

National Quality and Outcomes Framework Statistics for England 2006/07

This bulletin presents a summary of data from the national Quality and Outcomes Framework (QOF) during 2006/07. The QOF was first implemented in General Medical Service (GMS) and Personal Medical Service (PMS) practices in April 2004, and the financial year 2006/07 therefore represents the third year of the QOF. The QOF was revised from the start of 2006/07. Information is derived from the Quality Management Analysis System (QMAS), a national system that uses data from general practices to calculate QOF achievement for individual practices.

In 2006/07:	Contents	Page
<ul style="list-style-type: none"> The average QOF points achieved by general practices was 954.5 points, representing 95.5% of the total 1,000 points available to each practice. The average points achieved for the clinical domain was 630.7 points (96.3% of the maximum 655 available). Information on reported QOF prevalence is presented for 8,372 practices in England. The highest recorded prevalence was for hypertension (12.5% of patients registered within these practices). 	<ol style="list-style-type: none"> 1. Introduction to the QOF 2. QOF Information 3. Achievement 4. Prevalence 5. Recommendations around the use of QOF data 6. Links 	<p>1</p> <p>3</p> <p>7</p> <p>18</p> <p>26</p> <p>28</p>

<p>National Quality and Outcomes Framework Statistics for England 2006/07</p> <p>Price: Free</p>	<p>Published by the Information Centre Part of the Government Statistical Service</p> <p>ISBN: 978-1-84636-158-6 Bulletin: IC 2007 13</p> <p>This publication may be requested in large print or other formats. For further information contact: online: www.ic.nhs.uk telephone: 0845 300 6016 email: enquiries@ic.nhs.uk</p> <p>Copyright © 2007, The Information Centre, Prescribing Support Unit. All rights reserved.</p> <p>This work remains the sole and exclusive property of The Information Centre and may only be reproduced where there is explicit reference to the ownership of The Information Centre.</p> <p>This work may only be reproduced in a modified format or published independently with the express written permission of The Information Centre.</p>
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1. Introduction to the Quality and Outcomes Framework

1.1 Overview of the QOF

The national Quality and Outcomes Framework (QOF) was introduced as part of the new General Medical Services (GMS) contract on 1 April 2004. Participation by practices in the QOF is voluntary, though participation rates are very high, with most Personal Medical Services (PMS) practices also taking part.

Information in this bulletin was derived from the Quality Management Analysis System (QMAS), a national system developed by NHS Connecting for Health. QMAS uses data from general practices to calculate individual practices' QOF achievement.

More detailed QOF information for 2006/07, and information for the years 2004/05 and 2005/06, can be found on the Information Centre's web site at www.ic.nhs.uk.

The national QOF is based on the best available research evidence. It is not about performance management of general practice but about resourcing and then rewarding good practice.

From April 2006 a revised QOF was introduced, including new clinical areas and revising some clinical indicators. The revised QOF continued to measure achievement against a set of evidence-based indicators, but allowed a possible maximum score of 1,000 points. The reduction from the previous maximum of 1,050 points was due to the reallocation of resources associated with the 'access bonus' (previously 50 QOF points) to become part of an 'access directed enhanced service'.

The revised QOF measures achievement against 135 indicators and one measure of depth of care, known as holistic care. Practices score points on the basis of achievement against each indicator, up to a maximum of 1,000 points.

Full details of the revision to the QOF are available from the NHS Employers' web site: www.nhsemployers.org/primary/primary-890.cfm

Details of the GMS contract can be found on the Department of Health website (see section 6 of this bulletin).

1.2 Contents of the QOF

The QOF contains four main components, known as domains. Each domain consists of a set of measures of achievement, known as indicators, against which practices score points according to their level of achievement:

The **Clinical Domain** consists of 80 indicators across 19 clinical areas:

- Coronary heart disease (10 indicators)
- Heart failure (3)
- Stroke and transient ischaemic attack (8)
- Hypertension (3)

- Diabetes mellitus (16)
- Chronic obstructive pulmonary disease (5)
- Epilepsy (4)
- Hypothyroidism (2)
- Cancer (2)
- Palliative care (2)
- Mental Health (6)
- Asthma (4)
- Dementia (2)
- Depression (2)
- Chronic kidney disease (4)
- Atrial fibrillation (3)
- Obesity (1)
- Learning disabilities (1)
- Smoking (2)

Indicators in the clinical domain are worth up to a maximum of 655 points (65.5% of the total).

The **Organisational Domain** consists of 43 indicators across five organisational areas:

- Records and information (12 indicators)
- Information for patients (4)
- Education and training (8)
- Practice management (10)
- Medicines management (9)

Indicators in the organisational domain are worth up to 181 points (18.1% of the total).

The **Patient Experience Domain** consists of four indicators that relate to length of consultations and to patient surveys. These indicators are worth up to 108 points (10.8% of the total).

The **Additional Services Domain** consists of eight indicators across four service areas:

- Cervical screening (4 indicators)
- Child health surveillance (1)
- Maternity services (1)
- Contraceptive services (2)

Additional services indicators are worth up to 36 points (3.6% of the total).

The QOF also rewards practices with a **holistic care payment**, based on achievement across the clinical domain. This is worth up to 20 points (2.0% of the total).

2. QOF Information

2.1 The Quality Management Analysis System (QMAS)

QMAS is a national IT system developed by NHS Connecting for Health to support the QOF. The system calculates practice achievement against national targets. It gives general practices, primary care trusts (PCTs) and strategic health authorities (SHAs) objective evidence and feedback on the quality of care delivered to patients.

Through the QOF, general practices are rewarded financially for aspects of the quality of care they provide. QMAS ensures consistency in the calculation of quality achievement and disease prevalence, and is linked to payment systems. This means that payment rules underpinning the new GMS contract are implemented consistently across all systems and all practices in England.

Users of data derived from QMAS should recognise that QMAS was established as a mechanism to support the calculation of practice QOF payments. It is not a comprehensive source of data on quality of care in general practice, but it is potentially a rich and valuable source of such information, providing the limitations of the data are acknowledged.

The Prescribing Support Unit (PSU), part of the Information Centre for health and social care, has worked on behalf of the Department of Health and in collaboration with NHS Connecting for Health to obtain extracts from QMAS to support the publication of QOF information.

This publication of 2006/07 QOF information is based on data for the period April 2006 to March 2007. The data were extracted from the national QMAS system at the end of June 2007 in order to include adjustments agreed between practices and PCTs up to the end of June 2007.

This Statistical Bulletin covers two types of data for England:

- Data relating to QOF achievement.
- Disease prevalence information.

2.2 Data Coverage – QOF Achievement Data

QOF achievement for 2006/07 is presented for 8,372 general practices in England. These practices made an end-of-year submission to QMAS. QOF achievement figures include data automatically extracted from general practice systems by the QMAS system in March 2007 (or otherwise entered into QMAS), and data adjustments for the year 2006/07 submitted between April and June 2007.

Where comparisons are made in this document to QOF achievement in the previous two years, note that there were 8,576 practices in the 2004/05 dataset and 8,409 practices in the 2005/06 dataset. (Note also that any year-on-year comparisons will be affected by the revision to the QOF for 2006/07 – where a practice's underlying achievement against an indicator is unchanged, the QOF points awarded will differ

because of a change to the required achievement thresholds.)

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. PMS practices with local contractual arrangements are included in the published 2006/07 QOF information, and in the figures presented in this bulletin.

2.3 QOF Achievement Data for PMS Practices

Where PMS practices use the national QOF, their 2006/07 achievement (in terms of the 1,000 QOF points available) is subject to a deduction of approximately 104.7 points before QOF points are turned into QOF payments. This is because many PMS practices already have a chronic disease management allowance, a sustained quality allowance and a cervical cytology payment included in their baseline payments. (GMS practices do not receive such payments, but receive similar payments through the QOF). To ensure comparability between GMS and PMS practices, the QOF deduction for PMS practices ensures that they do not receive the same payments twice. Because this bulletin covers QOF achievement and not payments, all QOF achievement shown is based on QOF points prior to PMS deductions. This is to allow comparability in levels of achievement – so that where GMS and PMS practices have maximum QOF achievement, both are regarded as having achieved the maximum 1,000 points.

2.4 QOF Prevalence Data

Prevalence information for 2006/07 is presented in this bulletin for the 8,372 practices that were in the QOF achievement dataset.

For 17 of the 19 areas of the clinical domain, QMAS captures the number of patients on the clinical register for each practice. (The other two clinical areas, depression and smoking indicators, are based on subsets of other clinical registers.) The number of patients on the clinical registers can be used to calculate measures of disease prevalence, expressing the number of patients on each register as a percentage of the number of patients on practices' lists.

The clinical registers used to calculate prevalence were those submitted to QMAS at the same time as achievement submissions (ie end of year submissions). These are not 'national prevalence day' (14 February 2007) submissions. Year-end register submissions were used to achieve greater consistency between prevalence and achievement datasets. While QMAS uses disease prevalence to perform an adjustment in calculating practices' QOF payments, for national reporting of QOF information, the Information Centre has presented only raw (unadjusted) clinical prevalence as recorded by the practices at year-end. Therefore:

$$\text{Raw prevalence} = (\text{number on clinical register} / \text{number on practice list}) * 100$$

QOF registers do not necessarily equate to prevalence, as may be defined by

epidemiologists. QOF registers are constructed to underpin indicators on quality of care. QMAS only uses Read codes that are common to all three versions (version 2, version 3 and CVT). It is difficult to interpret year-on-year changes in the size of QOF registers, for example a gradual rise in QOF prevalence could be due partly to epidemiological factors (such as an ageing population) or due partly to increased case finding.

Five clinical areas within the QOF (diabetes, epilepsy, chronic kidney disease, obesity and learning disabilities) are based on clinical registers that relate to specific age groups. Diabetes registers are based on patients aged 17 and over; epilepsy, chronic kidney disease and learning disabilities registers are based on patients aged 18 and over; and obesity registers are based on patients aged 16 and over. Except where specifically noted, prevalence rates shown in this bulletin for these five clinical areas are based on whole practice list sizes (all ages) as the denominator. The Information Centre will provide additional analysis, based on appropriate age-banded list size information to researchers or information users who require more precise prevalence rates for these five clinical areas.

2.5 Practice List Sizes

The 2006/07 QOF information published by the Information Centre includes practice list sizes supplied to QMAS from National Health Applications and Infrastructure Services (NHAIS), the national general practice payments system, as at 1 January 2007. These figures are used in QMAS for list size adjustments in QOF payment calculations. In the context of this publication, these list sizes are used as the basis for the calculation of raw clinical prevalence.

The sum of the practice list sizes for the 8,372 practices included in the 2006/07 QOF publication is 53,681,098. This represents 99.8% of registered patients in England (based on registration data from the ePACT system of the Prescription Pricing Division of the NHS Business Services Authority, January to March 2007).

