Audit investigating In-house osteopathic provision at Silverdale medical practice

Abstract

An audit investigating in-house osteopathic provision at Silverdale medical practice was undertaken by Yasin Tayebjee under the auspices of Dr Shah (January 9th 2010 - March 26th 2011). Data was established from 56 patients (16 low back, 20 shoulder, 7 knee, 8 neck and 5 upper back). Key findings show:

- 96% of patients prefer In-house (Silverdale medical centre) osteopathic services
- 88% of patients were seen within 4 weeks of referral
- 93% of patients rated the clinician as 'Excellent' for personal skills and patient care
- 16.2 hours of GP time saved
- Conservative cost-savings of at least £2873
- 49% cheaper to offer the service in-house as opposed to hospital setting
- On average less than 3 osteopathic treatments were required per patient

Key-terms

D/c, Discharge

GP, Silveradale medical practice general practitioner

MRI, Magnetic resonance imaging

MSD, Musculoskeletal disorder

NHS, National Health Service

NSAID, Non-steroidal ani-inflammants

PBC, Practice Base Commission

Introduction

Up to 30% of all GP consultations are musculoskeletal complaints.(1) MSDs are the most common reason for repeat consultations with a GP.(1) About 40% attending NHS walk-in centres have musculoskeletal complaints.(2) Over 3.5 million emergency calls per year relate to musculoskeletal injuries or conditions.(3) With an ageing workforce, growth in obesity, reduction in exercise and physical activity and general fitness, the incidence of MSDs is likely to increase and worsen.

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Training to be an osteopath takes 4 years full-time or 5 years part-time. There are 10 osteopathic education institutions awarding qualifications recognised by the General Osteopathic Council. Osteopaths must complete 30 hours of Continuing Professional Development per year. Around 30,000 people currently consult osteopaths every working day.[4] 54% of new patients are seen within one working day after contacting the osteopath; 95% are seen within one week.[4] Public opinion surveys show that 88% of respondents feel the NHS should provide osteopathic treatment, or believe that it is already doing so.[4]

Yasin Tayebjee is a registered osteopath with a diploma in physiotherapy and certification in acupuncture. His private practice in north Leicester has seen a significant number of patients who have been disgruntled with NHS provision for their MSDs. Among the most common complaints the clinic notes are misdiagnoses, lack of speedy referral to NHS physiotherapy, dissatisfaction with physiotherapy services and incorrect advice given. It also has to be noted that a significant number have been given unnecessary investigative scans. With these concerns in mind and noting that his practice has an excellent success rate, a pilot study was proposed and implemented at Silverdale Medical Practice under the auspices of Dr Shah.

Methodology

Patients were seen by an in-house osteopath through general practitioner referral. The same criteria used for NHS physiotherapy referrals were applied to in-house osteopathic referrals, except non-referral of patients below the age of 18.

Patients were informed that anonymous data would be collected. The initial consultation was reserved for diagnosis and advice. Subsequent treatment sessions took place on a weekly basis (availability permitting).

20 minutes was allocated to each appointment. All notes were recorded on EMIS and a separate osteopathy template was created for the recording of treatments techniques and dosages. Data was extracted from EMIS post patient discharge.

No standardised treatment protocols were employed. Treatment techniques and dosages were clinically determined for individual patients.

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

The osteopath utilised the following modalities in each treatment session

- Joint mobilisations and manipulations
- Therapeutic ultrasound
- Acupuncture
- Home exercise programmes
- Life-style advice.

Data was collected and analysed for patients that were deemed suitable for osteopathic intervention, all other patients were discharged and referred to their GP if necessary.

