

The use of a digital tool in real-time data collection and multicentric analysis of practices

By Xavier Blusseau - Osteopath

Director of external relations - Ostéobio

Osteopathic schools in France are required to have an inhouse care centre dedicated to student training. In these centres, open to any patient from the general public, consultations are provided by students who are in their final year of training under the supervision of an osteopath instructor-practitioner. Students from lower classes are welcome as observers to these consultations or may even be invited to participate in clinical examinations.

Since 2020, Osteobio has been partnered with a developer of digital solutions in the implementation of a transversal tool for the administration of its care centre. Their software, Acuity, centralises functionalities necessary for clinical research, care improvement and the monitoring of clinical activity.

Clinical Research

The Acuity software is organized in such a way as to prioritise data related to clinical situations and to the treatment provided. These data structures offer the possibility to publish, in real time, a pre-assessment of practices, both from the Osteobio school and from other training institutions which have joined the project. Currently, there are 3 training institutions in France using Acuity.

Multicentric search

With Acuity, reasons for consultation are classified according to the anatomical site concerned by the complaint. The classification does not call upon the notion of medical diagnosis and it is recommended by the WHO, particularly in the retrieval of information regarding procedures carried out on functional disorders, medically unexplained symptoms or the absence of disease diagnosis. On the other hand, for each consultation reason, the source of pain is indicated, which makes it possible, for example, to differentiate between muscle pain and joint or nerve pain for the same anatomical complaint site. Thus, consultation reasons have a double classification based on the patient's complaint and the therapist's expertise. Possible sources of pain are ranked hierarchically according to the anatomical terminology. In addition, at the start of treatment, each consultation reason is rated in terms of intensity and duration.

Alongside this tool, Acuity users produce their own hierarchical organization of acts:

A, B, C, types acts etc.

- A1, A2, A3, types etc.

- A1a, A1B, A1C, types acts etc

- Etc.

This functionality provides a means to circumnavigate pitfalls associated with different conceptual approaches of the osteopathic act and, each user can thus generate a database of acts that corresponds to their teaching. The only restriction is that each act must be linked to an anatomical structure of the anatomical terminology.

Ultimately, Acuity produces a real-time analysis of the evolution of consultation reasons according to the site of the complaint, its intensity and its duration at the beginning of caretaking. Various filters in the tool can be used to pick consultation reasons which one would like to see in the real-time analysis of the practice.

The hierarchical classifications of the sources of pain and of the performed care procedures lead to the augmentation of data that can be analysed. Each piece of data is included in all of the higher hierarchical levels. Data analysis is done at each hierarchical level of the database, it being clear that higher hierarchical levels contain the biggest volume of data.

Customised databases

Each user has the possibility to include databases in which the reasons for seeking consultation are labelled with standardized data. Such databases cannot be used for multicentric analyses, but they allow us to collect data that is used in the framework of our students' dissertations.

Improvement of treatments

Action-research

Data collected, both at Osteobio and within the multicentric setting enable us to highlight our weak and strong points in caretaking.

We can thus set up working sessions, involving instructors at Osteobio, to reflect upon reasons behind them. There are cases where the teaching of fundamental procedures or the development of skills prior to caretaking vary in different teams in charge for a particular type of consultation reason or the other. These working sessions are intended to enable us homogenise our teaching by drawing on our strengths as a reference.

Multicentric analyses are particularly interesting in the transfer of skills from one teaching centre to another. Since there could be cases where one teaching method becomes particularly well developed for a certain type of consultation reason in one school and, consequently, the caretaking for this reason will be highly optimised in its treatment centre. This means that the management of this reason will be equally highly optimised. Our pedagogical exchanges are organised on the basis of these analyses.

Information transmission

The same patient, in the course of their follow-up care, may be taken care of by different teams. Therefore, the patient will not necessarily see the same practitioner (instructor and/or student) during the 2nd or 3rd consultation. One of the keys to ensure quality care, therefore, is proper and accurate transmission and interpretation of information from one session to the next. The use of Acuity has naturally led to the improvement in the clarity of information associated with caretaking by:

- the standardization of certain data alleviates the issue of abbreviations
- the establishment of a customized consultation record for Osteobio - for each patient - allows us to know where to look for information and identify it easily.
- specially designed data entry zones for the transmission of information optimize the longitudinal follow-up of the patient. We can include, in these zones:
 - results expected during the next session,
 - what should be done in view of the results obtained (in osteopathy or in collaboration with other health actors),
 - what the patient has been told, indicators to be monitored, etc.

The web.app format

The software technology and the rights matrix allow instructors to read, in live, information recorded in patient files, which could be:

1. notes taken in real time, in which case they have an immediate overview of the case at the moment of its presentation by the student or re able to verify if the reason for consultation does not call for the instructor's intervention at the start of clinical examination
2. detailed recordings which are written during the post-consultation period. The instructor can ask the student to clarify what they write down in order to leave no doubt in the minds of people who are going to read the form.

On the whole, one patient can see 2 or 3 different students and, a single student can have several referent instructors. In all cases, the software makes patient caretaking more fluid through the transmission of dated, standardized and assessable information.

Clinic administration

Statistics

All the data collected in the database enables us to analyse clinical activity in general including, epidemiological statistics, population analysis (age, gender, etc.), and make comparisons among different consultation sites or among different teams. These data are be used to better target our patients and organize our network of collaborators.

Studies department

Ultimately, the tracking of the activities of each student is thus rendered possible, in particular, the number of consultations observed or carried out, the consultation reasons taken in charge and acts performed. Through this functionality the studies department can follow the progression of students and schedule their presence according to the number of consultations done and remaining to be done.