2.6 Level of Detail

There is no patient-specific data in QMAS because this is not required to support the QOF. For example, QMAS captures aggregate information for each practice on patients with coronary heart disease and on patients with diabetes, but it is not possible to identify or analyse information on individual patients. It is not possible, for example, to identify the number of patients with both of these diseases.

2.7 Patient Exceptions

Practices may exclude specific patients from data collected to calculate QOF achievement scores within clinical areas. For example, patients on a specific clinical register can be excluded from individual QOF indicators if a patient is unsuitable for treatment, is newly registered with the practice, is newly diagnosed with a condition, or in the event of informed dissent. The GMS contract sets out valid exception criteria. National level information on 2006/07 QOF 'exception reporting' will be made available by the Information Centre later in 2007.

2.8 Organisational Presentation

Information in this bulletin is presented at strategic health authority and primary care trust level, as well as in respect of practices. The information presented refers to the NHS organisational structure as at 31 March 2007, when there were 10 strategic health authorities and 152 primary care trusts following organisational change during 2006/07.

3. Achievement

3.1 Overall Achievement

Practice achievement

In 2006/07, practices in England achieved an average of 954.5 points, 95.5% of the 1,000 available. This compares with an average achievement of 96.2% in 2005/06 and 91.3% in 2004/05, before the revision of the QOF.

In 2006/07, the maximum score of 1,000 points was achieved by 427 practices (5.1%). This compares with the 813 practices (9.7%) that achieved the maximum 1,050 points in 2005/06, and the 222 practices (2.6%) of practices that achieved the maximum 1,050 points in 2004/05, the first year of the QOF.

The median score in 2006/07 was 980.9 points.

Chart 1 shows the distribution of total scores in 2006/07. The percentage of practices that fall within a range appear above each bar. For example, the axis label '950 to < 1000' shows that 68.5% of practices achieved scores ranging from 950 points to less than 1,000 points in 2006/07. The final bar represents the percentage of practices achieving the maximum of 1,000 points.

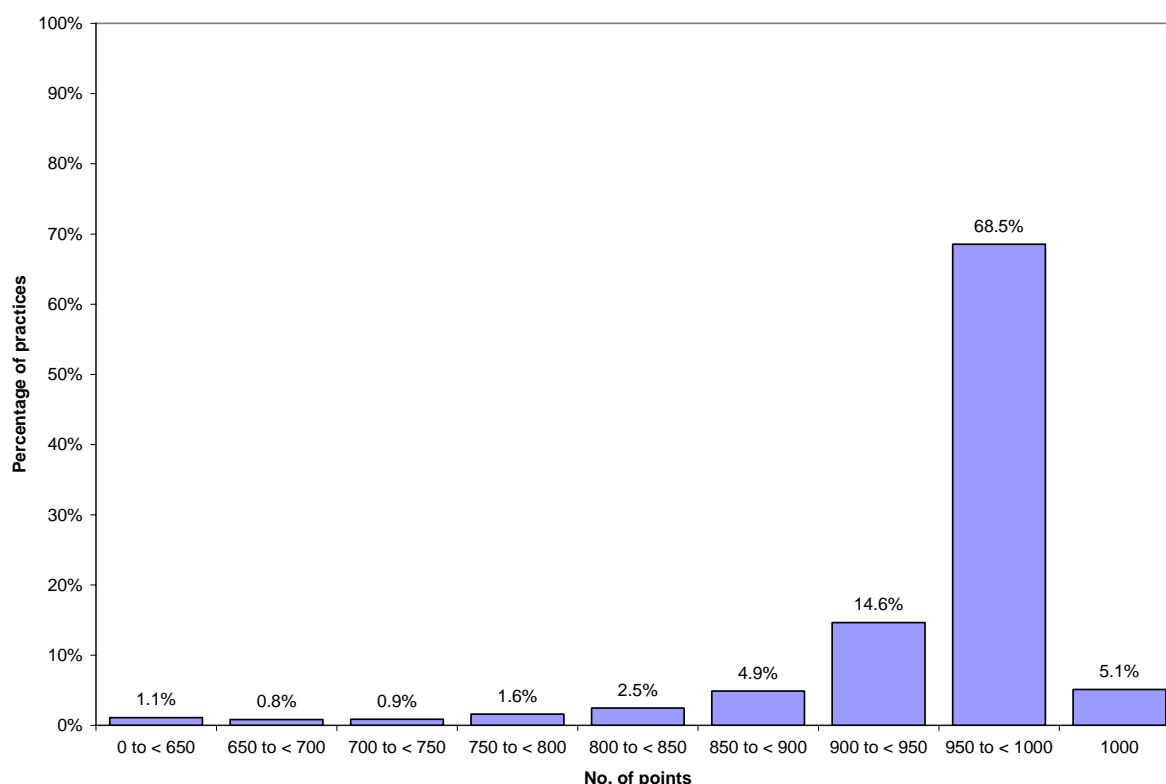


Chart 1: Distribution of the total points achieved by practices in England in 2006/07

Primary Care Trust level achievement

In 2006/07, the average number of points achieved by practices in each of the 152 PCTs ranged from 858.6 points (85.9% of points available) to 986.4 points (98.6% of points available). This compares with a range of 86.6% to 99.7% in 2005/06, when the QOF was based on a maximum of 1,050 points and when there were 303 PCTs.

Strategic Health Authority level achievement

In 2006/07, the average number of points achieved by practices in each of the 10 SHAs ranged from 934.0 points (93.4% of points available) to 975.8 points (97.6% of points available). This compares with a range of 93.5% to 99.1% in 2005/06, when the QOF was based on a maximum of 1,050 points and when there were 28 SHAs.

3.2 Domain Level Achievement

In 2006/07, the average number of points achieved by practices in England for each QOF domain was as follows:

- Average points achieved per practice in the **Clinical Domain** was 630.7, representing 96.3% of the 655 points available. This compares with an average for 2005/06 of 97.1% (when the clinical domain allowed a maximum of 550 points).
- Average points achieved per practice in the **Organisational Domain** was 167.5, representing 92.5% of the 181 points available. This compares with an average for 2005/06 of 93.4% (when the organisational domain allowed a maximum of 184 points).
- Average points achieved per practice in the **Patient Experience Domain** was 103.5, representing 95.9% of the 108 points available. This compares with an average for 2005/06 of 96.9% (when the patient experience domain allowed a maximum of 100 points).
- Average points achieved per practice in the **Additional Services Domain** was 34.7, representing 96.5% of the 36 points available. This compares with an average for 2005/06 of 97.0% (also from a maximum of 36).
- Average points achieved per practice for **Holistic Care** was 18.1, representing 90.6% of the 20 points available.

3.3 Clinical Domain Achievement

The clinical domain has the largest number of points available, 655 from a maximum of 1,000 (65.5%), across 19 clinical areas.

Practice achievement

The average points achieved per practice for the clinical domain in 2006/07 was 630.7 points, (96.3% of the maximum 655), compared with 97.1% in 2005/06 (when the clinical domain was worth 550 points). The maximum of 655 points was achieved by 1,213 practices (14.5%) in 2006/07; 19.8% of practices achieved maximum points for the clinical domain in 2005/06.

Chart 2 shows the distribution of points achieved by practices.

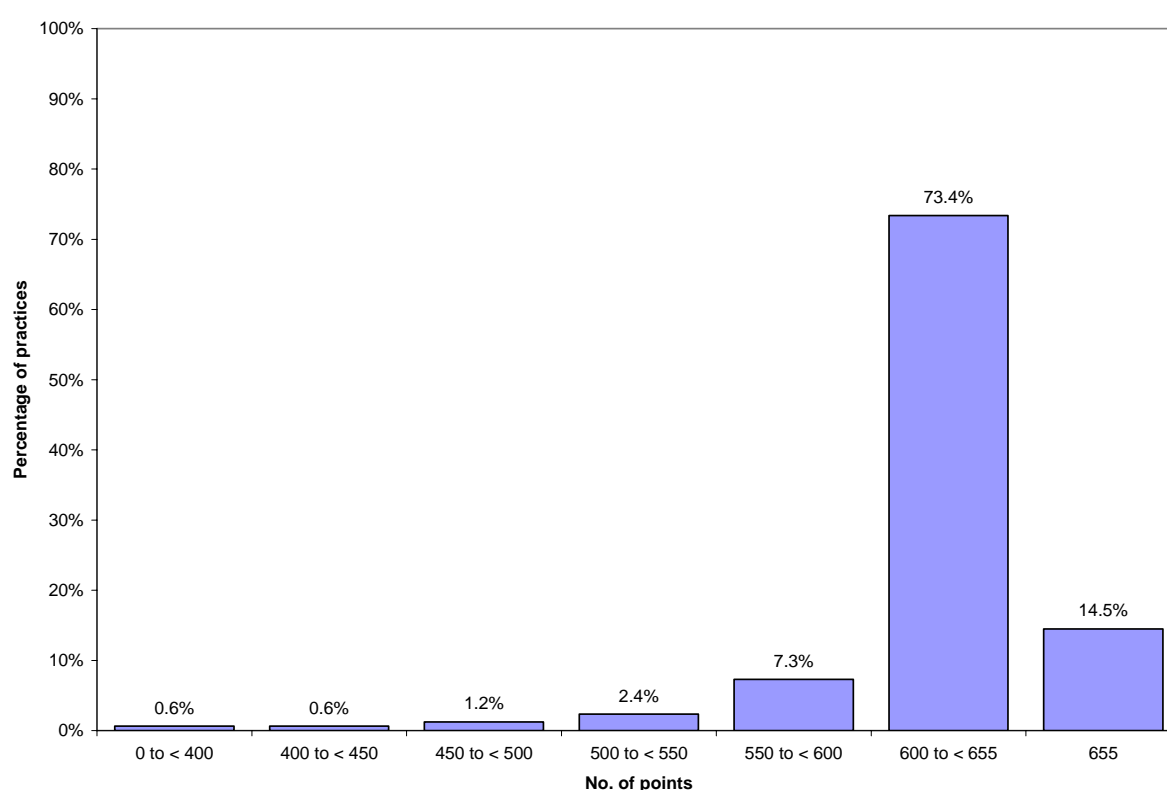


Chart 2: Distribution of the points achieved in the clinical domain by practices in England in 2006/07

Primary Care Trust and Strategic Health Authority level achievement

The range of achievement at SHA, PCT and practice level for the clinical domain is shown in Table 1. For 2006/07, the three measures are presented as points and as a percentage of the 655 total points available for the domain. For 2005/06 (when the clinical domain was worth 550 points), the equivalent percentage only is shown.

