

## EXECUTIVE SUMMARY

### Project to develop a standardised data collection tool for osteopathy

#### INTRODUCTION

This report describes the development of a Standardised Data Collection (SDC) tool for use in osteopathic practice. As part of the development project, the SDC tool was piloted in United Kingdom (UK) osteopathic practices for three months between April and July, 2009, and this project report presents also the data collected through this piloting exercise. Finally, the report offers recommendations for further use and development of the tool, future data collection topics, and areas of osteopathic practice likely to benefit from future investigation.

It should be emphasised that the data collected is **pilot data**. This information will provide background information concerning osteopathic activity in clinical practice. However, it is **not** appropriate to be used in isolation to support advertising claims advocating efficacy of treatment approaches.

#### BACKGROUND TO THE STUDY

Quality initiatives linked to clinical governance have been introduced by a number of healthcare professions; the creation of national datasets has been linked to such initiatives. Datasets help to identify key information concerning patients being managed including their symptoms, what treatment is offered and what supporting advice and information is provided. Osteopathy is a developing and maturing profession, and the development of a means to collect anonymised osteopathic practice data on a national scale was viewed as timely to promote further professional development and promote the maintenance of high standards of practice.

#### AIMS OF THE PROJECT

- The primary aim of this project was the development of a standardised data collection tool to enable osteopaths to collect patient data, and to pilot the data collection tool at a national level.
- A secondary aim of this project was to promote the involvement of UK osteopaths in participatory data collection. Data collection will be mandatory in the NHS from 2012. The project established a network of regional research hubs to engage and train osteopaths in clinical data collection.

## SDC TOOL DEVELOPMENT PROCESS

### **i. Searching the literature**

A search of the literature was undertaken to identify initiatives undertaken by other professions, nationally and internationally, to develop standardised data collection tools.

The literature search included Pub Med, subscription healthcare databases (e.g. AMED, CINAHL, Index to Theses, and OSTMED), specific manual therapy databases, and hard copy print media. Author searches were conducted and personal contacts were utilised. All searches were taken from the inception of the databases to May, 2010.

The literature showed the primary motivations for development of standardised data collection tools included:

- Profiling professional activities including clinical practice
- Protecting scope of practise in the face of increasing regulation
- Increasing professional visibility
- Raising standards of care through focussing on management practices and outcomes

### **ii. SDC tool development process**

A nominal group technique was used to develop the standardised data collection tool to generate ownership and to produce a national consensus. The network of research hubs acted as the nominal group to identify topics for inclusion in the SDC tool.

Examples of existing standardised data collection tools were examined but were regarded as unsuitable for osteopathic practice. Hub members focussed on a number of key topics areas for data collection. These included:

- Patient demographics
- Symptom profiles
- Osteopathic patient management including techniques and other management strategies
- Outcomes of treatment
- Financial implications of care

A three stage testing process was undertaken. This involved:

- Two separate content validity testing stages involving members of the research hubs. This was to identify any omissions or superfluous criteria or topic areas.
- A third pilot involving non-hub members to identify any regional differences
- Obtaining feedback to address the practical issues associated with data collection in practice

The final version of the tool prepared for a national pilot was comprised of 5 sections. These included:

- A patient-completed section
- The initial presentation of symptoms
- The management of the patient at their first appointment
- Management of the patient at their second and subsequent treatment(s)
- Final outcome(s) of care

### **iii. Piloting the SDC tool**

Recruitment for the national pilot was voluntary and undertaken through advertisement in print journals and via the email networks of the professional association and regulator. A total of 342 practitioners (9.4% of the UK profession) participated, contributing 1630 completed patient datasets.

### **Limitations of the project and pilot data**

- The primary aim of the project was to create and test a standardised data collection tool for osteopathy. Analysis of the data collected from the national pilot exercise highlighted areas where the tool performed well, but identified others where questions used in the tool need refinement to improve clarity and reduce the potential for ambiguity.
- Participants in the national pilot were volunteers. It would be preferable, in the future, to generate a future dataset through random sampling of the osteopathic profession.
- The use of a validated and nationally recognised outcome measure (depending on the physical or clinical area being assessed) would be beneficial.
- In the future, outcome data must be patient completed, and a mechanism to allow this to be undertaken away from osteopathic practices would ensure that the risk of bias is minimised. The practicalities of achieving this and the associated costs will need careful consideration.

### **KEY FINDINGS FROM THE NATIONAL PILOT**

Notwithstanding the limitations outlined above, piloting the SDC in practice produced a set of data that could represent a useful first step to developing a profile of UK osteopathic practice.

Key findings about the SDC tool included:

- The SDC tool developed with and by the profession performed extremely well.
- The tool was clear and easy to complete and generated meaningful data.
- Practitioner compliance was high with 86% of those volunteering actually collecting data, and data collection forms were completed thoroughly and validly.
- Practical issues for completion were cited including that some patients were in considerable pain and, understandably, did not want the added burden of having to complete a form prior to their consultation. Other reports included that patients were simply short of time either attending in their lunch time or on the way to other appointments.
- The data collection form has been amended to reduce the burden on patients.
- A few questions were reported to have ambiguous wording and these have been re-worded to make the meaning clearer.

