

## QOF 2004/05 data notes

Please be aware that there have been a small number of necessary post-publication annotations. Go to annotations to see these.

The Quality and Outcomes Framework (QOF) became part of general practice contracts on 1 April 2004; therefore, 2004/05 represents the first year for which QOF information is available. The publication of QOF information by the Health and Social Care Information Centre is based on data for the period April 2004 to March 2005. It is extracted from the national Quality Management and Analysis System (QMAS) at the end of June 2005, following adjustments agreed between practices and PCTs.

It should be recognised by all users of QMAS data that it was established as a mechanism to support the calculation of practice QOF payments. It is not a totally comprehensive source of data on quality of care in general practice - but it is potentially a rich and valuable source of information providing the limitations of the data are acknowledged.

### The source of the data

The national Quality Management and Analysis System was established to support payments to GP practices under the Quality and Outcomes Framework (QOF). The high level of interest in QMAS information has been recognised for some time, with demand for access to this information coming from Department of Health branches, other national healthcare organisations, local NHS users and academic researchers.

The Prescribing Support Unit (PSU) in the Health and Social Care Information Centre has developed a Quality, Prevalence and Indicator Database (QPID), derived from QMAS data. QPID is populated by monthly extracts from the QMAS system.

QMAS is a live database and practices can submit clinical and non-clinical data at any time. It is important to understand that the QPID database, from which published or released QMAS information is derived, holds a snapshot of QMAS data relating to the position of practices at the end of each month.

The QPID database has been used by the Health and Social Care Information Centre to publish 2004/05 QOF data for England, in order to meet additional information requirements arising from QMAS.

## **Benefits**

This release of national summary tables of QMAS data for 2004/05 will:

- Meet most requests for QMAS data, providing users with immediate access to the information they require.
- Reduce the burden on local organisations (such as Primary Care Trusts) to release this information.
- Provide a single national source for QMAS information.

## **Types of data**

The published tables, and the Statistical Bulletin, cover two types of data for England:

- Data relating to QOF indicator or domain scores.
- Disease prevalence information for each disease within the clinical domain of the QOF.

The QOF indicator and domain scores are presented for 8,576 general practices in England. This includes all practices that had data automatically extracted by the QMAS system in March 2005 and/or submitted additional data adjustments for the year 2004/05 during April to June 2005.

The disease prevalence tables are based on general practices where there is at least one disease register figure available within QMAS for March 2005, and where QMAS holds a valid practice list size. The 8,486 practices included in the prevalence tables cover 99.5% of registered patients in England (based on Prescription Pricing Authority data on patients registered with practices in England, January to March 2005).

## **Disease prevalence**

Practice disease register counts used for final payment calculations in QMAS are based on National Prevalence Day (14 February). These disease register counts are used in the disease prevalence tables published by the Health and Social Care Information Centre. In a small number of cases the disease register counts in QMAS were subject to adjustments made by PCTs - the published tables reflect the most recent relevant adjustments.

QMAS uses these disease register counts to perform an adjustment to practices' QOF payments, based on levels of disease prevalence. The 'adjustment factor' is based on an arithmetical formula that transforms the raw disease prevalence figure. In publishing national QMAS information, the Health and Social Care Information Centre has presented only raw (unadjusted) disease prevalence figures.

## **Data completeness**

The QOF was introduced as a component of the new General Medical Services (GMS) contract. Participation by practices is voluntary, though GMS practices participating in the QOF must follow the national QOF framework.

Personal Medical Services (PMS) practices are able to negotiate local contracts with their PCTs for the provision of all services. PMS practices may also participate in the QOF, and they may either follow the national QOF framework or enter into local QOF arrangements. (43% of general practices on the published QOF tables were PMS practices as at end of March 2005.)

Where PMS practices have agreed local arrangements to determine QOF payments, some elements of QOF achievement may not have been entered into QMAS by the practices and PCTs concerned. QMAS could, therefore, potentially report lower levels of QOF achievement than is the reality, and this may be reflected in the published tables. Users of the data must be aware of relevant local circumstances in undertaking any comparative analysis of the QOF data.

