2)	N/A	993	47 (4.7)	N/A

\*Includes rehabilitation clinics

Clinics not surveyed in the medical specialties were dermatology and endocrinology; in the surgical specialties breast, ophthalmology, ENT, leg ulcer, antenatal, trauma/fracture

teaching hospital and 47 (5%) at the district general hospital of new attendances at accident and emergency departments were due to low back pain. At both hospitals, low back pain formed a substantial proportion of new referrals to both orthopaedic and rheumatology departments, explaining almost half of the orthopaedic referrals at the teaching hospital. Similar large proportions were observed in both pain and neurosurgical clinics, though the absolute numbers were smaller than in the orthopaedic and rheumatology clinics. Analysis of the total number referred according to department showed that, in both hospitals, one-third of low-back-pain referrals were outside rheumatology and orthopaedics. In the teaching hospital 15%, and in the district general hospital 18%, of low-back-pain patients were referred to generalists or to specialists such as urologists and gynaecologists.

The clinical records of 189 of the teaching hospital attenders were retrieved to verify the diagnosis. In total, low back pain was mentioned as a referral symptom in 170 (90%). Of these 170 patients, 68 (40%) had previously attended a different specialist clinic for this symptom.

**DISCUSSION**

Results from an audit survey such as this are always difficult to extrapolate to other settings. Both population factors, such as sociodemographic characteristics, and health service

factors in primary and secondary care can influence the results. The two hospitals covered very different catchment areas across a broad range of inner-city, suburban and some semirural areas with a wide socioeconomic mix. New-patient waiting times clearly vary between specialties, both within and between hospitals. These data nonetheless do suggest that low back pain constitutes a substantial proportion of all new referrals across several specialties in two very different health service settings.

No attempt was made to identify false negatives—those with low back pain who were not recorded—so these figures may underestimate the total burden. In the teaching hospital, low back pain was mentioned in over 90% of those notified.

Low back pain therefore explains more than one in ten of all new referrals across a wide range of specialties. Two questions now emerge. First, what is the value in terms of improvement in outcome from this substantial workload? A total of two-fifths of those with low back pain had previously attended a different clinic with this symptom, yet a further referral was thought appropriate. This does not suggest an optimal approach to referral. Second, does it make clinical sense for such patients to be distributed across such a range of specialties?

Clinically, the proportion of low back pain which needs investigation is small, and the proportion which needs hospital medical or surgical treatment is smaller still<sup>4</sup>. The

Clinical Standards Advisory Group report on low back pain<sup>4</sup> indicated that referrals from primary care should predominantly be for those needing physical therapies or those with more chronic problems needing multidisciplinary pain management. Referrals to physiotherapy and to the pain clinic in our study hospitals represented only 51 out of the 394 low-back-pain attenders (13.0%). By contrast, orthopaedic clinics had 50% of all referrals with low back pain. Several health authorities and trusts have introduced a 'front-line' back pain service to filter referrals, staffed by non-consultant professionals such as physiotherapists, nurses or chiropractors. Early indications suggest that this is an effective means to reduce waiting lists in the consultant specialties, notably orthopaedics<sup>5-7</sup>. We propose that our data might be used as a reference point against which to judge the effect of such policy changes within the health service.

Low back pain is a common symptom in the community and is responsible for an important number of consultations in primary care. In this study we have documented for the first time the substantial proportion of a hospital's outpatient workload constituted by low back pain. These data add to the clinical arguments for a rethinking of the secondary care approach to the management of low back pain.

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