

RAW DISEASE PREVALENCE FOR NORTHERN IRELAND AS AT 14 FEBRUARY 2005

1. The following report contains a frequency distribution chart (Figure 1) of overall disease prevalence levels in N Ireland for the 10 disease areas covered by the Quality & Outcomes Framework:
2. The report also contains frequency distribution charts (Figures 2a - 2j) for each disease area, showing the number of practices within each band of raw prevalence per 1,000 patients.
You can therefore identify which raw prevalence/1,000 patients your practice falls into.

- (2a) Coronary Heart Disease
- (2b) Stroke
- (2c) Cancer
- (2d) Hypothyroidism
- (2e) Diabetes
- (2f) Hypertension
- (2g) Mental Health
- (2h) Asthma
- (2i) Chronic Obstructive Pulmonary Disease
- (2j) Epilepsy

Please note this Report contains raw prevalence per 1,000 patients generated from 364 practice returns (99.7% of practices) covering 1,793,329 patients (99.8% of NI patients) as at 14 February 2005.

3. Annex A illustrates how the Adjusted Disease Prevalence Factor (ADPF) is calculated.
4. In order to understand the need for an "Adjusted Disease Prevalence Factor", it is worth noting the calculation for the Achievement Payment. The achievement payment will be calculated automatically by the PCAS System. Points achievement is assessed on National Quality Achievement Day (31 March 2005) by the PCAS System.

CALCULATION OF ACHIEVEMENT PAYMENT:

- (i) For each clinical domain = £76 per point x ADPF x Points Achieved
- (ii) For the additional services domain = £76 per point adjusted by the relative size of the practice's target population compared to the NI target population x Points Achieved.
- (iii) For the other domains = £76 per point x Points Achieved.

TOTAL QUALITY & OUTCOMES FRAMEWORK PAYMENT =

Payments for the 4 domains are added together and adjusted by the practice's list size relative to the NI average list size.