	2005/06	2006/07
Practices		
Median point score	99.1%	646.7 (98.7%)
Lower quartile	97.0%	627.8 (95.9%)
Upper quartile	99.9%	653.2 (99.7%)
PCTs		
Median point score	98.0%	632.6 (96.6%)
Lower quartile	96.6%	623.5 (95.2%)
Upper quartile	99.0%	639.9 (97.7%)
SHAs		
Median point score	97.2%	631.8 (96.5%)
Lower quartile	96.5%	630.8 (96.3%)
Upper quartile	98.2%	635.8 (97.1%)

Table 1: Achievement in the clinical domain at SHA, PCT and practice level in 2005/06 (maximum points = 550) and 2006/07 (maximum points = 655)

3.3.1 Disease Areas within the Clinical Domain

Practice achievement

Chart 3 shows the mean practice score as a proportion of the maximum available for each of the 19 clinical areas within the clinical domain of the QOF.

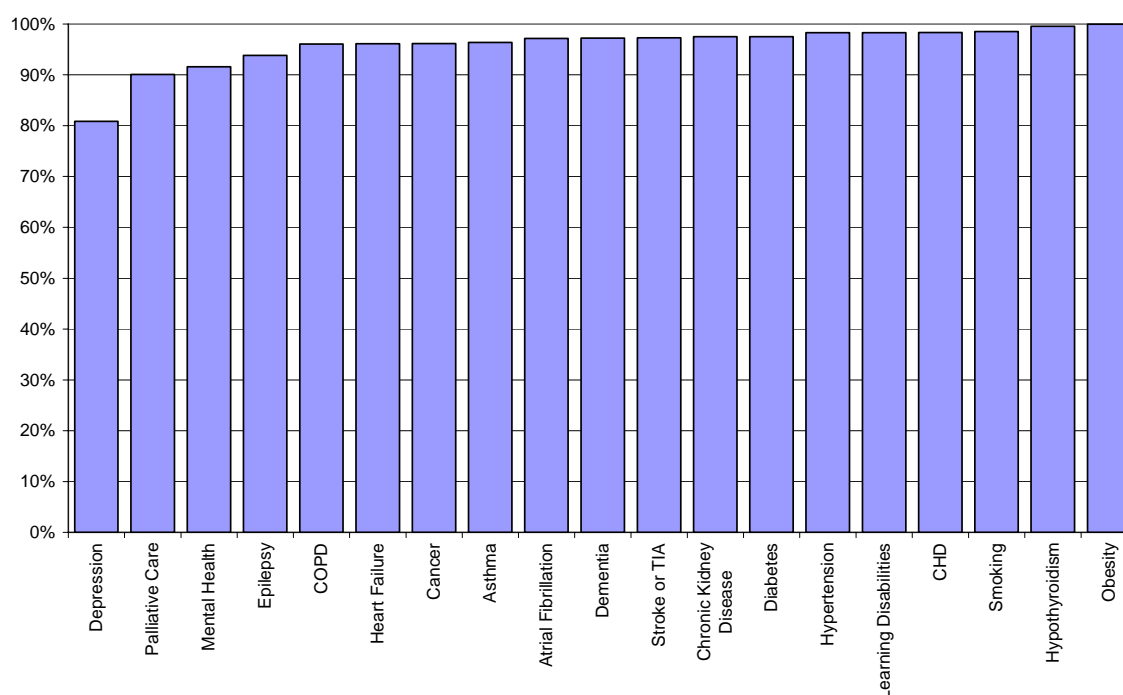


Chart 3: Percentage of points scored for each disease area by practices in England in 2006/07

3.4 Organisational Domain

The organisational domain has 181 points available from five indicator groups, representing 18.1% of the total 1,000 points available to practices.

Practice achievement

The average points achieved per practice for the organisational domain in 2006/07 was 167.5 points, (92.5% of the maximum 181), compared with 93.4% in 2005/06 (when the organisational domain was worth 184 points). The maximum of 181 points was achieved by 736 practices (8.8%) in 2006/07; 24.9% of practices achieved maximum points for the organisational domain in 2005/06.

Chart 4 shows the distribution of points achieved by practices.

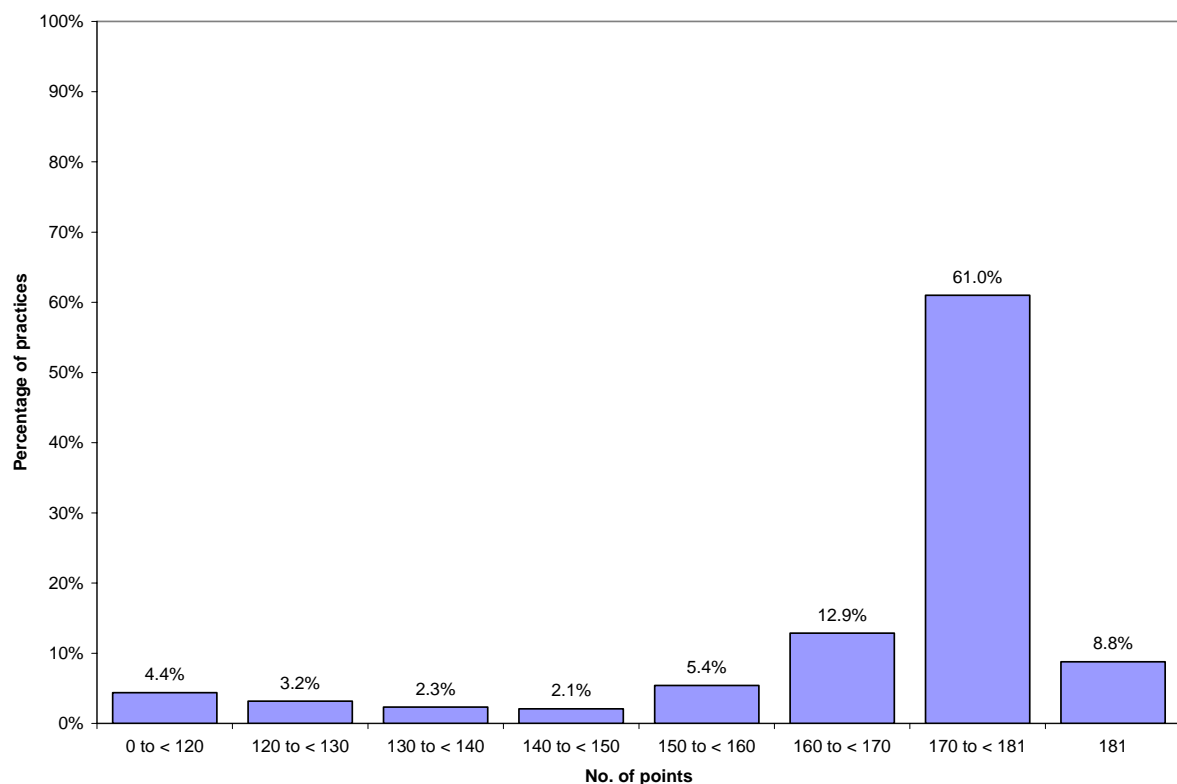


Chart 4: Distribution of the points achieved in the organisational domain by practices in England in 2006/07

Primary Care Trust and Strategic Health Authority level achievement

The range of achievement at SHA, PCT and practice level for the organisational domain is shown in Table 2. For 2006/07, the three measures are presented as points and as a percentage of the 181 total points available for the domain. For 2005/06 (when the organisational domain was worth 184 points), the equivalent percentage only is shown.

	2005/06	2006/07
Practices		
Median point score	97.3%	175.2 (96.8%)
Lower quartile	92.7%	167.3 (92.4%)
Upper quartile	99.7%	178.5 (98.6%)
PCTs		
Median point score	94.7%	168.8 (93.2%)
Lower quartile	91.7%	165.2 (91.3%)
Upper quartile	96.6%	172.2 (95.1%)
SHAs		
Median point score	93.3%	167.3 (92.4%)
Lower quartile	92.4%	166.0 (91.7%)
Upper quartile	95.0%	171.6 (94.8%)

Table 2: Achievement in the organisational domain at SHA, PCT and practice level in 2005/06 (maximum points = 184) and 2006/07 (maximum points = 181)

3.4.1 Indicator Groups within the Organisational Domain

Table 3 shows the mean practice achievement in each indicator group of the organisational domain, presented as a percentage of the total points available in each indicator group. The total number of points available changed from 184 to 181 between 2005/06 and 2006/07. Note also that there were changes to the individual indicators that made up these indicator groups, therefore affecting the year-on-year comparison.

Indicator Group	Mean Practice Achievement 2005/06	Mean Practice Achievement 2006/07
Records and Information	92.5%	90.4%
Information for Patients	91.2%	93.8%
Education and Training	93.6%	94.9%
Practice Management	97.0%	97.0%
Medicines Management	93.7%	93.1%

Table 3: Percentage of points achieved in each indicator group of the organisational domain by practices in England in 2005/06 and 2006/07

3.5 Patient Experience Domain

The patient experience domain has 108 points available from four indicators, representing 10.8% of the total 1,000 points available to practices.

Practice achievement

The average points achieved per practice for the patient experience domain in 2006/07 was 103.5 points (95.9% of the maximum), compared with 96.9% in

2005/06 (when there were differences in the indicators comprising this domain, and when this domain was worth 100 points). The maximum of 108 points was achieved by 7,640 practices (91.3%); 89.9% of practices achieved maximum points for the patient experience domain in 2005/06.

Chart 5 shows the distribution of points achieved by practices. The four indicators in the patient experience domain score either zero or the maximum number of points. This means that the domain score can take only a limited number of values and so Chart 5 shows only discrete values rather than ranges.