Exclusion criteria

- Below the age of 18
- Non-compliance to advice (exercise, hot/cold packs)
- Where treatment is deemed unlikely to help during the initial assessment
- Treatment none attendance
- Too obese to treat
- Advice was only needed
- Part way through treatments, but end of study
- Unable to determine benefit of treatment

Markers taken pre-osteopathic assessment were

- Onset of patient complaint in weeks
- Previous GP visits
- GP prescribed pain and NSAID medications
- Number of referrals to orthopaedics, steroid injections, and MRI scans

Markers taken post-osteopathic discharge

- Percentage improvement perceived by patient
- Number of osteopathic sessions required
- Osteopathic referred and/or self-referral to GP for the same complaint
- Reduction in pain and NSAID medications
- Onward referrals to orthopaedics, steroid injections, MRI
- Re-referrals to osteopath for the same complaint

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(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
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Using the above markers the following savings were established

- Orthopaedic referrals
- GP visits
- MRI scans
- Steroid injections
- Reduction/stopping of pain and NSAID medications

Savings of the below markers were calculated as follows

Orthopaedic referrals

- IF a patient has been reviewed by NHS orthopaedics for the same complaint
- AND the same complaint still persists
- AND no further referrals to the GP for the same complaint post osteopathic discharge (barring one GP visit for review of treatment)
- AND patient makes a 70% or more improvement
- AND no further recurrence within 6 months of discharge from osteopathic treatment
- THEN one orthopaedic referral would have been saved if the patient was referred directly to osteopath as opposed to current treatment pathway

Number of GP visits saved per complaint

- $(a+b) – (b+1) = c$

Where

a = Pre-osteopathic GP visits for the same complaint

b = Post – osteopathic GP visits for the same complaint

c = number of GP visits that would have been saved if directly referred to osteopath as opposed to current treatment pathway.

Percentage of un-necessary GP appointments

- $(((a+b) – c) / (a+b)) * (a+b)$ = percentage of un-necessary GP appointments

GP time saved

- Total number of saved GP visits * 10 minutes (time per appointment) = GP time that would have been saved if patient was immediately referred to osteopath when they initially presented to their GP.

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(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
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Steroid injection

- IF patient has had steroid injection(s) for the same complaint in the last year with little or no benefit
- AND referred for osteopathic intervention
- AND patient makes a 70% or more improvement for the same complaint
- AND no further interventions have been required post osteopathic discharge
- THEN previous injections for the same complaint has been deemed un-necessary, and one saving is registered.

MRI scan

- IF pre-osteopathic MRI scan(s) have been taken for the same complaint with little or no benefit
- AND with osteopathic intervention, patient makes a 70% or more improvement for the same complaint
- AND no further interventions have been required post osteopathic discharge
- THEN previous MRI scan has been deemed un-necessary, and one saving is registered.

Results & Discussion

Low Back Pain (see appendix 1)

16 patients met the inclusion criteria.

An umbrella diagnosis of non-specific lower back pain was made in all cases. This encompassed the following terms

- Sciatica
- Neuralgia
- Lumbago
- Low back pain

The following affected lumbar & hip structures were included in the study

- Joints: Facet & sacroiliac
- Ligaments: Supraspinal, Iliolumbar, posterior sacroiliac
- Myofascial: Erector spinae

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(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
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Patients were noted to have been in pain from between 4 weeks to 5 years with no previous or current resolution. The ages of patients ranged from between 28 to 75 years of age.

Two patients did not respond to treatment (12%). Of the 14 patients who responded to treatment (88%); an average of 3 treatments were administered with an average improvement of 87%.

Savings that would have been made if the above patients were referred immediately

- Orthopaedic referrals: 0
- GP visits: 26 (21**%**)
- GP time saved 4.3 hours
- Steroid injections: 0
- MRI Scans: 1

Shoulder (see appendix 1)

20 patients met the inclusion criteria. Age range between 27 to 82. Patients were in pain between 2 weeks to 6 years. The diagnosis in order of commonality:

- 7 patients (Adhesive capsulitis ranging from acute to chronic)
- 6 patients (levator scapular tendinitis and tendinosis)
- 3 patients (Acromioclavilcular osteoarthritis, chronic)
- 2 patients (long head of bicep tendonitis)
- 1 patient (impingement syndrome)
- 1 patient (glenohumeral joint osteoarthritis)

13 patients (65%) achieved 70-100% (average of 88%) improvement in less than 3 treatments. Conditions included problems with tendons, adhesive capsulitis and osteoarthritis in the acromioclavicular joint. 5 patients (25%) achieved 30-60% improvement in less than 3 treatments (including 2 patients that did not conform to stretching exercises). More treatment would have been useful to gage if further improvement could have been made. Pressure to discharge after 3 treatments lead to early discharge. 2 patients (10%) did not respond to treating

