



In two of the articles featured in this issue<sup>1,2</sup>, part of the data required for the studies were gathered from the existing data from records available at the institution/department in which they were being conducted. In most cases however, researchers collect 'new' data by employing either available data collection measures, or by designing their own.

All clinical departments, whether governmental or private, keep records (usually in hard-copy file-format) of their patients. At the very least, these records show (or at least should show) sociodemographic data and diagnosis, assessment results on admission, which interventions were provided and when, attendance information, discharge status and follow-up plans (when applicable).

Evidence-based practice (EPB) in medicine and allied health has been gaining ground since 1992. EBP attempts to encourage, and in some instances to force, professionals and other decision-makers to pay more attention to evidence to inform their decision-making. The goal of evidence-based practice is to eliminate unsound or outdated practices in favour of more effective ones by shifting the basis for decision making from traditional, intuitive and unsystematic data collection and recording to firmly grounded scientific data<sup>3</sup>.

Beginning in the early 1990s, the American Health Care Cost and Utilization project (HCUP) began a voluntary collaboration with the State-wide Data Organisations (SDOs) to leverage their data collection efforts in order to build uniformly formatted national and state hospital encounter-level datasets for research<sup>4</sup>. These easily accessible, online datasets created at each institution have online query systems which provide for easy access to statistics generated from the data. Linkages to datasets from other institutions then expand the analytic capacity of state-wide data. The data are used for research on diverse health delivery systems, geographic variations, and comparative effectiveness of different clinical practices and interventions and on health policy topics<sup>4</sup>. Institutions then also use this information for quality assessments and internal improvement as it provides information on their own performance and when required, set benchmarks by comparing their performance with other institutions listed on the SDO system.

Why can't we, as South African clinicians, create a similar data infrastructure to expand our capacity to support studies concerning comparative effectiveness, quality improvement, efficiency and to inform health policy?

The availability of clinical data in electronic format, coupled with increasingly sophisticated health information technology, offers a whole plethora of opportunities not only for research, quality control, decision-making, and planning, but also for therapists in the field. We have published various articles on the challenges of our community service therapists – especially those in single-therapist departments in remote areas. Access to a central clinical database could assist these newly qualified therapists with at least some guidelines and pointers when faced with previously un-encountered challenges.

There are of course, many warning bells going off in some heads when talking about 'standardising' patient records, given the great differences and variations in patient populations, service delivery models and therapists' own initiative. The last thing I am suggesting is to create a culture of 'let's google it' for a quick and easy answer, which comes so readily to the younger generation. The other issue surely is a system that would not compromise patient confidentiality. In addition, Hersh et al<sup>5</sup> identified many 'caveats' for the use of Electronic Health Records (EHR) for research purposes<sup>5</sup>. These caveats mainly exist because clinical data are recorded for clinical and billing purposes, and that the reuse of this data for research purposes can

be challenging. The timing, quality and comprehensiveness of clinical data are often not consistent with research standards.

As reported in this edition by Hoosain, de Klerk and Burger<sup>6</sup>, the substantial increase in medical claims over the last 5 years also poses a challenge to ensure that our data meet the requirements set to support or refute such claims.

Hersh and his colleagues purport that probably most critical to the success of using EHR data for Clinical Effectiveness Research (CER) and other types of research is the promotion of policies calling for, mandating, or providing incentives for the universal adoption of standards-based health care data, captured across the diverse sites where patients receive care<sup>5</sup>. Such an investment could set the foundation for a clinical record data base system that facilitates learning, clinical research, quality improvement and other data-driven efforts to improve health.

We should strive for not only improving the quality of our data infrastructure, but also for developing professionals who are trained to understand the nuances and analytical potential of clinical records, optimal data entry and extraction, and who are acutely aware of the standards that should be upheld when recording clinical information.

Uniform institutional and provincial databases which capture core variables with a minimal recording burden could enhance clinical data and assist clinicians and especially researchers, to examine policy, care delivery, quality of care and clinical outcomes across a wide range of diagnoses and settings<sup>4</sup>.

Creating such a uniform data infrastructure would require the cooperation of various provincial and countrywide organisations, both governmental and non-governmental, as well as professionals in the field.

OTASA could instigate such an initiative by:

- ❖ Setting up or sourcing a medical informatics task team to design an access-controlled, generic database which captures core data from all fields of practice. This could be done in collaboration with and input from existing standing committees within the Association, as well as with practitioners.
- ❖ Liaising with the Professional Board on ethics and standards
- ❖ Incorporate standards of data capture into the Minimal Standards for Practice
- ❖ Collaborating with educational departments to incorporate electronic data capture/record keeping into their clinical training courses

Most of our clinical data are evidence-based. Developing an online infrastructure to capture our data, could facilitate a transition from evidence-based to evidence-generating clinical information which is accessible to all registered professionals.

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