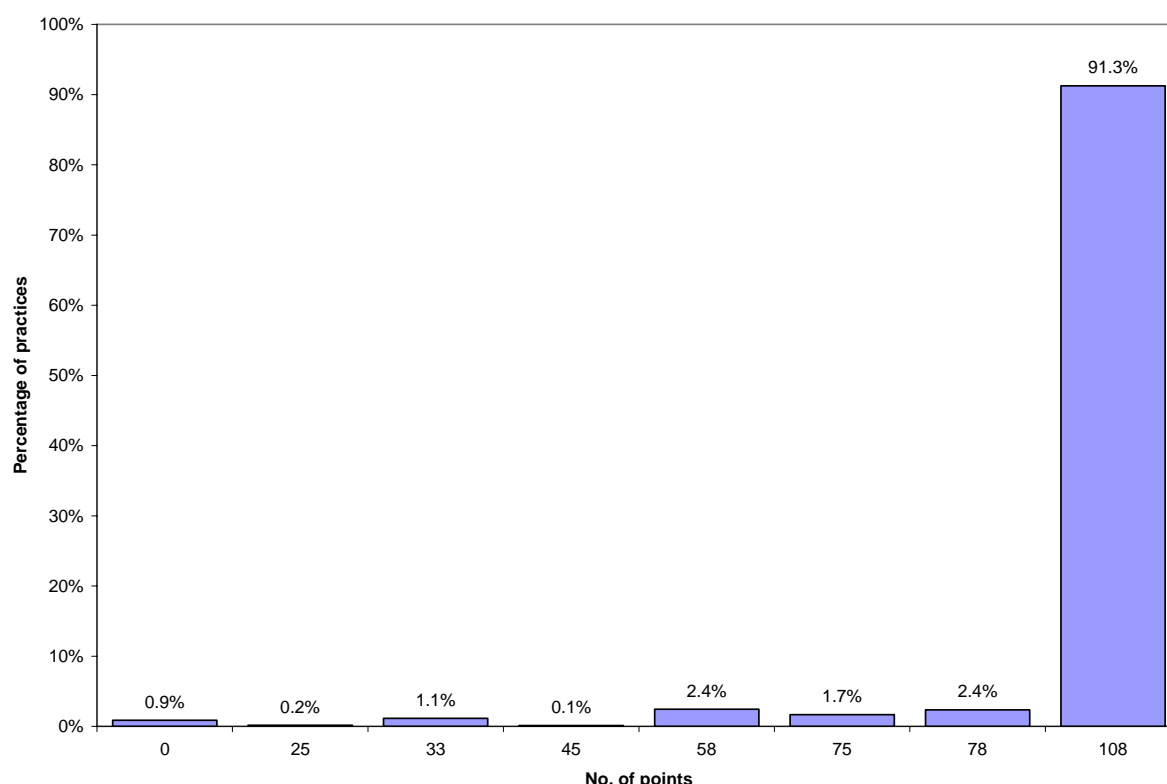


Chart 5: Distribution of the points achieved in the patient experience domain by practices in England in 2006/07

Primary Care Trust and Strategic Health Authority level achievement

The range of achievement by SHA, PCT and practice level for the patient experience domain is shown in Table 4. For 2006/07, the three measures are presented as points and as a percentage of the total points available for the domain. For 2005/06, the equivalent percentage only is shown. By definition, half of the organisations lie between the lower and upper quartile – each quartile representing 25% of the organisations. Therefore, the 100% achievement shown at practice level for the median and the lower and upper quartiles is due to over 75% of practices achieving the maximum points (which is illustrated in Chart 5).

	2005/06	2006/07
Practices		
Median point score	100%	108.0 (100%)
Lower quartile	100%	108.0 (100%)
Upper quartile	100%	108.0 (100%)
PCTs		
Median point score	98.3%	105.3 (97.5%)
Lower quartile	95.6%	102.0 (94.5%)
Upper quartile	100.0%	106.9 (99.0%)
SHAs		
Median point score	97.0%	104.5 (96.8%)
Lower quartile	96.2%	103.8 (96.1%)
Upper quartile	97.8%	105.7 (97.9%)

Table 4: Achievement in the patient experience domain at SHA, PCT and practice level in 2005/06 (maximum points = 100) and 2006/07 (maximum points = 108)

3.6 Additional Services Domain

The additional services domain is the smallest domain in terms of available points, with a total of 36 points available from four indicator groups, and representing 3.6% of the total 1,000 points available to practices. The indicators comprising the cervical screening indicator group of this domain were revised for 2006/07.

Practice achievement

The average points achieved per practice for the additional services domain in 2006/07 was 34.7 points, (96.5% of the maximum 36), compared with 34.9 points (97.0%) in 2005/06. The maximum of 36 points was achieved by 6,003 practices (71.7%); 69.3% of practices achieved maximum points for the additional services domain in 2005/06.

Chart 6 shows the distribution of points achieved by practices.

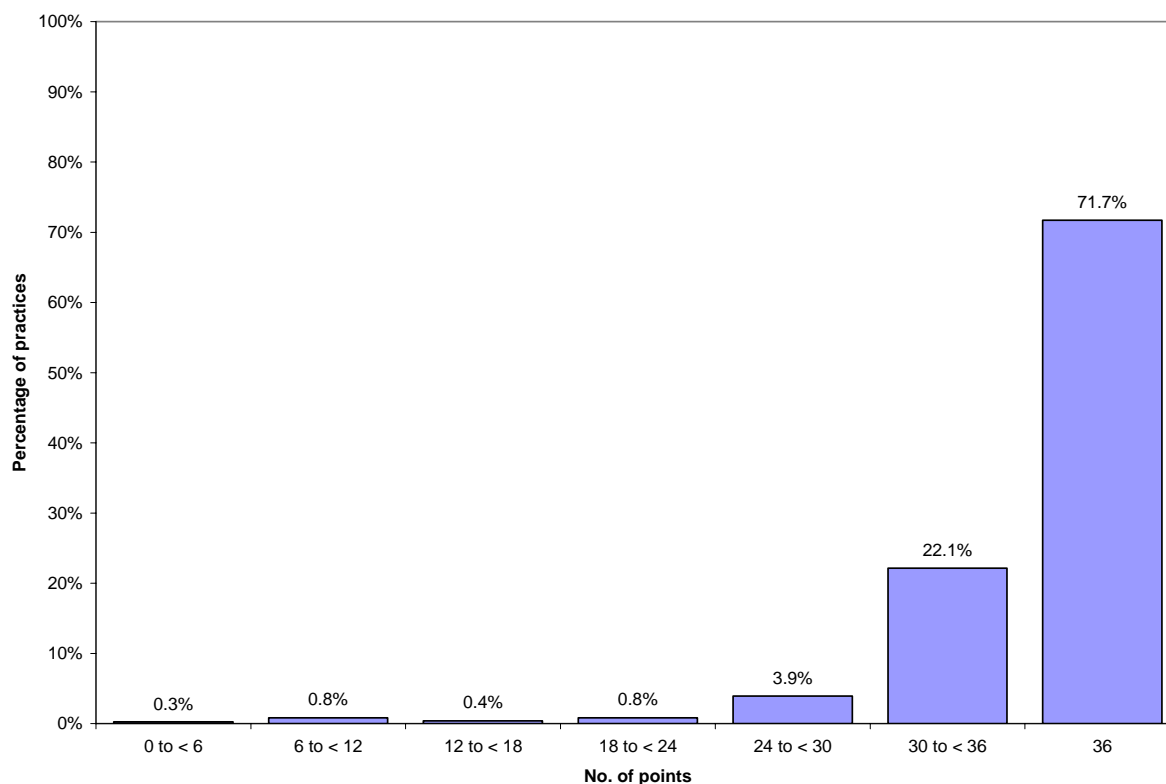


Chart 6: Distribution of the points achieved in the additional services domain by practices in England in 2006/07

Primary Care Trust and Strategic Health Authority level achievement

The range of achievement at SHA, PCT and practice level for the additional services domain is shown in Table 5. The three measures are presented as points and as a percentage of the 36 total points available for the domain. For 2005/06, the equivalent percentage only is shown.

	2005/06	2006/07
Practices		
Median point score	100.0%	36.0 (100%)
Lower quartile	98.9%	35.7 (99.3%)
Upper quartile	100.0%	36.0 (100%)
PCTs		
Median point score	98.9%	35.3 (98.1%)
Lower quartile	96.9%	34.3 (95.3%)
Upper quartile	99.7%	35.7 (99.2%)
SHAs		
Median point score	98.0%	35.2 (97.7%)
Lower quartile	96.5%	34.9 (97.0%)
Upper quartile	98.8%	35.5 (98.7%)

Table 5: Achievement in the additional services domain at SHA, PCT and practice level in 2005/06 (maximum points = 36) and 2006/07 (maximum points = 36)

3.6.1 Indicator Groups within the Additional Services Domain

Table 6 shows the mean practice achievement in each indicator group of the additional services domain, as a percentage of the total points available in each indicator group.

Indicator Group	Mean Practice Achievement 2005/06	Mean Practice Achievement 2006/07
Cervical Screening	97.0%	96.3%
Child Health Surveillance	94.7%	94.6%
Maternity Services	99.3%	98.5%
Contraceptive Services	98.3%	98.4%

Table 6: Percentage of points achieved in each indicator group of the additional services domain by practices in England in 2005/06 and 2006/07

3.7 Holistic Care

Holistic care payments to practices are designed to recognise the breadth of achievement across the clinical domain, and 20 QOF points are available. To calculate holistic care points, the practice's points totals in each of the clinical areas of the clinical domain are ranked on the basis of the proportion of available points achieved. The points relating to the highest proportion are ranked first. The proportion relating to the points total that is third-to-last is then taken as the proportion of 20 holistic care points to which the practice is entitled as the basis for its holistic care payment.

Practice achievement

The average holistic care points achieved per practice in 2006/07 was 18.1 points (90.6% of the maximum of 20). Maximum points were achieved by 3,145 practices (37.6%).

Chart 7 shows the distribution of holistic care points achieved by practices.

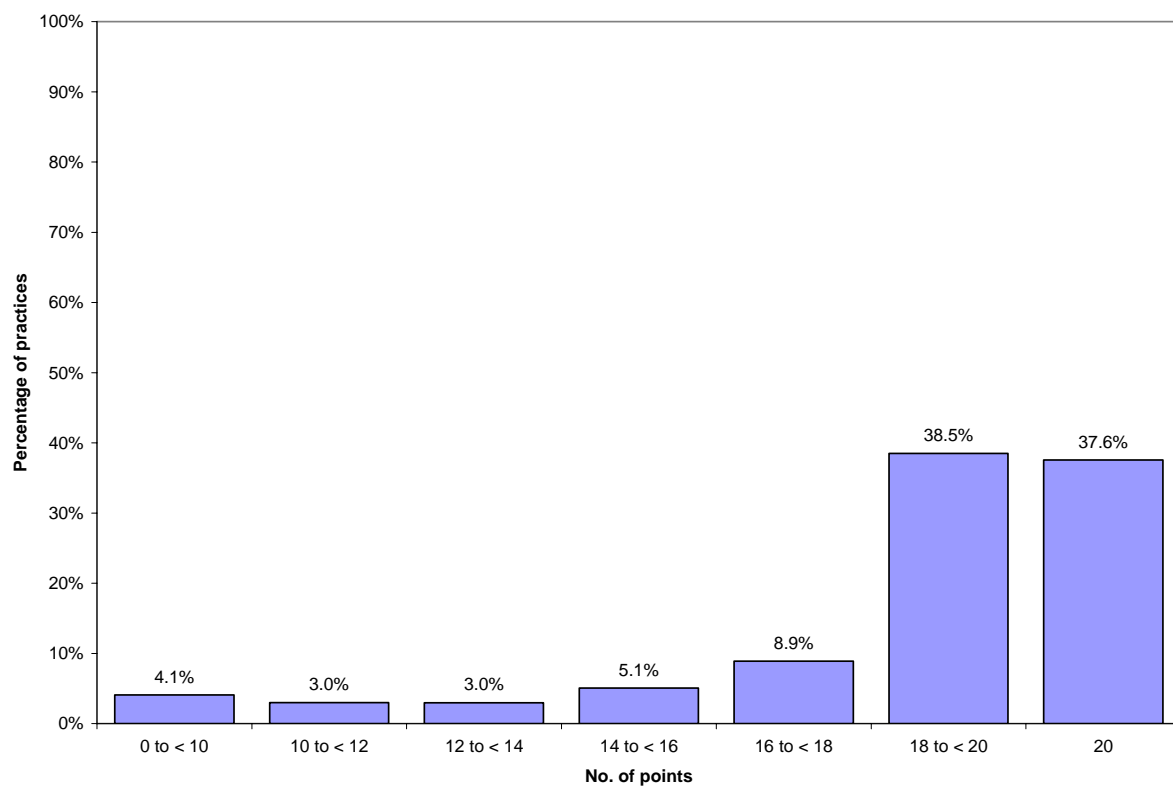


Chart 7: Distribution of the points achieved for holistic care by practices in England in 2006/07

4. Prevalence

4.1 Definition of Prevalence

QOF prevalence information for 2006/07 is based on the 8,372 practices that were in the QOF achievement dataset.