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Savings

- Orthopaedic referrals: 0
- GP visits: 25 (**34%**)
- GP time saved 4.2 hours
- Steroid injections: 4
- MRI Scans: 0

Neck (see appendix 1)

8 patients met the inclusion criteria. Age range was between 27 to 66. Patients were in pain between 3 weeks to 8 years with no previous solutions. Treatments ranged from between 1 to 6 (average number of treatments less than 3). Where possible there were cases where patients were treated during the first appointment. 5 patients improved between 70 to 100% (average 92%). 2 patients made a 50% improvement. 1 patient made no improvement. Conditions ranged from whiplash, facet joint sprain, periosteal sprain (occipital) and osteoarthritis.

Savings

- Orthopaedic referrals: 1
- GP visits: 22 (**15%**)
- GP time saved 3.66 hours
- Steroid injections: 0
- MRI Scans: 0

Knee (see appendix 1)

7 patients met the inclusion criteria. An average of three osteopathic treatments were administered. The age range of patients was between 30 to 75. Patients were in pain between 1 week to 7 years. Of the 3 patients who improved between 80-90%, one was diagnosed with osteoarthritis (age 75years), and two were diagnosed with plica syndrome and one was also diagnosed with ligament sprain. 2 patients gained between 20-40% improvement, both with diagnosed osteoarthritis. 2 patients did not receive any benefit from treatment, both diagnosed with osteoarthritis.

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Savings

- Orthopaedic referrals: 2
- GP visits: 20 (**21%**)
- GP time saved 3.33 hours
- Steroid injections: 1
- MRI Scans: 3

Upper-mid back pain (see appendix 1)

5 patients met the inclusion criteria. Age range between 33 to 71 years of age. Onset of pain between 8 weeks to 9 years. Improvement ranged from 70 to 100% (average of 86%). Number of treatments required on average; less than 3. The chief diagnosis was supraspinal ligament sprain.

Savings

- Orthopaedic referrals: 0
- GP visits: 4 (**5%**)
- GP time saved 40 minutes
- Steroid injections: 0
- MRI Scans: 0

Patient Satisfaction Questionnaire

Patients were asked to fill in anonymous satisfaction questionnaires (appendix 2) at the end of their last osteopathic consultation. 45 questionnaires were collected out of a total of 97 patients seen over the course of the PBC contract (46% collected).
Non-collected questionnaires were due to

- Limited time and resources (language barrier, elderly patients)
- Patients unable to fill in the questionnaire correctly
- Patients not turning up for their final treatment session
- Where only advice was needed

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Of the 46% of questionnaires collected the data revealed

- Length of time patients had to wait from time of GP referral to actual appointment
    - Less than 1 week 27%
    - 1-2 weeks 16%
    - 3-4 weeks 45%
    - Other 12%

- Where would patients prefer to receive osteopathic treatment
    - In-house (Silverdale medical centre) 96%
    - Leicester Glenfield Hospital 2%
    - Leicester General Hospital 2%
    - Loughborough Hospital 0%
- What were the patients impressions of Yasin Tayebjee's personal conduct (mannerism, listening to patient, customer service)
    - Lacking 0%
    - Acceptable 0%
    - Good 7%
    - Excellent 93%

Treatment approach

	Lacking %	Acceptable %	Good %	Excellent %
Explanation of the Injuries to patients	0	0	20	80
Explanation of treatment approach	0	0	18	82
How do-able were the exercises given	0	3	32	66
Patients ability to self-manage	5	14	39	42
Patients ability to return to work/home	5	22	32	41
Patients ability to return to leisure activities	12	19	26	43

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Summary of savings

A conservative estimate of overall cost savings, had osteopathic treatment been the second point of referral, after the initial GP visit.

