

# Health Equity: Diabetes from QOF & HES 2004/05

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## Data Set Facts

### Quality & Outcomes Framework (QOF)

- Introduced in 2004 as part of the new GP Contract
- GPs required to maintain a register within practices of certain diseases
- GPs are paid based on their performance of managing patients on the disease registers

### Hospital Episodes Statistics (HES)

- Contains cleaned data on all hospital in-patient admissions

### York Diabetes Prevalence Model

- Uses health related inputs to estimate the likely prevalence of diabetes in an area

\* Data Definitions

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## Key Messages:

- 3.5% of the North West population is currently being managed for diabetes under the new GP contract. A modelled prevalence of 4.6% suggests that there may be over 50,000 silent patients.
- Management of diabetics within Primary Care is variable, and those PCTs with high hospital admissions may wish to investigate local practice further using health equity analysis.

## Introduction

The Quality and Outcomes Framework (QOF) was introduced in 2004 as part of a new contract for General Practitioners (GPs). As part of the framework, GPs maintain registers of 10 chronic conditions predominantly managed within primary care. GPs are awarded points based on the treatment and follow-up provided during the year for patients on the disease registers. HES records all admissions to secondary care in NHS Hospitals. Comparing admission to hospital with disease registers prevalence may help inform Primary Care Trusts (PCTs) about where management in primary care could potentially be improved.

### Burden of Diabetes in the North West

	QOF Register Total	HES Admissions Total	York Model estimate
<b>No. of Patients</b>	250, 276	63,521	308,051

### QOF Prevalence versus Predicted Prevalence (York Model)

As the symptoms of diabetes are not always specific to having diabetes, there is believed to be a significant under-estimation of the prevalence of the disease (silent cases). As a result, a number of models have been developed over the years to help better determine the prevalence of diabetes in an area. The York model ([www.yhpho.org.uk/PBS\\_diabetes.aspx](http://www.yhpho.org.uk/PBS_diabetes.aspx)) uses data relating to deprivation, ethnicity and demographic breakdown to estimate the prevalence of diabetes in an area. Figure 1 shows a comparison of QOF and modelled prevalence for each PCT in the North West:

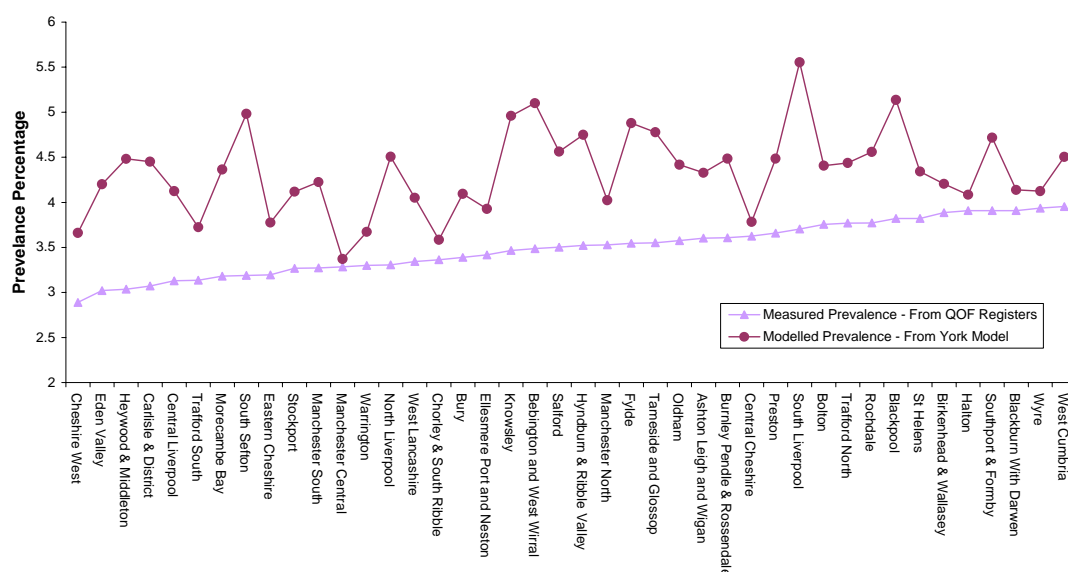


Figure 1. QOF & York Model diabetes prevalence estimates (ordered by QOF percent)

There is a wide variation in measures of diabetes across PCTs; some have a QOF prevalence very close to the modelled prevalence whilst others have very much lower QOF figures, suggesting possibly many more silent cases in these areas. It is worth noting that no PCT has a measured prevalence greater than the modelled prevalence.