For 17 of the 19 areas of the clinical domain, QMAS captures the number of patients on the clinical register for each practice. (The other two clinical areas, depression and smoking indicators, are based on subsets of other clinical registers.) The number of patients on the clinical registers can be used to calculate measures of disease prevalence, expressing the number of patients on each register as a percentage of the number of patients on practices' lists.

Raw prevalence for each clinical area is defined as a percentage of patients on a practice list:

$$\text{Raw prevalence} = (\text{number on clinical register} / \text{number on practice list}) * 100$$

4.2 Notes on QOF Prevalence

It is important to emphasise that QOF registers do not necessarily equate to prevalence, as may be defined by epidemiologists. *For example, prevalence figures based on QOF registers (eg obesity) may differ from prevalence figures from other sources because of coding or definitional issues.* QOF registers are constructed to underpin indicators on quality of care. QMAS only uses Read codes that are common to all three versions (version 2, version 3 and CVT). It is difficult to interpret year-on-year changes in the size of QOF registers, for example a gradual rise in QOF prevalence could be due partly to epidemiological factors (such as an ageing population) or due partly to increased case finding.

Other factors in interpreting information on specific registers include:

- The diabetes register (indicator DM19) was redefined for 2006/07 to state that GPs should be able to identify patients as having either Type I or Type II diabetes. Although the QOF diabetes register does not distinguish between Type I and Type II, there was a change to the underlying coding rules which could affect the extent to which QOF diabetes prevalence for 2006/07 is comparable with previous years.
- Some clinical areas have 'resolution codes' to reflect the nature of diseases. Others, such as the cancer register, do not.
- Some clinical registers are newly defined for 2006/07. There may be a wider than normal variation in prevalence for these registers, which could be due to variations in clinical practice, coding, clinical systems and the availability of testing. Variations may reduce over time as practices become familiar with the new registers.

- To be on the asthma register, patients need a diagnosis of asthma and a prescription for an asthma drug within the year.
- Five clinical areas within the QOF (diabetes, epilepsy, chronic kidney disease, obesity and learning disabilities) are based on clinical registers that relate to specific age groups. Diabetes registers are based on patients aged 17 and over; epilepsy, chronic kidney disease and learning disabilities registers are based on patients aged 18 and over; and obesity registers are based on patients aged 16 and over. Except where specifically noted, prevalence rates shown in this bulletin for these five clinical areas are based on whole practice list sizes (all ages) as the denominator. The Information Centre will provide additional analysis, based on appropriate age-banded list size information to researchers or information users who require more precise prevalence rates for these five clinical areas.
- Many patients are likely to suffer from co-morbidity, ie diagnosed with more than one of the clinical conditions included in the QOF clinical domain. Robust analysis of co-morbidity is not possible using QOF data because QOF information is collected at an aggregate level for each practice; there is no patient-specific data within QMAS. For example, QMAS captures aggregated information for each practice on patients with coronary heart disease and on patients with diabetes, but it is not possible to identify or analyse patients with both of these diseases. The qualification to this statement is that from 2006/07 the QOF clinical domain includes depression and smoking indicators that are based on some patients who are on the CHD and/or diabetes registers (depression) and some patients who are on any (or any combination of) the CHD, stroke, hypertension, diabetes, COPD and asthma registers (smoking indicators).

4.3 National QOF Prevalence Rates

The 2006/07 QOF prevalence rates for England are presented in Table 7:

Clinical Area	National Raw Prevalence 2005/06	National Raw Prevalence 2006/07
Coronary Heart Disease (CHD)	3.6%	3.5%
Heart Failure	-	0.8%
Stroke	1.6%	1.6%
Hypertension (BP)	12.0%	12.5%
Diabetes *	3.6%	3.7%
Chronic Obstructive Pulmonary Disease (COPD)	1.4%	1.4%
Epilepsy *	0.6%	0.6%
Hypothyroidism	2.4%	2.5%
Cancer	0.7%	0.9%
Palliative Care	-	0.1%
Mental Health	0.6%	0.7%
Asthma	5.8%	5.8%
Dementia	-	0.4%
Chronic Kidney Disease *	-	2.4%
Atrial Fibrillation	-	1.3%
Obesity *	-	7.4%
Learning Disabilities *	-	0.3%

Table 7: National prevalence rates for each disease area

*** Footnote to Table 7: Diabetes registers are based on patients aged 17 and over; epilepsy, chronic kidney disease and learning disabilities registers are based on patients aged 18 and over; and obesity registers are based on patients aged 16 and over. Prevalence rates shown for these five clinical areas are based on whole practice list sizes (all ages) as the denominator.**

Five of the clinical areas in Table 7 have QOF registers that are age-specific, but have prevalence rates shown that refer to whole practice list sizes (all ages) as the denominator. This is because QOF list size information available from QMAS does not include a list size breakdown by age band. In order to calculate a more robust prevalence rate for these five clinical areas, based on the appropriate age-specific list sizes, it is necessary to use age-banded list sizes from an external data source.

Age-banded list sizes were therefore obtained from the Prescription Pricing Division (PPD) of the NHS Business Services Authority for the practices included in the 2006/07 QOF prevalence dataset (except for 25 practice codes which were in the QOF dataset but not in the PPD dataset). The PPD age-groups included the age band 15-24, and it was necessary to use a proportion of this age band to estimate the numbers aged 17-24 (for diabetes), 18-24 (for epilepsy, chronic kidney disease and learning disabilities) and 16-24 (for obesity). These estimates (assuming the number of people in the 15-24 age band is evenly spread across individual ages) were added to the numbers in age bands for 25 years and over to give a new denominator for the calculation of an alternative prevalence rate for the five clinical areas whose registers are age-specific:

- For England, the prevalence of obesity for those 16 and over is estimated as 9.1% (compared with 7.4% in Table 7).
- For England, the prevalence of diabetes for those 17 and over is estimated as 4.5% (compared with 3.7% in Table 7).
- For England, the prevalence of epilepsy for those 18 and over is estimated as 0.8% (compared with 0.6% in Table 7).
- For England, the prevalence of chronic kidney disease for those 18 and over is estimated as 3.0% (compared with 2.4% in Table 7).
- For England, the prevalence of learning disability for those 18 and over is estimated as 0.3% (also 0.3% in Table 7, following rounding).

4.4 Variation in QOF Prevalence Rates

The distribution of prevalence at practice level for 2006/07 is shown in Chart 8. Variation at PCT and SHA level is shown in Chart 9 and Chart 10. The black boxes show the range from the lower to upper quartiles (50% of practices will lie between these limits) while the “whiskers” show the range from the minimum to maximum values.

