



■ EDITORIAL

The transparency agenda and the orthopaedic data revolution

**A. J. Timperley,
F. S. Haddad**

From The British Editorial Society of Bone & Joint Surgery, London, United Kingdom

The data revolution is well under way in orthopaedic and trauma surgery and there is an imperative for all orthopaedic surgeons to engage and help define the culture surrounding the collection and use of data in our domains. Following on from the publication of surgeon level data in the United Kingdom as part of the transparency agenda,¹ we thought it timely to detail some of the datasets that are currently available. In this month's *BJJ*, Perry et al² also summarise the key features of the funnel plots that have been used in this setting.

There is a bewildering range of data sources available for interpretation and comment by patients, analysts, commissioners and the media. Some of these sources have been the basis of nine articles published in *BJJ* in 2012 alone.³⁻¹¹ Sources in the United Kingdom include: Hospital Episode Statistics (HES), the Quality Observatories, Patient Reported Outcome Measures (PROMs), RightCare, The Royal College of Surgeons Quality Dashboards, Dr Foster league tables, data published by individual Healthcare Trusts and data available from specialty registers.

HES¹² is a data warehouse containing details of all admissions, outpatient appointments and A&E attendances at NHS hospitals in England processing over 125 million records each year. The standard aggregation tables are free and anonymous to access on HESonline. Users of the 'monthly managed service' and 'bespoke extract service' are known to HES and these include government and public bodies, private companies, manufacturers and the media.

In the 2008 publication 'High Quality Care for All'¹³ each Strategic Health Authority (SHA) was tasked to: 'establish a formal Quality Observatory, building on existing analytical arrangements, to enable local benchmarking, development of metrics and identifications of opportunities to help frontline staff innovate and improve the services they offer'. SHAs created Quality Dashboards depicting metrics and methodologies they considered most likely

to produce a set of valid and robust indicators of 'quality'. There is little commentary on how the dashboards should be interpreted and used to make informed choices particularly for those trying to access healthcare.

PROMs¹⁴ for hip and knee replacements using pre- and post-operative surveys have been collected by all providers of NHS-funded care since April 2009. The data is reported by a number of organisations, including hospital trusts, contractors and the Health and Social Care Information Centre. It is unclear how improvement in PROMs scores should be used by commissioning groups or patients in choosing their healthcare provider, or how the importance of these data should be balanced with other results available in the public domain such as volume of cases performed, 90-day mortality, readmission rate, length of stay etc.

Dr Foster Intelligence¹⁵ is a joint-venture between the Department of Health (DoH) and Dr Foster LLP started in 2006. Dr Foster published its first hospital guide in the Sunday Times in 2001 and this included mortality data using the Hospital Standardised Mortality Ratio (HSMR) for every hospital. This was the first time that this comparative measure of quality had been published for a national health economy anywhere in the world. A hospital guide is now published on an annual basis.

Orthopaedic surgeons have been at the forefront of developing national registers. In the UK, two exemplars have already had clear effect driving up the quality of care for patients.

The Trauma Audit and Research Network (TARN)¹⁶ has had a profound effect on improving the treatment of severely injured patients. In 1988 the Royal College of Surgeons of England recommended changes in trauma management and a group of UK emergency physicians began to collect data and compare results using TRISS Methodology.¹⁷ By 1992 thirty three hospitals in the UK had used these techniques to analyse the effectiveness of their trauma care.¹⁸ After 1996,

■ A. J. Timperley, DPhil(Oxon), FRCS(Ed), Consultant Orthopaedic Surgeon Princess Elizabeth Orthopaedic Centre, Royal Devon and Exeter NHS Foundation Trust, Barrack Road, Exeter EX2 5DW, UK.

■ F. S. Haddad, MD(Res), MCh(Orth), FRCS(Orth), Editor-in-Chief
The Bone & Joint Journal, 22 Buckingham Street, London WC2N 6ET, UK.

Correspondence should be sent to Professor F. S. Haddad;
e-mail:
editorbjj@boneandjoint.org.uk

©2013 The British Editorial Society of Bone & Joint Surgery
doi:10.1302/0301-620X.95B9.32853 \$2.00

Bone Joint J
2013;95-B:1153-5.