- Orthopaedic referrals: 3
- GP visits: 97
- GP time saved 16.2 hours
- Steroid injections: 5
- MRI Scans: 4

Cost-saving to the Tax Payer:

Referral	Estimated unit cost to NHS	Total Cost
Orthopaedics	£120	£360
GP visits	£14	£1358
Steroid injection	£71	£355
MRI Scans	£200	£800
56 Patients referred by GP in a typical practice setting	TOTAL Saving to Tax payer	£2873

Silverdale medical practice referred the following numbers to NHS Musculoskeletal physiotherapy

April 2007 – March 2008: 64

April 2008 – March 2009: 76

April 2009 – March 2010: 59

April 2010 – Sept 2010: 24

The referral trend for hospital physiotherapy shows a decrease (pre- and post- in-house osteopathic services. However as can be seen, patients were still being referred to hospital physiotherapy post January 2010. Since only 10 osteopathic patient slots were available per week (9am-1pm Saturdays) the excess patients were referred onwards.

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Cost to NHS for in-house osteopathic services at Silverdale medical centre compared to hospital physiotherapy services

Cost to the NHS for the equivalent 56 patients

- Average cost to taxpayer per Outpatient NHS physiotherapy visit is £30.96 (Surrey PCT, 2010-2011)
- Actual cost of inhouse osteopath at Silverdale medical centre.

  Total, new patients seen = £21 (56 seen) = £1176

  Total, follow-up patients seen = £14 (157) = £2198

  Grand Total, cost to taxpayer = £3374

- If NHS Physiotherapists were given additional training to replicate the same outcome measures and treat patients as quickly and efficiently, the cost to the NHS would be (based on Surrey PCT costs, 2010-2011)
  (157+56) x £30.96 = £6594.48

- At least 49% cheaper to deliver in-house osteopathic services compared to the same service in a hospital setting.

These savings have not taken account of savings for medications, acute conditions, and cumulative savings from chronic patients needing further NHS services. Considering these savings are based on chronic conditions only, where patients were previously without solutions, it strongly indicated a significant financial benefit in using private practice services, as well as improved quality of patient care.

Further information that would be useful for the follow-on study

- Specific reasons for not deeming patient appropriate for osteopathic referral and treatment
- Patient satisfaction data – this was gathered in a limited fashion but in all cases showed good-excellent patient satisfaction with the service in general and the practitioner in particular.
- Co-morbidities and their relationships to patients outcomes
- Records for patients pain medication
- Increase in patient numbers

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This pilot study is in-vivo with no standardised treatment protocols, implemented by one osteopath (Yasin Tayebjee) with additional skill sets of ultrasound, acupuncture and a specialist interest in rehabilitative exercise prescription.

Acknowledgements

Dr Shah for spearheading this study, Dr Mali for EMIS and clinical skills training as well as data collection, Dr Riisnaes for EMIS template construction, Mrs Caroline Roberts and the team at Silverdale medical practice for their support and guidance.

Reference

(1) 'The Musculoskeletal Services Framework', Department of Health, July 2006
(2) 'Arthritis: the big picture'. Arthritis Research Campaign, 2002
(3) 'The Musculoskeletal Services Framework', Department of Health, July 2006
(4) GOsC Public Awareness Survey (2006) and the GOsC Osteopathic Practice Survey - Pilot Study (2006 - 07)
(5) National Institute of Clinical Excellence. Low Back Pain. http://guidance.nice.org.uk/CG88/Guidance/pdf/English
(6) Average practice list sizes in the uk (2008) The Health and Social Care Information Centre

CPD

Time spent by myself reading: devising the methodology, analysing the results, writing report: 10 hours (June-July 2011)

Time spent with others: collecting results with Dr Mali & discussing criteria (30minutes), presenting report to Silverdale medical practice & discussions (30 minutes) (March-June 2011). Total time: 1 hour

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Appendix 1. Lower back raw data