Prepared by:
Information & Analysis Directorate
DHSSPS

April 2005

Figure 1: Percentage of Patients on each Clinical Disease Register

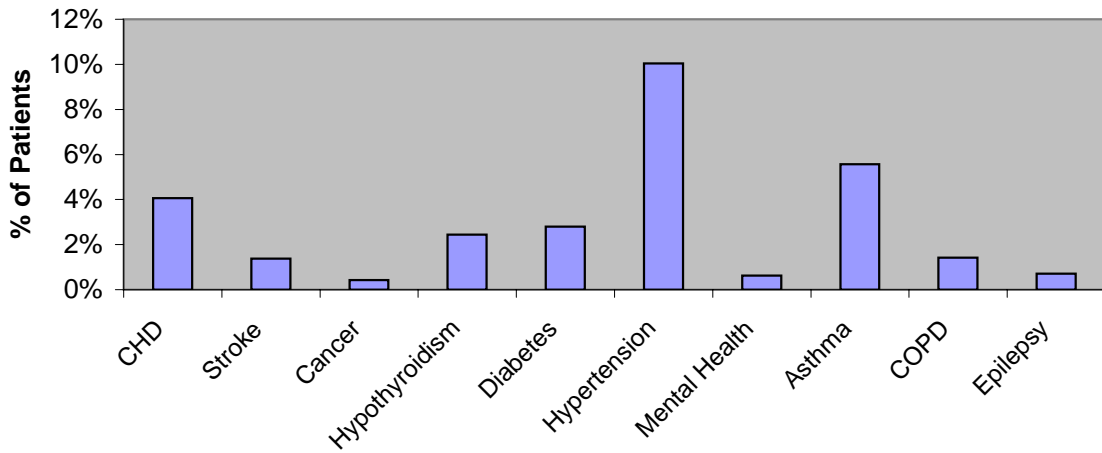


Figure 2a: Histogram of CHD Prevalence

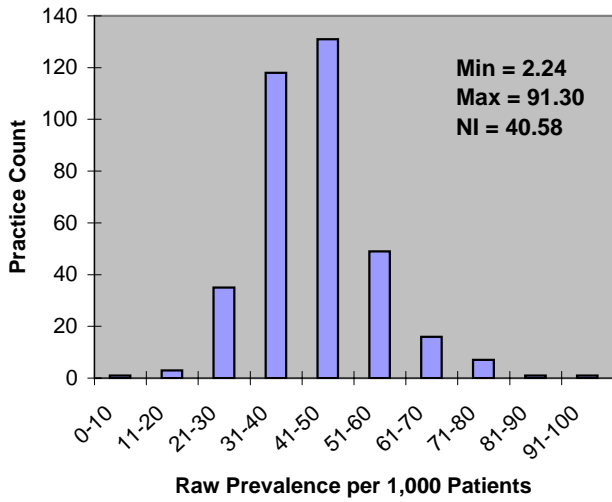


Figure 2b: Histogram of Stroke Prevalence

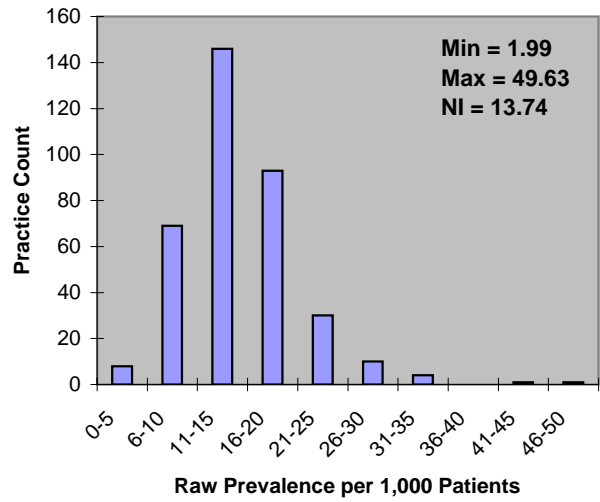


Figure 2c: Histogram of Cancer Prevalence

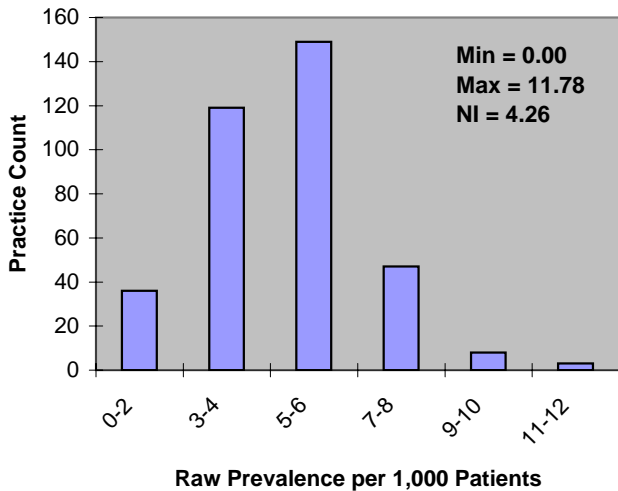


Figure 2d: Histogram of Hypothyroidism Prevalence

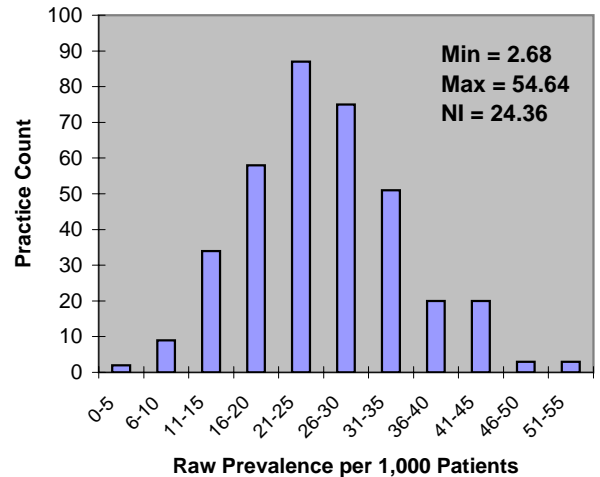


Figure 2e: Histogram of Diabetes Prevalence