For example, in North Bradford PCT there are 12 practices, all of which are PMS practices, and which operate a locally agreed quality framework (in place of the national QOF). Practice performance is recorded using a local PCT system, rather than using QMAS. The practices are connected to QMAS, and the nature of the way in which QMAS extracts data for the disease domain provides a true record of performance in this area. However, for other aspects of the national QOF (such as the organisational domain), which require practices to submit responses manually, the information held in QMAS is not regarded as a valid record of the practices' performance.

A locally agreed Quality and Outcomes Framework (in place of the national QOF) is also operated for one practice (out of 13) in Durham and Dales PCT. Here, practice achievement is recorded using a local PCT system and, therefore, the QMAS-derived data shown for this practice in the QOF tables published by the Health and Social Care Information Centre is not a valid record of this practice's achievement.

For both North Bradford PCT and Durham Dales PCT, the inclusion of practices with local QOF arrangements in the tables means that the published PCT-level QOF achievement figures are lower than actual levels of achievement. In Durham Dales, for example, the summary figures for the whole PCT show QOF achievement as 90.2% instead of the 98.7% recorded by the PCT. Further information may be obtained from Helen Suddes, Director of Primary Care and Performance at Durham Dales PCT (01388 458835).

In Durham and Chester-le-Street PCT, a PCT-run PMS practice (code Y00255) had data removed from the QMAS system for payment purposes. The practice remains on the QMAS system so that it can record activity for 2005/06. When data was extracted from QMAS for the publication of 2004/05 figures it included a recording of zero QOF points for this practice. When the achievement of this practice is taken into account, the overall average QOF achievement for Durham and Chester-le-Street PCT is 94.4%.

The Health and Social Care Information Centre is not aware of other PCT-wide initiatives of this type. However, taking the non-submission of non-clinical data as a proxy for this type of scenario, there are fewer than 20 such practices in the indicator tables. The Health and Social

Care Information Centre has included information for these practices in the published tables for the sake of completeness, with the advice that users of the data should take account of local circumstances in undertaking any comparative analysis of the QOF data.

There are other examples of local use of QMAS reflected in the published tables. In some cases the figures published from data extracted from QMAS do not therefore equate to actual local levels of QOF achievement. Where identified, these instances have been highlighted in the post-publication annotations to practice level data, as described below. One example is Knowsley PCT, where an agreement with the QMAS team involved setting QOF scores for some practices to zero within the QMAS system in order for the QOF achievement of those practices to be incorporated into the scores of another practice code to represent a group of practices for QOF payment purposes.

### **Level of detail**

QOF information is collected at an aggregate level for each general practice. There is no patient-specific data within QMAS. For example, QMAS will capture practice-aggregated information on patients with coronary heart disease and practice-aggregated information on patients with diabetes, but it is not possible to identify, or analyse, patients with both of these diseases.

Because the information is collected at an aggregate level, and does not refer to specific patients, the published tables do not include any suppression of small numbers. Even where there are small numbers for the numerators and denominators of individual QOF indicators, these numbers are themselves subject to exemptions and exception reporting (see below). It is not possible to identify information about individual patients from the published figures.

### **Exception reporting**

The QOF enables practices to exclude specific patients from data collected to calculate QOF achievement scores. Patients with specific diseases can be excluded from the denominators of individual QOF indicators if the practice is unable to deliver recommended treatments to those patients (the GMS contract sets out valid exception criteria). Exception reporting is a feature of practice contracts in respect of QOF, but QMAS will not implement functionality on exception reporting until later in 2005. Exception reporting will therefore not be possible for 2004/05 QMAS data.

One approach to inferring levels of exception reporting has been to examine the differences between the practice disease registers held on QMAS and the denominators for individual QOF indicators. However it must be recognised that:

- The definitions of some QOF clinical indicators refer to a subset of the patients on a disease register - for example, some indicators are defined in respect of newly diagnosed patients, or patients within a particular age range.

- The disease register counts on published tables are based on National Prevalence Day (14 February). Denominators for individual indicators can be based on data entered into QMAS (or captured by QMAS) subsequent to National Prevalence Day. It is, therefore, possible to identify indicator denominators for some practices that are greater than the recorded number of patients on the disease register.
- Even if an estimate of patients excluded from indicator denominators is inferred, there is no way of identifying the reasons for these exclusions. QMAS will introduce functionality to report on reasons for exclusions during 2005, but it will never be possible to obtain this information in respect of 2004/05 QMAS data.