EMIS number	5015	6010	7006	7411	7761	8116	9491	11608	13055	14152	14614	14725	14956	17028
Number of NHS physio sessions					0	0								
Private manual therapy session					0	9								
% improvement	90	100	90	90	90	80	90	100	90	80	70	80	80	90
Reasons (below 70%)					11 More t	11 More treatment needed					11 More treatment needed			
Previous GP visits	2	2	3	3	1	4	2	5	2	2	4	1	1	1
Post osteo GP visits	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prescribed painkiller pre treatment	yes	no	yes	yes	no	Yes	no	yes	yes	yes	yes	no	unknown	yes
Reduced NSAIDS post treatment	unknown				no	unknown	no	no	yes	unknown	unknown	no	unknown	unknown
Stopped painkillers post treatment	unknown		yes	yes	no	unknown	no	yes	unknown	unknown	unknown	no	unknown	unknown
Pre-Osteopathic MRI	no	no	no	no	no	no	no	yes	no	no	no	no	no	no
Post- Osteopathic MRI	no	no	no	no	no	no	no		no	no	no	no	no	no
Pre-Osteo injecton	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Post-Osteo injection	no	no	no	no	no	no	no		no	no	no	no	no	no
Number of Osteopathic sessions	3	4	3	4	4	4	5	4	4	2	4	5	5	4
Pre-osteopathic Ortho referral	no	no	no	no	no	no		no	no	no	no	no	no	no
Post-osteo Ortho ref	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Body area	LB	LB	LP	LB	LB	LB	LB	LB	LB	LB	LB	LB	LB	LB
Diagnosis	Sciatic nerve ir	non-specifi	non-specifi	non-specifi	non-specifi	non-specifi	non-specifi	Disc Bulge - Mu	non-specifi	non-specific	non-specific	non-specifi	non-specifi	Non-spec
Complaint (onset - weeks)	72	14	22	14	6	14	30	15	260	52	4	4	52	5

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BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Appendix 1. Knee raw data

EMIS number	5492	5534	7546	9368	10835	13805	14258
Number of NHS physio sessions			0				
Private manual therapy session			0				
% improvement	40	80	20	0	80	90	0
Reasons (below 70%)	2 No reason		2 No reason	2 No reason			2 No reason
Previous GP visits	3	5	1	2	4	7	5
Post osteo GP visits	2	0	3	4	0	5	0
Prescribed painkiller pre treatment	yes	no	yes	yes	yes	yes	Yes
Reduced NSAIDS post treatment	no	no	no	no		unknown	No
Stopped painkillers post treatment	no	no	no	no	yes	unknown	No
Pre-Osteopathic MRI	no	yes	no	no	yes	yes	no
Post- Osteopathic MRI	no	no	no	no	no	no	no
Pre-Osteo injecton	no	no	no	no	no	2	yes
Post-Osteo injection	no	no	no	yes	no	2	no
Number of Osteopathic sessions	3	3	4	4	6	4	4
Pre-osteopathic Ortho referral	no	yes	no	no	no	yes	yes
Post-osteo Ortho ref	no	no	no	no	no	no	no
Body area	knee	knee	Knee	knee	Knee	knee	Knee
Diagnosis	Knee OA	Medial plica syn	Knee OA	knee OA	Plica syndrom	OA	Osteoarthritis
					LCL sprain		
Complaint (onset - weeks)	104	24	1	12	52	52	364

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BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Appendix 1. Shoulder raw data