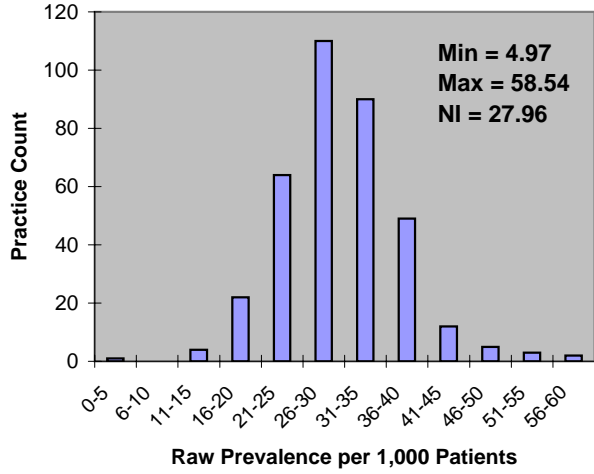


Figure 2f: Histogram of Hypertension Prevalence

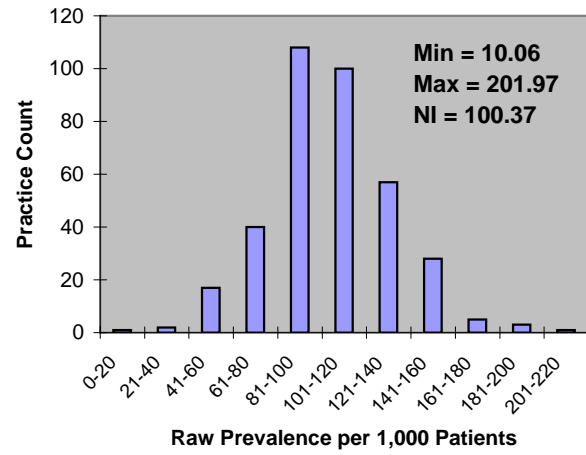


Figure 2g: Histogram of Mental Health Prevalence

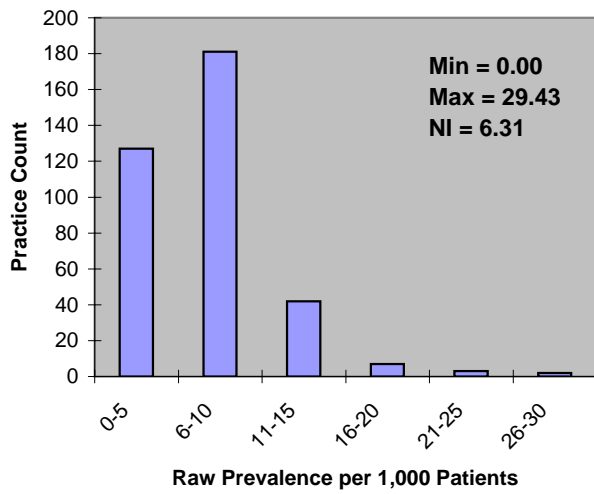


Figure 2h: Histogram of Asthma Prevalence

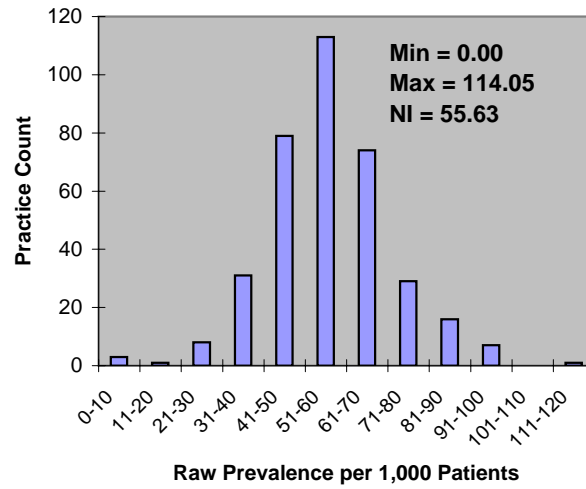


Figure 2i: Histogram of COPD Prevalence

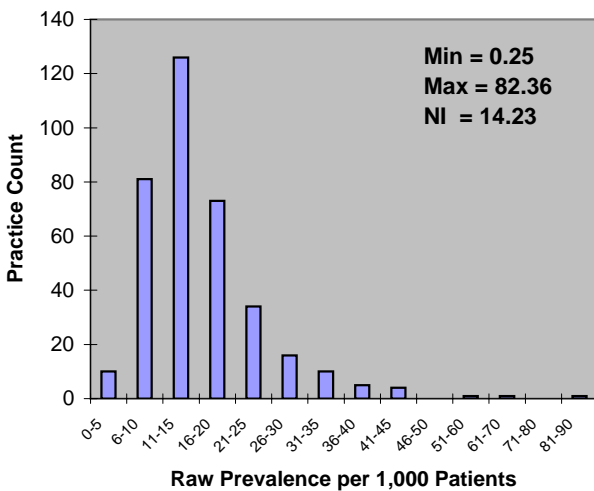
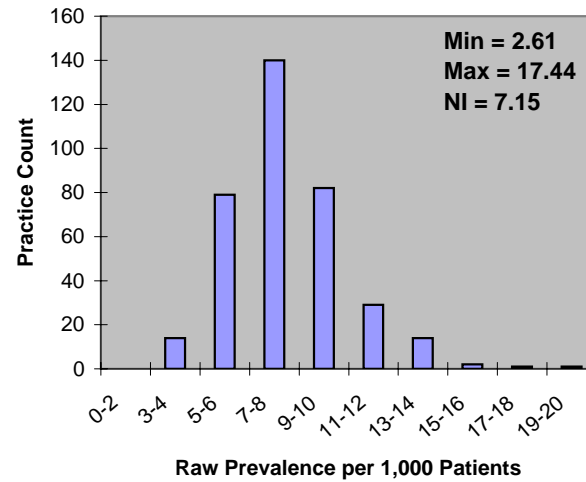


Figure 2j: Histogram of Epilepsy Prevalence



CALCULATION OF ADJUSTED DISEASE PREVALENCE FACTOR (ADPF):