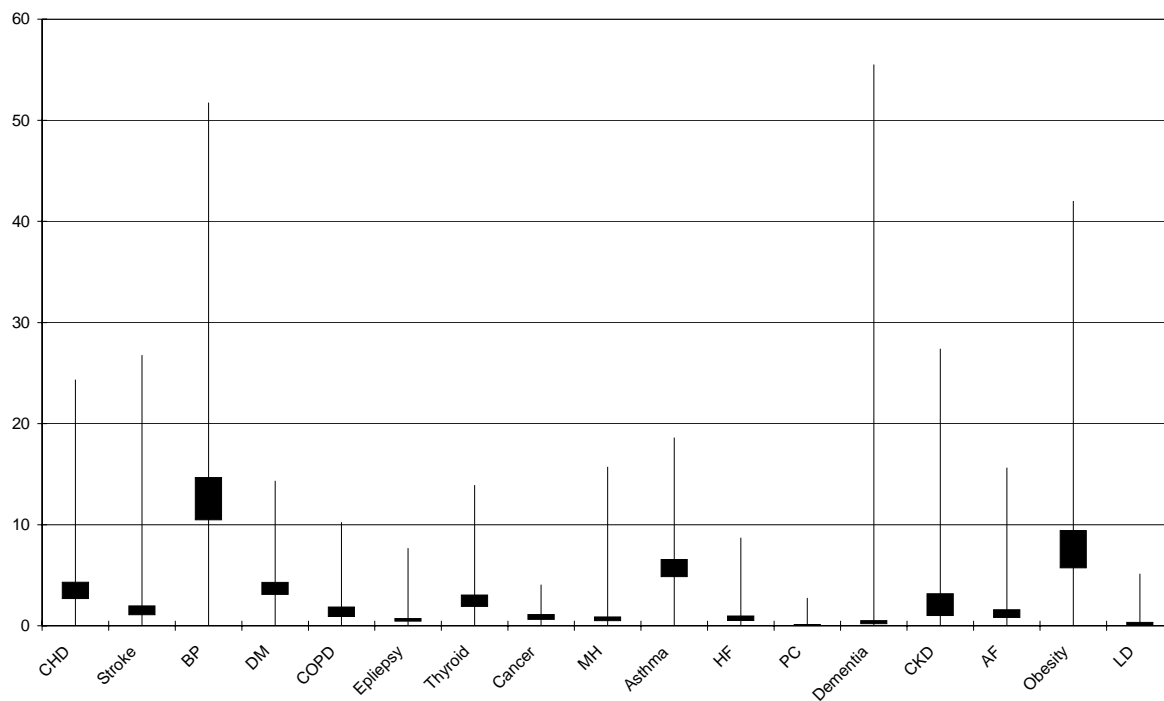


Chart 8: Variation in practice prevalence values for England, 2006/07

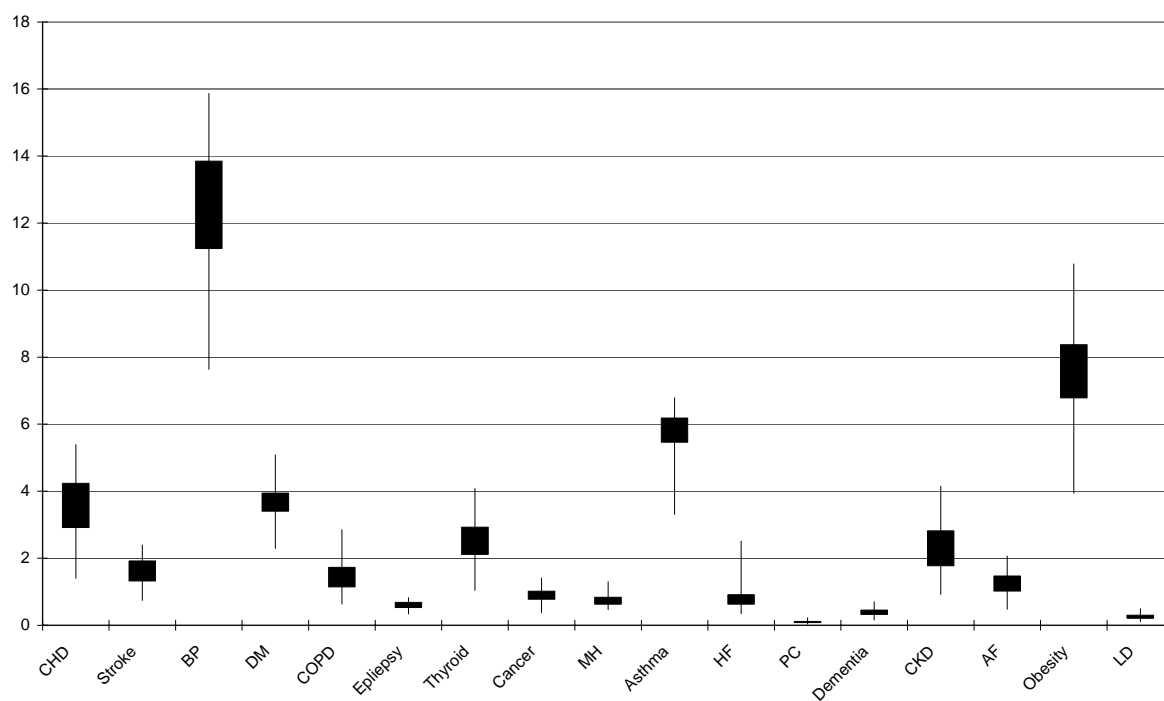


Chart 9: Variation in primary care trust prevalence values for England, 2006/07

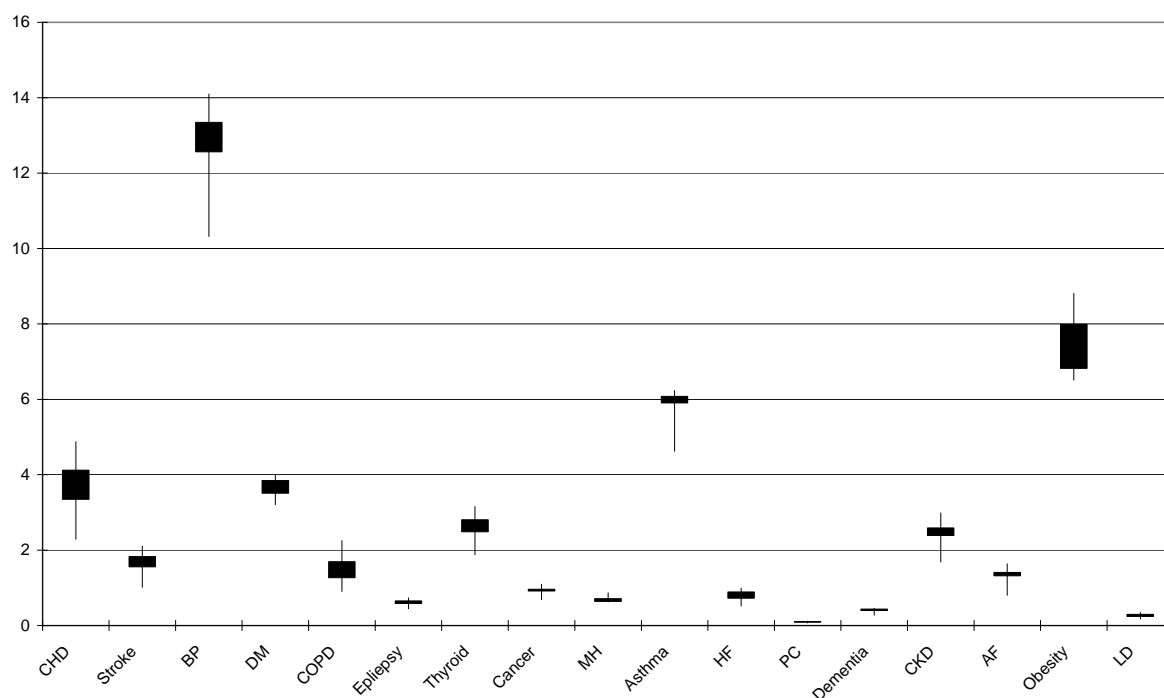


Chart 10: Variation in strategic health authority prevalence values for England, 2006/07

Chart 11 presents a summary of the recorded prevalence rate for the disease areas of the QOF for England in 2006/07.