EMIS number	5589	5772	6690	6832	9277	9879	10586	11584	12213	13795	13951	13992	14033	14049	14049	14181	14502	14710	15814	15959
Number of NHS physio sessions																		0		
Private manual therapy session												no	no					0		
% improvement	70	80	0	50	0	50	100	90	100	90	30	100	80	80	80	30	90	100	90	60
Reasons (below 70%)	11 More treatment ne	2 No rea	2 No reason								2 No reason					2 No reason				11 More tr
Previous GP visits	1	1	1	2	2	6	1	3	2	6	1	4	1	1	1	1	1	3	6	1
Post osteo GP visits	0	0	1	3	5	0	0	2	0	0	0	0	1	0	0	2	0	0	0	0
Prescribed painkiller pre treatment	yes	yes	no	yes	yes	yes	no	yes	no	yes	yes	yes	yes	yes	no	yes	no	no	yes	no
Reduced NSAIDS post treatment	Unknown	unknown		no	no			unknown		yes	no	no	no	no	no	no		no		
Stopped painkillers post treatment	Unknown	yes		no	no	yes		unknown		unknown	yes	yes	no	yes	no	no		no	yes	
Pre-Osteopathic MRI	no	no	no	yes	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Post- Osteopathic MRI	no	no	no	no	yes	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Pre-Osteo injecton	no	no	no	no	yes	yes	no	no	no	yes	no	no	yes	yes	no	no	no	no	no	no
Post-Osteo injection	no	no	yes	yes	yes	no	no	no	no	no	no	no	yes	no	no	yes	no	no	no	no
Number of Osteopathic sessions	3	3	4	4	5	3	3	5	2	4	4	4	6	4	4	4	5	3	4	3
Pre-osteopathic Ortho referral	no	no	no	no	no	no	no	no	no	no	no	no		no	no	no	no	no		no
Post-osteo Ortho ref	no	no	yes	no	no	no	no	no	no	no	no	no		no	no	no	no	no		no
Body area	Shoulder	Shoulder	Shoulder	Shoulder	Shoulder	Shoulder	Shoulder	shoulder	Shoulder	Shoulder	shoulder	Shoulder	Shoulder	Shoulder	shoulder	Shoulder	ACJ	Neck	ACJ	Shoulder
								adhesive capsulitis									GHJ Capsule	Shoulder	Levator Scapular	
																			Upper Trapezius	
Diagnosis	Levator sca	Levator Sca	Impingeme	Adhesive c	Adhesive C	OA	Levator Sca	stage 1	Adhesive C	Adhesive C	Long head	Long head b	Adhesive Ca	ACJ OA	ACJ OA	Adhesive Ca	Osteoarthriti	Sub-occipita	Osteoarthr	Levator sca
														Adhesive ca	Adhesive Capsulitis			Levator scap	Tendinosis	
Complaint (onset - weeks)	208	24	2	9	3	260	26		5	20	6	10	2	312	312	40	4	52	8	12

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(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Appendix 1. Neck raw data

EMIS number	5155	5985	12355	13722	14165	14710	15111	15886
Number of NHS physio sessions						0		
Private manual therapy session						0		
% improvement	90	100	50	0	50	100	100	70
Reasons (below 70%)			11 More treatme	11 More t	2 No reason			
Previous GP visits	4	1	1	15	1	3	1	4
Post osteo GP visits	2	0	1	4	0	0	0	0
Prescribed painkiller pre treatment	Yes	no	unknown	Yes	no	no	yes	yes
Reduced NSAIDS post treatment	no		unknown		no	no		
Stopped painkillers post treatment	no		unknown		no	no	yes	yes
Pre-Osteopathic MRI	no	no	no	no	no	no	no	no
Post- Osteopathic MRI	no	no	yes	no	no	no	no	no
Pre-Osteo injecton	no	no	no	no	no	no	no	no
Post-Osteo injection	no	no	no	no	no	no	no	no
Number of Osteopathic sessions	4	1	3	3	7	3	1	4
Pre-osteopathic Ortho referral	no	no	no	no	no	no	no	no
Post-osteo Ortho ref	no	no	no	no	no	no	no	no
Body area	Neck	neck	neck	Neck	upper back	Neck	Neck	Neck
					sub-occipital	Shoulder		
Diagnosis	Whiplash	Facet arthrosis	osteochondritis	Whiplash	Ligament sprain	Sub-occipital tendinosis	Facet lock	Spondylosis
						Levator scapular tendinosis		
Complaint (onset - weeks)	14	416	416	104	16	52	3	8

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
Clinic address: 640 Melton Road, Thurmaston, Leicester, LE4 8BB

Appendix 1. Thoracic (supraspinal ligament sprain)

