

# Hospital Episode Statistics (HES): Improving the quality and value of hospital data

## Executive summary



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The quality of hospital data is the responsibility of consultants, both in the way that notes are recorded and in relation to the accuracy with which data on patients is coded.

The NHS, like any large organisation needs information so that resources can be managed efficiently and the quality of its services assured. In the white paper "Equity and excellence: Liberating the NHS"<sup>1,2</sup> the government has shown a strong commitment to ensuring that information is collected and used to secure good quality outcomes and to inform patient choice.

Since the Korner report<sup>3</sup> was published in 1982 there has been a commitment to collect a national set of data for management of the NHS. At the time the president of the Royal College of Physicians (RCP) indicated that it was a good thing that clinical data from every inpatient episode was to be coded and recommended that every clinician should ensure that clinical coding was as accurate as possible<sup>4</sup>.

Since the first national set of data was collected in 1989 there has been considerable evidence that the majority of clinicians have not engaged in the process. They have not been concerned about the accuracy of the data, the many ways that it is used, nor have they used the data to support their own clinical practice or service developments. Many have little or no knowledge of the large database Secondary Uses Service (SUS) into which Trusts are required to submit data from their Patient Administration Systems (PAS) or of the **Hospital Episode Statistics (HES)** database which provides a repository of data for secondary uses including:

- Public health, epidemiology, health trends and service development
- Informing governments, national and international
- Monitoring quality of health care and informing patient choice
- Linkage to other data sources such as ONS deaths, national audits and cancer register.

Serious lack of clinical engagement has been the subject of two reports by the audit commission<sup>5,6</sup> published in 2002 and 2004. A report by the RCP Informatics unit<sup>7</sup> of an attempt to engage clinicians with their data flagged a number of issues that need to be addressed including:

- No diagnostic data available in outpatient based specialities.
- No recognition that most consultants now work as part of a team.
- Failure to record clinicians undertaking procedures if not the named consultant.
- Lack of contact between clinicians and coders and Trust information departments.
- Difficulty in accessing raw data.

Clinical diagnoses including co-morbidities are coded using the International Classification of Diseases (ICD-10) and procedures are coded using Office of Population, Censuses and Surveys Classification of Surgical Operations and Procedures (OPCS-4.5). In most Trusts this task is undertaken by highly trained clinical coders who have very little contact with front line clinicians and have to work from clinical notes which are normally inadequate for this purpose in that they are not structured or standardised<sup>8,9</sup>. Consequently errors and omissions occur. Since the onset of Payment by Results (PbR) clinicians have become more aware of the financial consequences of inaccurate and incomplete clinical coding. This has led a few to work closely with clinical coders to maximise income.

However a recent report from the Audit Commission<sup>10</sup> on PbR has shown in general that coded data is still a poor reflection of clinical practice, and that many clinicians remain uninterested.

Data quality is also a patient safety issue as

inaccurate data can lead to errors.

There is now an urgent need for clinicians to engage with national data because it will be used to assess the quality of clinical services and will be available in a patient anonymised format on public websites such as NHS Choices<sup>11</sup>, for all to see. Metrics and indicators of clinical quality will increasingly be published for individual, named consultants, in line with government policies on patient choice of consultant-led team<sup>12</sup> and “transparency” of detailed data on public services<sup>13</sup>. Furthermore appraisal and re-validation will require evidence of clinical practice (amount and quality). In most cases HES data will be the only source available but at present it is not of sufficient depth or quality for this purpose<sup>14</sup>.

**We have identified seven key issues for further discussion to help find feasible solutions.**

1. Providing clinicians with access to their raw data for the purposes of review and validation.
2. Recording of clinical terms (SNOMED) in addition to ICD10 and OPCS for detailed audit, analysis and validation of codes used.
3. Capture of diagnostic and procedure information in outpatients.
4. Capture clinicians, including non consultant career grade doctors, undertaking medical or surgical activities in addition to the consultant in charge so as to represent the current way in which senior clinicians work in teams.
5. A diagnosis present on admission flag to differentiate between events such as a broken leg, a pressure sore and acquisition of MRSA occurring prior to or during a hospital stay .
6. Easier and more cost effective linkage of other databases to HES.
7. Linking primary and secondary care records.

In the meantime clinicians should accept that ensuring the quality of coded data is their responsibility<sup>4</sup>. To discharge this responsibility they need to make sure that all clinical notes whether paper or electronic are structured and standardised<sup>8,9,14</sup>. Regular meetings with clinical

coders and validation of the raw data using Trust informatics departments or third party informatics providers are required.

Teaching juniors good note keeping and the importance of clinical coding is a responsibility that all consultants should accept. A review of a consultant’s workload, either as an individual or as part of a team should become an essential part of the appraisal process whenever suitable data exists.

It is accepted that the weaknesses in the current processes for collection of HES data cannot be fully rectified without radical change in this process. These weaknesses include the limitations of the data collected from a clinical perspective, the use of statistical classifications for coding rather than a clinical terminology, and the very fact that a parallel process is used to extract data from non standardised, largely unstructured paper records. The Academy of Medical Royal Colleges called for a review of this process and a migration towards the collection of data directly from standardised, patient-focused electronic records in which the data items are recorded at the point of care!<sup>15</sup> This view is supported by The NHS Information Centre. Both the Academy and The NHS Information Centre recognise that much action can be taken to improve the existing process while this strategic vision is achieved.

## Next steps

The NHS Information Centre will:

- Consult front line clinical staff on the seven key issues and priorities for improvement. You can fill in the online survey at: <https://www.surveymonkey.com/s/Nat-HES-Survey>
- Publish a feasibility report on the seven key issues
- Design programs of work to engage all the necessary stakeholders to make change happen – the priority for The NHS IC National Clinical Lead.

The NHS Information Centre and the Academy of Royal Colleges will work together to:

- Ensure the outcomes of the survey and feasibility report are used to inform the future development of HES.

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