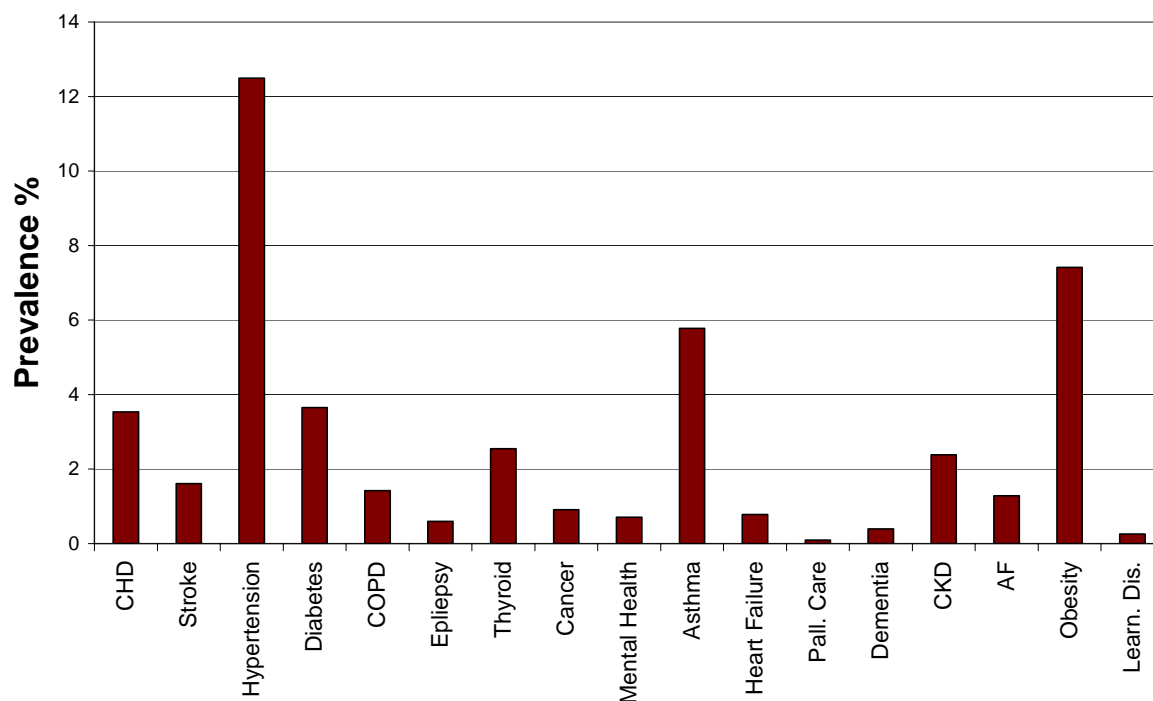
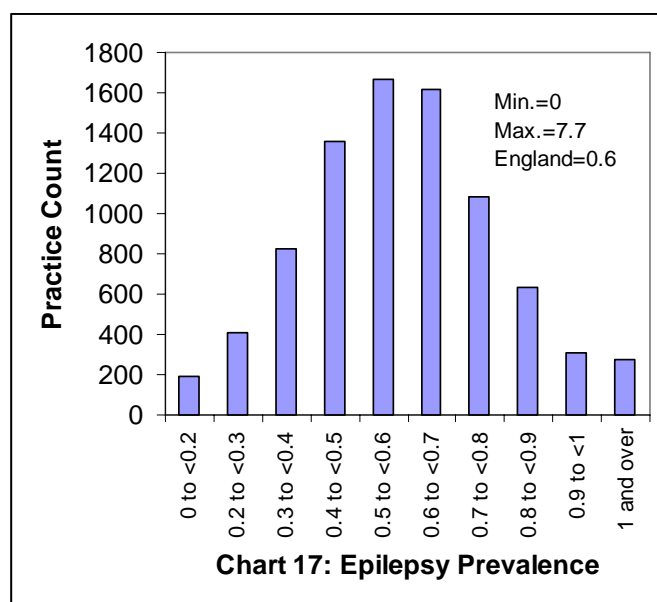
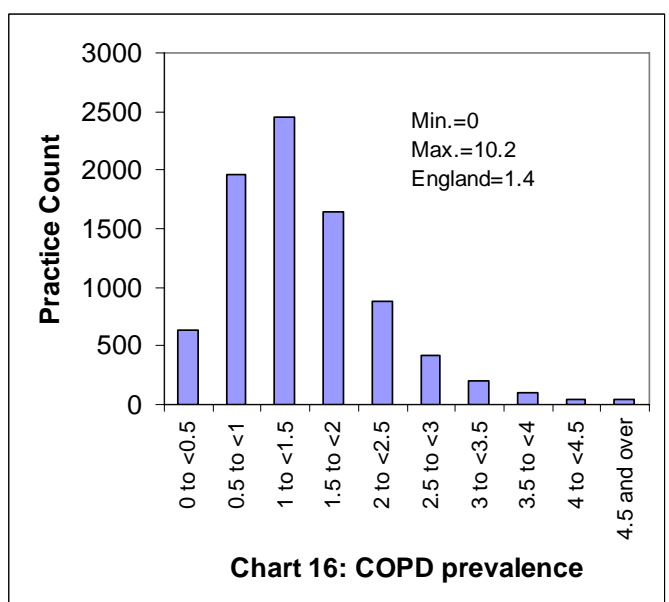
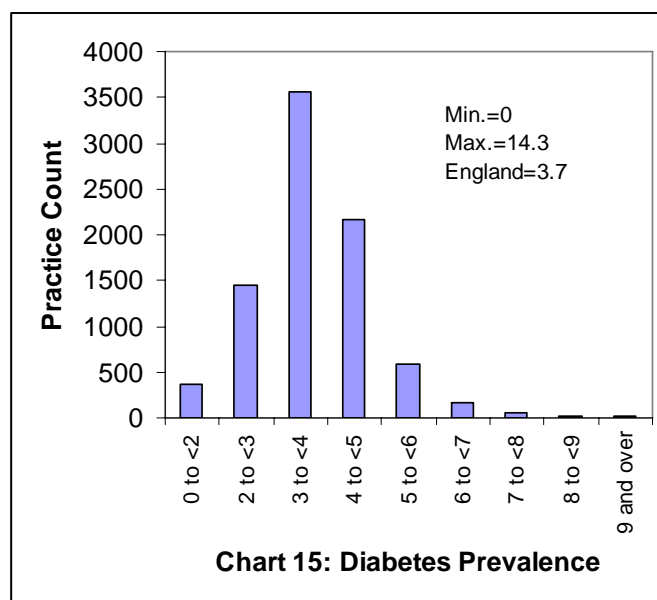
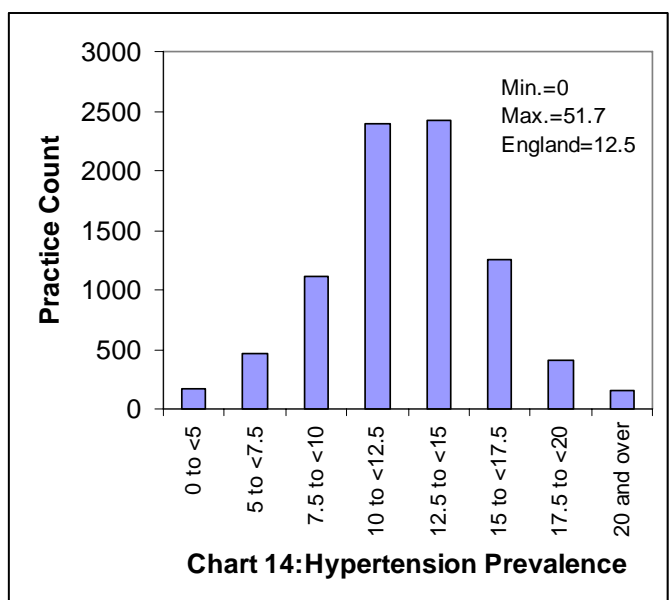
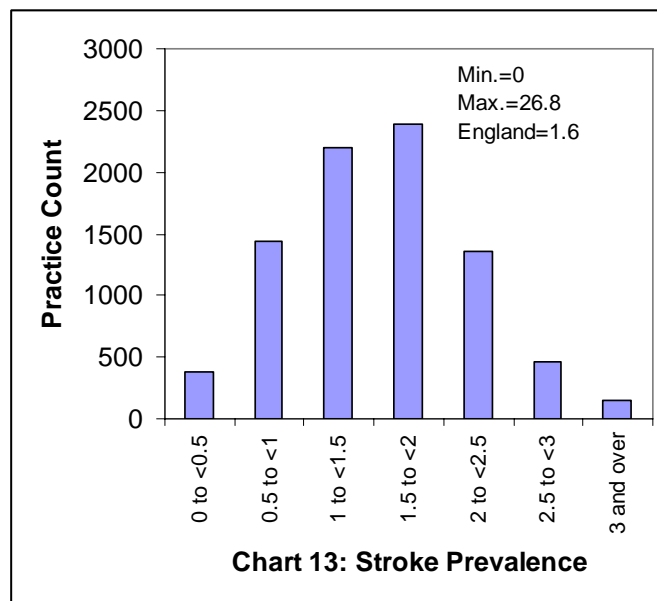
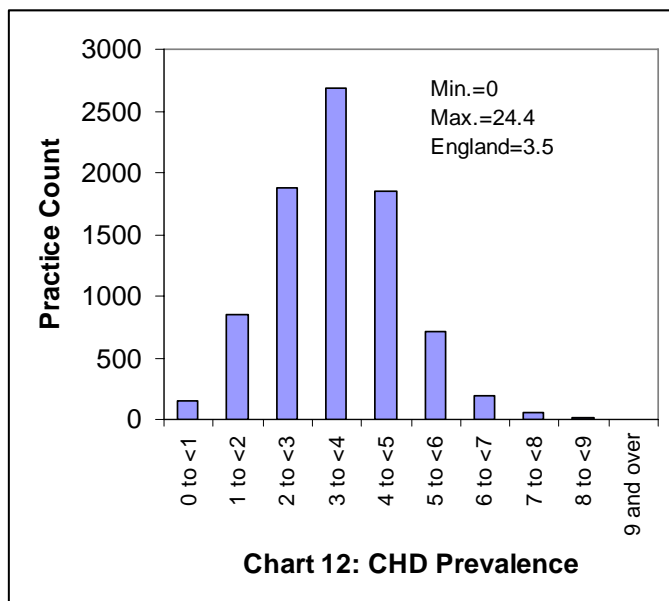
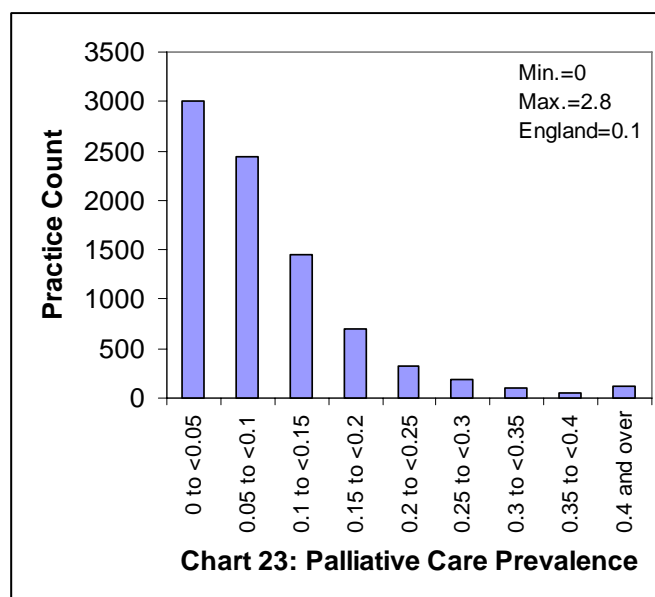
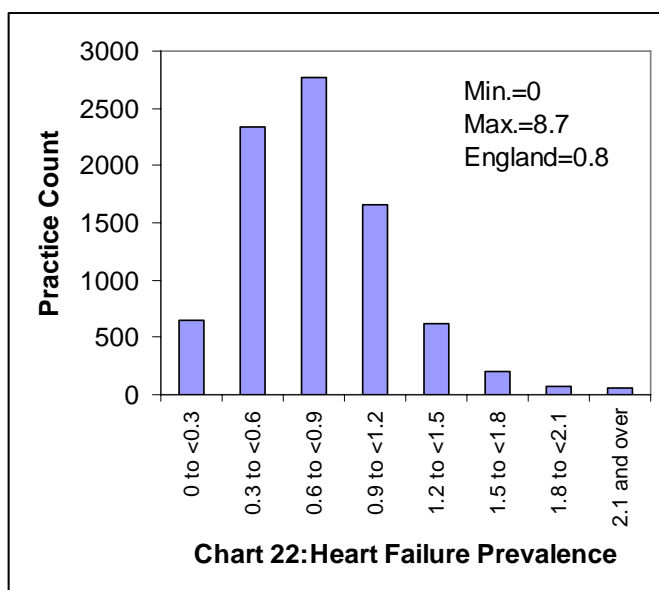
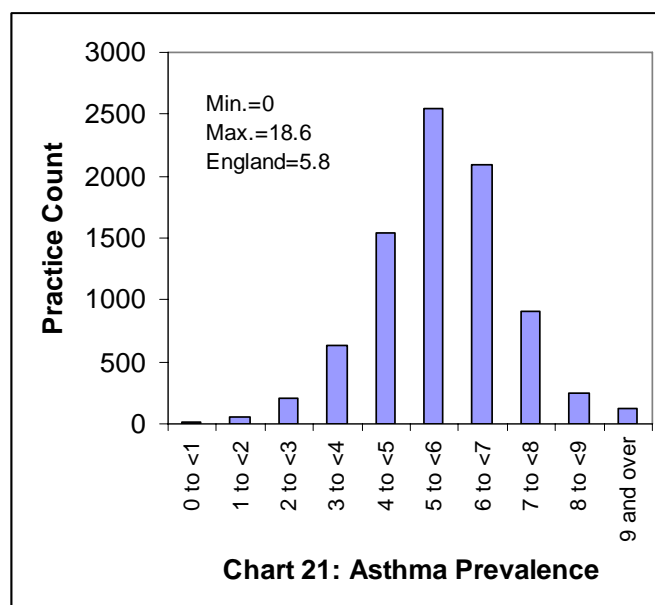
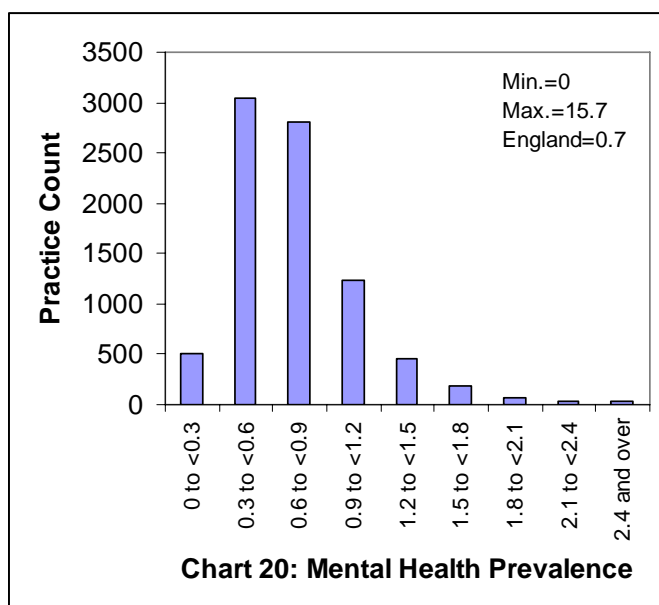
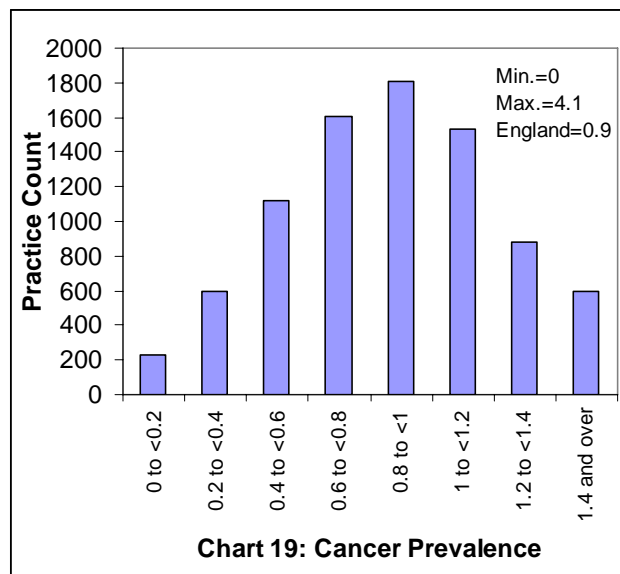
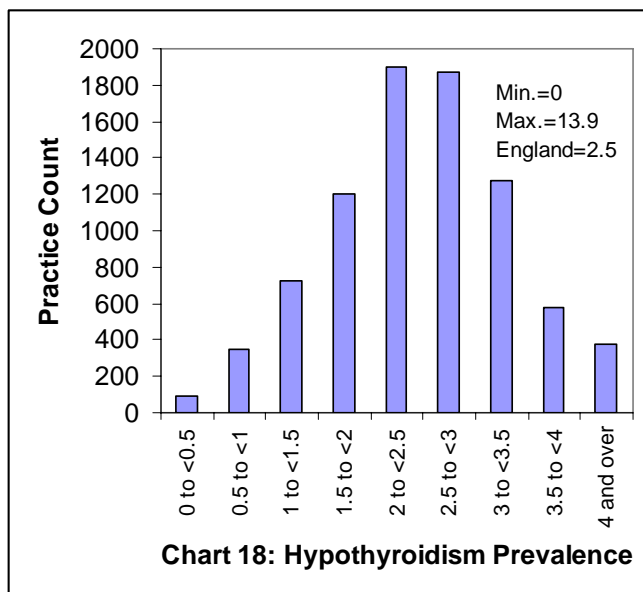
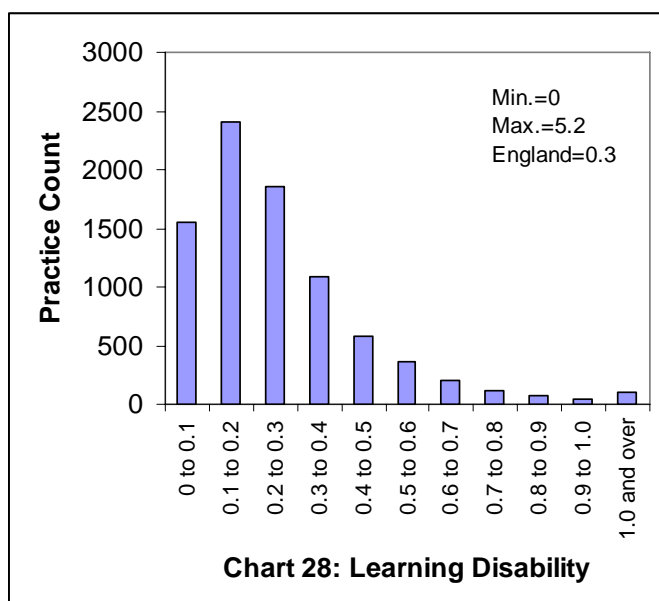
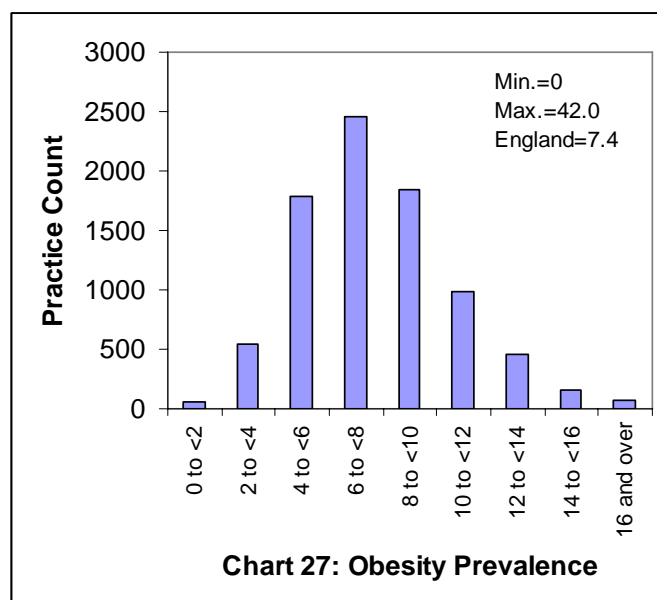
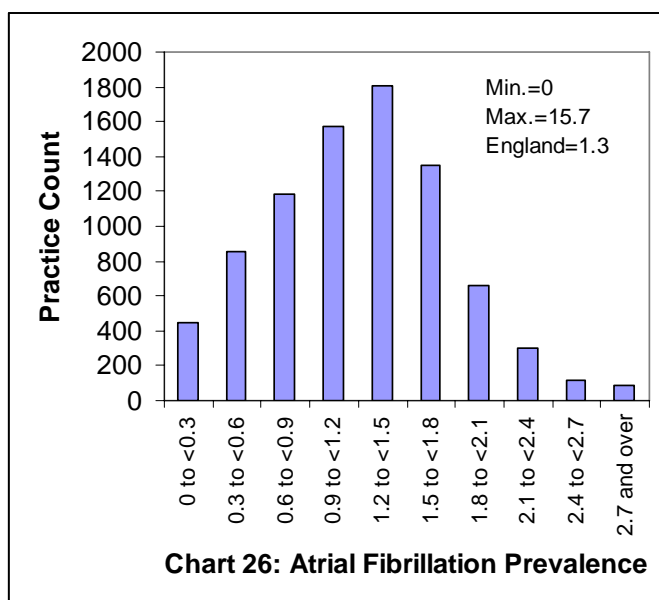
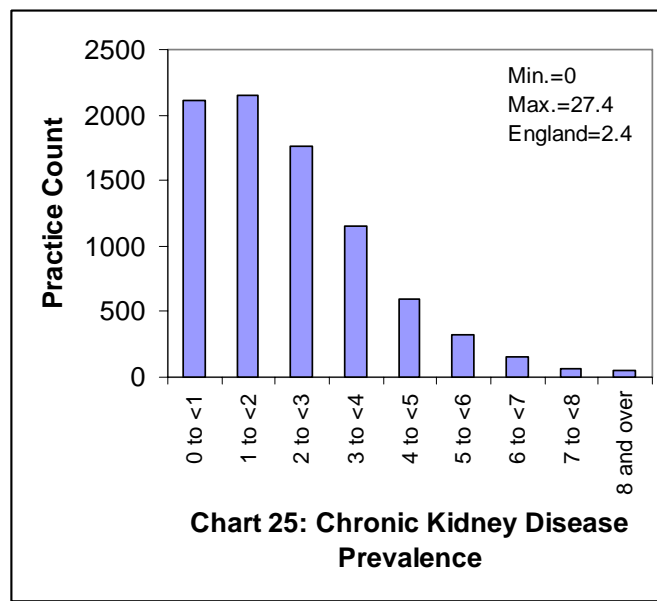
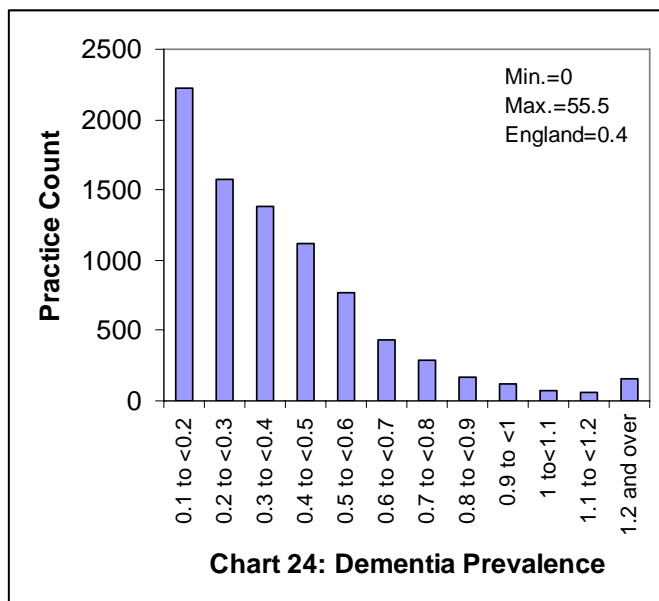