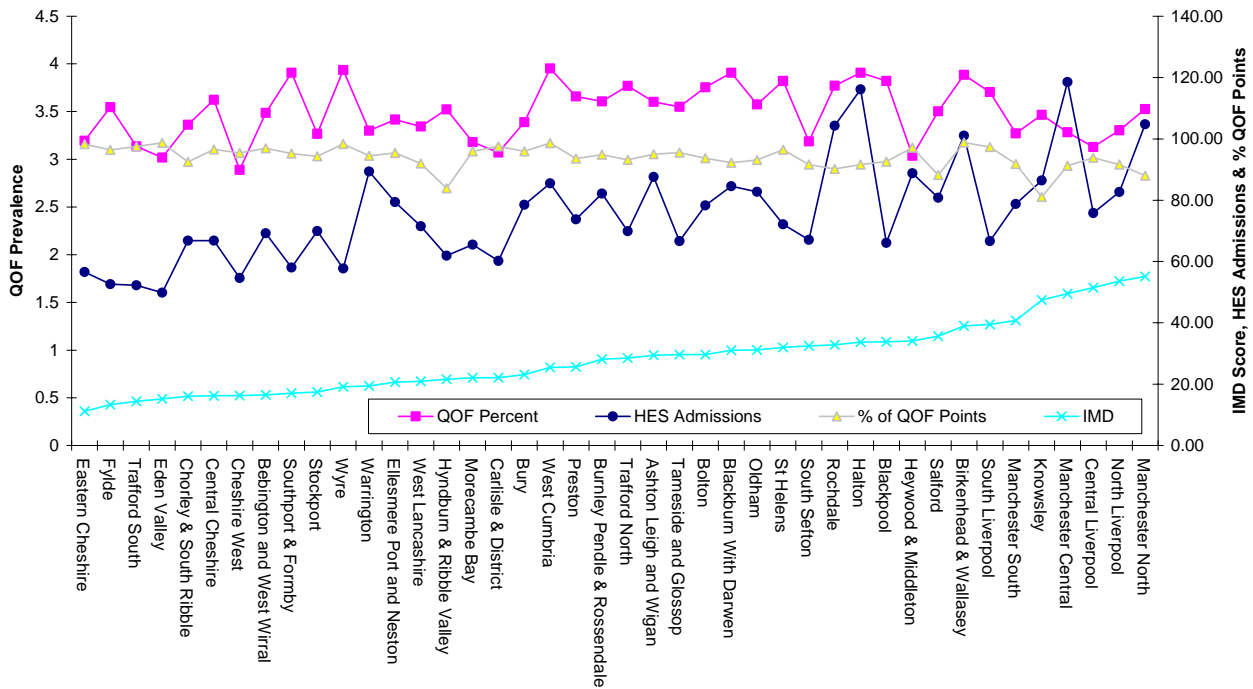


Figure 2. Diabetes prevalence, payment points and hospital admission (ordered from least to most deprived)

Figure 2 compares various measures of diabetes treatment and care by PCT in the North West Region, with the PCTs ordered by their Index of Multiple Deprivation (IMD). The rate of admission to hospital, where diabetes was coded in any of the diagnosis fields in the HES record, is much more variable than the QOF prevalence but tends to increase as deprivation increases. The QOF prevalence does not appear to be linked with deprivation. In addition, the graph shows the percentage of points awarded by PCT for the management of diabetes, which shows little relationship with either prevalence measure or deprivation. The relationship between hospital admission and primary care measures is illustrated further below.

**Diabetes admission to hospital versus treatment in primary care**

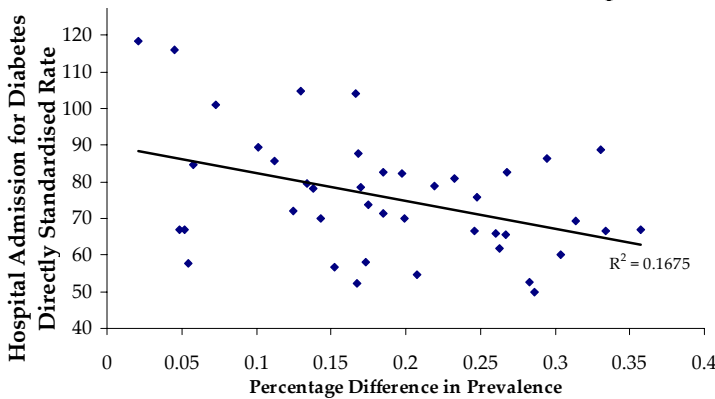


Figure 3. Relationship between possible missing cases and hospital admission

Figure 3 shows a negative correlation between the difference in the modelled and recorded diabetes prevalence and the rate of admission to hospital for diabetic patients. The picture though is highly variable, particularly for PCTs where modelled and recorded prevalence are closest. PCTs with more potentially silent diabetics have less variability and generally lower levels of hospital admission.

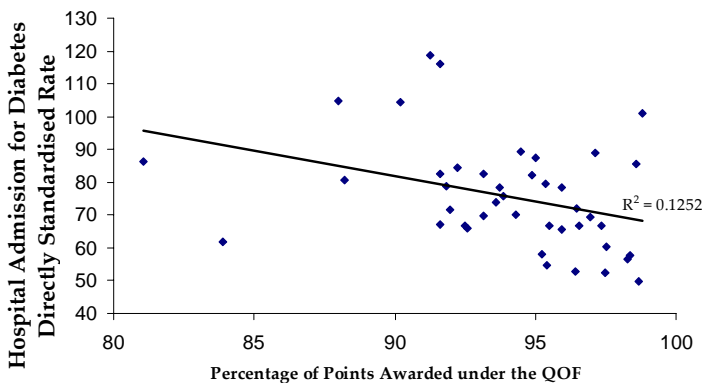


Figure 4. Relationship between QOF points and hospital admission

Figure 4 shows a negative correlation between QOF points awarded and the rate of admission to hospital for diabetic patients. Although highly variable, this suggests that PCTs with higher rates of admission to hospital are not as effective at managing diabetics in primary care as those with lower hospital admission. Nevertheless, some PCTs have high admission and higher QOF points, or low admission and low QOF points.

\* All data outlined in this report for North West PCTs and further information can be found at:  
[www.nwpho.org.uk/monthly/may06](http://www.nwpho.org.uk/monthly/may06)