EMIS number	6782	10544	14021	14550	16439
Number of NHS physio sessions					
Private manual therapy session			no		
% improvement	90	70	90	100	80
Reasons (below 70%)		11 More treatment needed			
Previous GP visits	2	1	2	1	3
Post osteo GP visits	0	0	0	0	0
Prescribed painkiller pre treatment	yes	unknown	unknown	no	yes
Reduced NSAIDS post treatment		unknown	unknown		no
Stopped painkillers post treatment	yes	unknown	unknown		yes
Pre-Osteopathic MRI	no	no	no	no	no
Post- Osteopathic MRI	no	no	no	no	no
Pre-Osteo injecton	no	no	no	no	no
Post-Osteo injection	no	no	no	no	no
Number of Osteopathic sessions	2	4	4	4	4
Pre-osteopathic Ortho referral	no	no	no	no	no
Post-osteo Ortho ref	no	no	no		no
Body area	Upper Thoracic	Upper Thoracic	Upper Tsp	Lower Thoracics	Upper Thoracics
Diagnosis	Supraspinal ligament sprain	Spinal and rib ligament sprain	Supraspinal lig sprain	Supraspinal Tendinitis	Supraspinal sprain
Complaint (onset - weeks)	8	8	26	22	468

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
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Appendix 2. Patient Satisfaction Questionnaire

PATIENT SATISFACTION QUESTIONNAIRE (OSTEOPATHY)

EMIS number…….

Today's Date…….

Please complete all sections.

How long did you wait for your first appointment after being referred

☐ less than 1 week ☐ 1-2 weeks ☐ 3-4 weeks other (how many weeks) _____

If given a choice, where would you like to receive Osteopathy? (Please tick one)

Silverdale practice (In-house) ☐ Leicester Glenfield Hospital ☐

Leicester General Hospital ☐ Loughborough Hospital ☐

PERSONAL IMPRESSION

Was his manner pleasant? Did he make you feel comfortable? Did he listen to you? Did he offer an excellent customer experience?

Lacking	**Acceptable**	**Good**	**Excellent**
☐	☐	☐	☐

TREATMENT APPROACH

	Lacking	**Acceptable**	**Good**	**Excellent**
Explanation of injuries	☐	☐	☐	☐
Explanation of Treatment	☐	☐	☐	☐
Exercises do-able	☐	☐	☐	☐
Ability to self manage from here	☐	☐	☐	☐
Ability to return to work/ Home	☐	☐	☐	☐
Ability to return to leisure Activities	☐	☐	☐	☐

OVERALL IMPROVEMENT

0 = No improvement; 100 = Full resolution of symptoms
Circle relevant improvement percentage

0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100

For this same problem:

Have you been prescribed painkillers from the doctor? YES / NO
Has osteopathic treatment resulted in you stopping the painkiller? YES / NO
Has osteopathic treatment resulted in you reducing the painkillers? YES / NO

If you have had a steroid injection, approximately how many weeks ago was this? _____

How many steroid injections have you had? _____

Please can you write a testimonial below of how treatment has affected your life, what you gained from treatment? Have you been impressed with any particular part of the treatment/result? How do you rate my treatment compared to NHS treatment? Please tick ☐ if I cannot use this testimonial.

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Appendix 2. Raw data from Patient Satisfaction Questionnaire

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EMIS number	5015	5202	5534	5605	5772	6681	6832	6887	7006	7411	9491	9879	9910	10586	10835	11584
Wait Less than 1/52	0	1	0	0	0	1	0	1	0	0	0	0	1	0	1	0
Wait 1-2/52	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
Wait 3-4/52	1	0	1	0	1	0	1	0	1	1	0	1	0	1	0	1
Wait other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL																
Choice - Silverdale (inhouse)	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1
Choice - Glenfield hospital	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Choice - Leicester General Hospital	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Choice - Loughborough Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL																
Personal Impression - lacking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Personal Impression - Acceptable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Personal Impression - Good	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Personal Impression - Excellent	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL																
Treatment Approach - Injuries - Lacking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Injuries - Acceptable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Injuries - Good	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0
Treatment Approach - Injuries - Excellent	1	1	0	0	1	0	0	0	1	1	1	1	1	1	1	1
TOTAL																
Treatment Approach - Treatment - Lacking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Treatment - Acceptable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Treatment - Good	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0
Treatment Approach - Treatment - Excellent	1	1	1	1	1	0	0	0	1	1	1	0	1	1	1	1
TOTAL																