Chart 11: Percentage of list size on clinical registers (raw prevalence), England 2006/07

Charts 12 to 28 present recorded prevalence distributions for each disease, at practice level.







5. Recommendations around the use of QOF data

The QMAS system 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 for healthcare organisations, analysts and researchers, providing the limitations of the data are acknowledged.

QMAS is a live database, and practices can submit clinical and non-clinical data at any time. This publication is derived from a snapshot of QMAS data relating to the position of practices at a point in time – namely the end of June 2007 for information on 2006/07 QOF achievement.

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 data should be particularly careful in undertaking comparative analysis.

The following points have been raised by local healthcare organisations in consultation with the 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-level or PCT-level QOF achievement, or prevalence, may also be inappropriate without taking account of the underlying social and demographic characteristics of the populations concerned. The delivery of services may be related, for example, to population age/sex, ethnicity or deprivation characteristics that are not included in 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.
- 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 and asylum seekers.
- Robust 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 practice. There is no patient-specific data within QMAS. For example, QMAS captures aggregated information for each practice on

patients with coronary heart disease and on patients with asthma, but it is not possible to identify or analyse patients with both of these diseases.

- Any year-on-year comparisons will be affected by the revision to the QOF for 2006/07 – where a practice's underlying achievement against an indicator is unchanged, the QOF points awarded will differ because of a change to the required achievement thresholds.
- 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.

Measuring the quality of care is not a simple process. The indicators on which this bulletin reports can only be proxies for true quality. Within the clinical domain, the QOF does not cover every clinical condition, and only describes some aspects of the care for the clinical areas that are included. However, the QOF does provide valuable information (on prevalence, cholesterol levels and blood pressure for example) on a scale previously unavailable, and provides a measure of improvement in the delivery of care.

6. Links

Department of Health: Primary Care Contracting and QOF:

<http://www.dh.gov.uk/en/Policyandguidance/Organisationpolicy/Primarycare/Primarycarecontracting/index.htm>

Department of Health: General Medical Services Contract:

<http://www.dh.gov.uk/en/Policyandguidance/Organisationpolicy/Primarycare/Primarycarecontracting/GMS/index.htm>

Connecting for Health QMAS pages:

<http://www.connectingforhealth.nhs.uk/systemsandservices/gpsupport/qmas>

NHS Employers - Primary Care Contracting

<http://www.nhsemployers.org/primary/index.cfm>

NHS Employers - GMS Contract:

<http://www.nhsemployers.org/primary/primary-886.cfm>

NHS Employers - QOF, including 2006/07 revisions and guidance:

<http://www.nhsemployers.org/primary/primary-890.cfm>

NHS Primary Care Contracting:

<http://www.primarycarecontracting.nhs.uk/16.php>

British Medical Association - GMS Contract:

<http://www.bma.org.uk/ap.nsf/Content/Hubthenewgmscontract>

QOF Publications in other UK countries

Scotland:

<http://www.isdscotland.org>

Wales:

<http://www.wales.nhs.uk>

Northern Ireland:

<http://www.dhsspsni.gov.uk>