### **Practice list sizes**

The 2004/05 QOF tables published by the Health and Social Care Information Centre use practice list sizes supplied to QMAS from the national general practice payments system (NHAIS, also known as the 'Exeter' system) as at 1 January 2005. These are the figures used in QMAS for the list size adjustments in final QOF payment calculations.

### **Secondary use issues**

The published QOF tables for England provide healthcare organisations, analysts and researchers with a potentially rich source of information on the provision of primary care services. However, it is recognised that levels of QOF 'achievement' will be related to a variety of local circumstances, and should be interpreted in the context of those circumstances. Users of the published QOF tables should be particularly careful to undertake comparative analysis on this basis.

The following points, for example, have been raised by local healthcare organisations in consultation with the Health and Social Care Information Centre:

- The ranking of practices on the basis of QOF points achieved, either overall or with respect to areas within the QOF, may be inappropriate. QOF points do not reflect practice workload issues (for example, around list sizes and disease prevalence) - that is why practices' QOF payments include adjustments for such factors.
- Comparative analysis of practice or PCT level QOF achievement may also be inappropriate without taking account of the underlying social and demographic characteristics of the populations concerned. The delivery of services will be related, for example, to population age/sex, ethnicity or deprivation characteristics that are not included in the QOF data collection processes.
- Information on QOF achievement, as represented by QOF points, should also be interpreted with respect to local circumstances around general practice infrastructure. In undertaking comparative or explanatory analysis, users of the data should be aware of any effect of the numbers of partners (including single handers), local recruitment and staffing issues, issues around practice premises, and local IT issues.
- Similarly users of the data should be aware that different types of practice may serve different communities. Comparative analysis should therefore take account of local circumstances, such as numbers on practice lists of student populations, drug users, homeless populations, asylum seekers etc.
- Analysis of co-morbidity (patients with more than one disease) is not possible using QOF data. QOF information is collected at an aggregate level for each general practice. There is no patient-specific data within QMAS. For example, QMAS will capture practice-aggregated information on patients with coronary heart disease and practice-aggregated

information on patients with diabetes, but it is not possible to identify, or analyse, patients with both of these diseases.

- Because the 2004/05 QOF data for England represents the first year of the QOF, it is not possible to provide an indication of trends or levels of improvement in service delivery. The 2004/05 data will form the baseline for analysis of trends in subsequent years. It may be noted that the 2004/05 information does not allow analysis of the extent to which service delivery improved during 2004/05, and that it is possible that relatively low-scoring practices could actually have seen significant improvements. Any such analysis can only be undertaken in the light of local circumstances.
- Underlying all this is the fact that the information held within QMAS, and the source for the published tables, is dependent on diagnosis and recording within practices using practices' clinical information systems.

### **Post-Publication Annotations to Practice-Level QOF Tables**

The 2004/05 publication of QOF tables represents the first use of QMAS data for publication or analysis purposes. Inevitably a small number of data issues came to light that did not affect the prime use of QMAS as a system to support practice QOF payments.

Overall, a very small number of practice codes on the published tables (fewer than 20 out of 8,576) were affected, but the HSCIC recognises that all data issues are significant to the practices and PCTs concerned, and has worked with colleagues in those organisations to highlight the issues identified.

Four types of data issue have been identified:

- Where there was an issue around the sequencing of submissions into QMAS, affecting the selection of the latest submissions for presentation in the published tables.
- Where data in QMAS was recorded against an obsolete practice code - ie a code for a practice that was not active at the end of 2004/05. Although the presence of such codes on QMAS would not affect payments functionality, the presence of these records on the published QOF tables would affect any analysis of the published data.
- Where a PCT has manually assigned zero scores against certain practice codes because practices are part of a joint group for payment purposes, and where all points were assigned to a single practice code within the group.
- Where a practice did not participate in the QOF during 2004/05, but was connected to QMAS towards the end of 2004/05 in preparation for participation in the QOF in 2005/06.

For the practices concerned, the practice level domain summary tables have been annotated with notes, including revised achievement points where appropriate, or a note indicating that obsolete practice codes should be disregarded. The annotations in the practice level domain summary tables should be understood by users of the detailed clinical and organisational practice level tables. Users should also note that tables containing higher level (PCT, SHA and England) figures were based on the initial QMAS extract (pre-annotations).