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

(w) www.TownOsteo.com (e) info@TownOsteo.com (m) 078 55 76 27 21
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17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
11608	11734	13055	13055	13805	13992	13992	13992	14021	14033	14049	14152	14165	14181	14258	14502	14725	15068	15111	15709	15722	15814	15886
0	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	0	1	1
0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
1	0	0	1	0	1	1	1	1	0	0	1	0	0	1	1	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1

Author: Yasin Tayebjee BSc (Hons) Osteopathy
BSc (Hons) Biological Science. Dip (HE) Health Science. Cert Acupuncture

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40	41	42	43	44	45	**TOTAL**	%
15959	16180	16439	16804	17028	9491	**45**	
0	0	0	0	0	0	**13**	26.53061
0	1	0	0	1	1	**8**	16.32653
1	0	1	1	0	0	**22**	44.89796
0	0	0	0	0	0	**6**	12.2449
						49	
1	1	1	1	1	1	**43**	95.55556
0	0	0	0	0	0	**1**	2.222222
0	0	0	0	0	0	**1**	2.222222
0	0	0	0	0	0	**0**	0
						45	
0	0	0	0	0	0	**0**	0
0	0	0	0	0	0	**0**	0
0	0	0	0	0	0	**3**	6.666667
1	1	1	1	1	1	**42**	93.33333
						45	
0	0	0	0	0	0	**0**	0
0	0	0	0	0	0	**0**	0
0	0	1	0	0	0	**9**	20.45455
1	1	0	1	1	1	**35**	79.54545
						44	
0	0	0	0	0	0	**0**	0
0	0	0	0	0	0	**0**	0
0	0	1	0	0	0	**8**	18.18182
1	1	0	1	1	1	**36**	81.81818
						44	

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Treatment Approach - Excercise - Lacking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Excercise - Acceptable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Approach - Excercise - Good	0	0	1	1	1	1	1	1	0	0	1	1	0	0	0	1
Treatment Approach - Excercise - Excellent	1	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0
TOTAL																
Treatment Approach - manage - Lacking	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Treatment Approach - manage - Acceptable	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
Treatment Approach - manage - Good	0	1	1	0	1	1	1	1	1	0	0	1	0	0	0	0
Treatment Approach - manage - Excellent	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0
TOTAL																
Treatment Approach - return to work - Lacking	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Treatment Approach - return to work - Acceptable	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
Treatment Approach - return to work - Good	0	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1
Treatment Approach - return to work - Excellent	1	0	1	0	0	0	1	0	0	1	0	0	0	1	1	0
TOTAL																
Treatment Approach - return to leisure - Lacking	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Treatment Approach - return to leisure - Acceptable	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Treatment Approach - return to leisure - Good	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	1
Treatment Approach - return to leisure - Excellent	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0
TOTAL																
Overall improvement percetage	80	0	80	80	80	70	50	60	80	80	80	100	0	100	80	90

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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0
1	0	1	0	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0
1	0	1	0	1	0	0	0	1	1	0	1	0	0	1	1	0	1	1	0	1	1	1
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	1	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	1	1	1	1	1	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
1	0	0	0	1	1	1	1	1	1	0	0	0	0	0	1	0	1	1	0	1	1	0
100	50	90	70	80	100	100	40	90	75	80		50		0	85	80	80	100	90	70	90	70

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40	41	42	43	44	45	**TOTAL**	%
0	0	0	0	0	0	**0**	0
0	0	0	0	0	0	**1**	2.272727
0	0	1	0	0	0	**14**	31.81818
1	1	0	1	1	1	**29**	65.90909
						44	
1	0	0	0	0	0	**2**	4.651163
0	0	0	0	0	0	**6**	13.95349
0	1	1	0	1	1	**17**	39.53488
0	0	0	1	0	0	**18**	41.86047
						43	
0	0	0	0	0	0	**2**	4.878049
0	0	0	0	0	0	**9**	21.95122
1	1	1	0	1	1	**13**	31.70732
0	0	0	1	0	0	**17**	41.46341
						41	
1	0	0	0	0	1	**5**	11.90476
0	1	0	0	0	0	**8**	19.04762
0	0	1	0	0	0	**11**	26.19048
0	0	0	1	1	0	**18**	42.85714
						42	
60	50	80	60	90	100	**69.778**	

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