Key findings from the SDC pilot data included:

#### **Patient demographics**

- i. 56% of patients were female and 43% were male.
- ii. 93.9% of patients were white.
- iii. The age range of patients was from 5 days old to 93 years old
- iv. Occupational data showed that 47.9% were in full time employment, and 10.9% self-employed full time; 19% were retired, and 14.2% worked part time as either employed or self-employed, and 6.3% were not currently employed
- v. GP referral was reported by 6.3% of patients

vi. A total of 48.1% of patients reported between 1 and 4 visits to their GP concerning their current symptoms, and 29% had undergone previous NHS treatment or investigation  
vii. Access to treatment was rapid. A total of 16.8% of patients were offered an appointment on the same day; a further 54.2% were offered appointments within the next 72 hours.

▪ **Symptom profiles**

- i. Space was provided to record up to three symptom areas. Lumbar symptoms were the most common (36%), followed by cervical spine (15%), sacroiliac/pelvic/groin (7.9%), head/facial area (7%), shoulder (6.8%), and thoracic spine (6%).
- ii. Additional symptoms were recorded in 2.9% of patients.
- iii. Symptom duration for the current episode was categorised and included acute (<6 weeks) in 51%; subacute (7-12 weeks) in 15%, and chronic (13 weeks or more) in 32%. 2% of patients did not respond.
- iv. A total of 797 patients reported the presence of comorbidities as diagnosed by their medical practitioner. The most common of these was hypertension (11.7%), followed by asthma (6.6%), and arthritis (5.7%).

▪ **Osteopathic patient management**

- i. Practitioners recorded that 97% of patients were suitable for osteopathic treatment
- ii. Treatments given to patients were varied and complex. Soft tissue treatment was the most common (78%), followed by articulation (72.7%), and HVLA thrust (37.7%). These were followed in frequency by cranial osteopathy (25.8%), muscle energy (18.3%), and functional technique (13.7%)
- iii. Additional interventions in patient management included education (35.8%), and exercise (22.6%). A variety of self-management strategies were discussed with 88% of patients

▪ **Outcomes of treatment**

- i. Simple patient-reported outcomes were recorded on the data collection sheet. These were drawn from the literature but are unvalidated measures and their findings should be treated with caution.
- ii. After the first appointment, the majority of patients (59%) reported no complications of treatment. The most common complications within the first 24-48 hours after treatment were increased stiffness (18%), increased pain (14%), and fatigue (6.6%). After the second and subsequent appointments, 77.3% of patients reported no complications of treatment.
- iii. Only a small number of patients (10.4%) were off work at first presentation; of these 5.3% were able to return to work after one treatment, and 3.1% after two treatments.
- iv. In cases where patients underwent onward referral, 88% were to their GP for further investigation, and 13% were to a hospital consultant.

▪ **Financial implications of care**

- i. The responsibility for payment for treatment was met by individual patients in 90% of cases; only 8% of osteopathic care was funded by outside sources.

ii. The cost of investigations or treatment undergone by patients through the NHS prior to treatment is hard to quantify but 29% had received NHS care or investigations by their first osteopathic appointment.

## RECOMMENDATIONS FOR FUTURE WORK

### Issues raised

- Gaining consent is now a statutory requirement but it is clear that this remains an area of considerable confusion for osteopaths as it appears to for other professions. There is a need for clarification based on sound and informed legal opinion concerning the need for verbal and/or written consent information.
- The role of manipulative techniques in older age groups has been documented in general terms but no information is available concerning which area of the body is being manipulated. Safety information on the use of HVLA techniques on this age group is notably lacking.
- The provision of osteopathic care to infants and young children has been documented in the data collection process; 8.6% were under 20 years of age and 5.6% were aged 0-9 years. This is an area of therapeutic provision that requires more work to identify research priorities within this subset of patients.
- The lack of access by patients belonging to different ethnic minorities has been documented. Greater exploration concerning why this has occurred would ensure that equal access to treatment is possible for all ethnic groups, and that appropriate education is given to osteopaths to raise awareness of cultural sensitivities.
- A high proportion of osteopaths have documented that they are recommending exercise to patients. Little work has been undertaken in this area which is not formally taught in all osteopathic educational institutions.
- Osteopaths have documented that they refer to a large number of other healthcare professionals to try and enhance their patients' recovery.
- The small sample produced significant and positive patient feedback; the profession needs to confirm the findings with a further data collection exercise involving a larger number of participants from a systematic sample of the profession.

### Further use and development of the standardised data collection tool

- The development of an electronic format for use by individual practitioners in their practices to enhance their own data collection.
- Use of the tool for research purposes to ensure that data is being collected in a standardised format.
- Use of the tool for periodic snapshot surveys with a larger randomly sampled group to identify if the significant and positive patient feedback can be replicated.
- The development of a short form of the tool for use in practice on a day-to-day basis.