Payment per Quality Point £76

Practice	STEP 1			STEP 2		STEP 3	STEP 4			STEP 5	
	Registered List	No. of Patients on CHD Disease Register	Raw Prevalence per 1,000 patients	Raw Prevalence After 5% cut off	Sqr Root = ADP	ADPF	% different from NI Avg	Adjustment (£) from £76 Avg	Final £ per Clinical Quality Point	Population Factor	Final £ per Point
A	1,250	75	60.0	60.0	7.7	1.21	21.3%	£16.21	£92.21	0.255	£23.52
B	2,500	170	68.0	68.0	8.2	1.29	29.2%	£22.17	£98.17	0.510	£50.08
C	4,900	200	40.8	40.8	6.4	1.00	0.1%	£0.05	£76.05	1.000	£76.05
D	4,900	370	75.5	75.5	8.7	1.36	36.1%	£27.45	£103.45	1.000	£103.45
E	7,000	22	3.1	3.6	1.9	0.30	-70.2%	-£53.36	£22.64	1.429	£32.35
F	9,800	400	40.8	40.8	6.4	1.00	0.1%	£0.05	£76.05	2.000	£152.11
N.I	30,350	1237	40.8	40.8	6.4	1.00					

NI Average List = 4,921

Min Raw Prevalence per 1,000 patients	3.14	1.90	Min Adjusted Prevalence per 1,000 patients
Max Raw Prevalence per 1,000 patients	75.51	8.69	Max Adjusted Prevalence per 1,000 patients
NI Raw Prevalence Range	72.37	6.79	NI Adjusted Prevalence Range
5% Cut-off	3.6		

Step 1: Calculate Raw Disease Prevalence for each practice as follows:

Likewise NI Raw Disease Prevalence is calculated as follows:

$$\frac{\text{No. of Patients on Practice's Disease Register}}{\text{No. of Patients on Practice's Registered List}} \times 1,000 \text{ Patients}$$

$$\frac{\text{No. of Patients in N Ireland on Disease Register}}{\text{Total No. of Registered Patients in N Ireland}} \times 1,000 \text{ Patients}$$

Step 2: A 5% cut-off is applied to the NI range of raw disease prevalence, bringing all contractors up to the base level of 5%. This recognises that even practices with relatively low disease prevalence still have costs in setting up registers, buying equipment, training staff and checking patients. For example, Practice E has raw prevalence of 3.1 per 1,000 patients, however, the 5% cut-off is 3.6 per 1,000 patients, therefore this Practice has its raw prevalence brought up to 3.6 per 1,000 patients.

The square root of each practice's raw prevalence figure is calculated to narrow the NI range of disease prevalence. This prevents destabilising the cash flow of practices with relatively low prevalence. This is the Adjusted Disease Prevalence (ADP) for each practice. Likewise the square root of NI raw prevalence is calculated, giving the NI Adjusted Disease Prevalence.

Step 3: The Adjusted Disease Prevalence Factor (ADPF) for each practice is then calculated as follows:

$$\text{Adjusted Disease Prevalence Factor (ADPF) for each Practice} = \frac{\text{Practice Adjusted Disease Prevalence}}{\text{N Ireland Adjusted Disease Prevalence}}$$

This rebases each practice's Adjusted Disease Prevalence (ADP) around the NI average ADP of 1.0

Step 4: The ADPFs are used to adjust the contractor's figures depending on how far above or below the NI average they are. This determines the pounds per clinical quality point. The average contractor is assumed to receive £76 per clinical quality point. Practice C has an average list size and average CHD prevalence and therefore receives approx. £76 per clinical quality point. The ADPF does not adjust the contractor's achieved points, but rather the pounds per point they receive. The adjustment only applies to the clinical domain of the QOF.

Step 5: The payments per clinical quality point are then adjusted by the practice's list size relative to the NI average list size using a population factor.

$$\text{Population Factors for each Practice} = \frac{\text{Practice List Size}}{\text{NI Average List Size}}$$

$$\text{The Pounds per Clinical Quality Point} \times \text{Practice Population Factor} = \text{Final Pounds per Point in the QOF}$$

Examples: Practice B has a list size half the NI average but has higher than average CHD prevalence and therefore has an ADPF of 1.29. Practice B therefore receives a 29% higher payment per clinical point than the £76 average. Practice B receives £98 per clinical quality point. When adjusted for relative list size, practice B receives £50 per overall QOF point.

Practice F has a list size twice that of the NI average and has average prevalence. Practice F has an ADPF of 1.0, the same as the NI ADPF, therefore Practice F receives approx. £76 per clinical quality point. However, when adjusted for relative practice size, Practice F receives £152 per overall QOF point.