We undertook a survey of 29 women attending the Ante-Natal Clinics (ANC) of two hospitals in late 2004. Sixteen had Type 1 Diabetes (15 white European/1 South Asian), and 13 had Type 2 Diabetes (7 white European/6 South Asian). Fifteen (51.7%) said that the pregnancy was planned. However, only 11 (37.9%) had an HbA1c <7.0%, and just 6 (20.7%) were taking folic acid 5 mg daily (13 were taking no folic acid pre-conception). Eight (27.6%) said that they did not know what their HbA1c was, and 9 (31.0%) did not feel in control of their diabetes before pregnancy. Twenty-one (72.4%) had had retinal screening, while 5 had had additional clinic visits, 10 had more contact with the Diabetes Team and 7 had contact with the Diabetes midwives. Twelve (75%) with Type 1 Diabetes had attended the ANC by 6 weeks gestation, whereas only 3 women (23.1%) with Type 2 Diabetes had an early booking visit. This survey demonstrates that current pre-conception planning is inadequate, and many diabetic women are becoming pregnant with high risk of adverse outcome.

#### P211

## 'Catch them while you can': how good are we at caring for prisoners with diabetes? E MORGAN\* and AB JOHNSON†

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Many prisoners with diabetes have led chaotic lives, may have poor clinic attendance and may have undiagnosed diabetic complications. Therefore, an assessment protocol was developed at HMP Horfield men's prison for all new diabetic prisoners from 01/01/03 onwards. A prison nurse with training in diabetes identified all new prisoners with diabetes and initiated the protocol, which included measurement of demographics, blood pressure, and screening investigations. A visiting diabetic consultant then reviewed each prisoner, assessing control, adjusting treatment and screening for complications. Between 01/01/03 and 01/01/05, 26 new prisoners with diabetes were identified (age 23-73 years), of whom 3 'escaped' due to rapid relocation. Thus 23 were assessed; 7 were type 1 and 16 type 2 (3 insulin treated) diabetics, whose duration of diabetes ranged from 1 to 42 years. 1 prisoner refused screening blood tests. Weight, smoking, blood pressure, HbA1c, cholesterol, creatinine, microalbuminuria, foot examination and fundoscopy was recorded in 100%, 100%, 96%, 96%, 96%, 96%, 91%, 100% and 100% of prisoners respectively. New diagnoses of microalbuminuria (1) and referral requiring retinopathy (1) were made, and treatment plans made for all prisoners. Thus care for new prisoners with diabetes improved significantly, as all were comprehensively assessed, complications identified, and treatment and management plans implemented.

### P212

### Male patients of working age are more likely to default from diabetes clinic

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Missed appointment from hospital diabetes clinic cause major costs and problems to the health service. These patients are thought to be more prone to develop complications. We studied hospital records of patients who defaulted from diabetes clinic over a two-month period. Out of 652 appointments, 81 (12.4%) defaulted without prior notice. 50 (61%) were males and 37 (45.6%) had type 1 diabetes. Within the past 3 years, 23 (28.4%) had been admitted to the hospital of which 16 (69.5%) were due to metabolic complications and 6 type 1 subjects had diabetic ketoacidosis. Only a third of these subjects had good overall control [HbA1c <7.5% in 22 (27.1%), blood pressure <140/80 in 29 (35.8%) and serum cholesterol <5.0 mmol in 35 (43.2%)]. 6 had at risk feet, 10 had retinopathy and 7 had microalbuminuria. Demographic data showed 53 (65.4%) patients to be of working age (20 to 60 years) of which majority (66%) were males.

Our data shows that working males may be frequent defaulter from diabetes clinic and at risk of developing complications. There may be a need to have a special clinic for people of working age so that their employment is not affected by frequent hospital visits.

#### P213

# An evaluation of a neurovascular technician's role in an annual screening programme P SECRET\*, C BEARD\* and JH PARR†

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**Aims:** The Diabetes NSF supports new ways of service delivery. We have utilised a trained Neurovascular Technician (NVT) to assess neurovascular function in our annual screening programme since 2000. Previous assessments were undertaken in general podiatry clinics. To determine if the NVT can perform the neurovascular assessment to the podiatrists' standard we have evaluated our NVT's performance by comparing the assessments in 642 patients assessed by both the NVT and podiatrists during the first year of the programme (2001).

**Results:** 12 parameters were compared using a scoring system as follows: Identical = 61 percent; Near Identical = 27 percent; Some Similarity = 3 percent; Dissimilar = 6 percent; Missing Data = 3 percent. Comparing individual parameters, distal pulses were the most consistent between NVT and podiatrist (mean 84.4 percent for 4 pulses); least consistent were ankle reflexes (mean 71.2 percent); monofilament readings (mean 82.9 percent) and four neurosthesiometer readings (mean 80.1 percent) were intermediate. The NVT and podiatrist agreed the parameters were normal or abnormal in 82 percent of instances. The NVT's 'false positive' rate was 12 percent and 'false negative' rate 6 percent.

**Conclusion:** We have shown that a trained Neurovascular Technician can perform the neurovascular part of an annual screening assessment to a podiatrists' standard.

### P214

# Increasing glycaemic burden (GB) associated with diabetes in a UK Health District – a six year follow-up study

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GB is an integrated measure of hyperglycaemia over time and can be used to quantify risk of complications, and is useful in health economic projections. In a single Health District, we estimated the individual and total GB of diagnosed diabetes over 6 years. GB was calculated from over 91 000 HbA1c measurements between 1996 and 2001, and patients identified using linkage between 3 clinical databases. GB was expressed as months per HbA1c % above threshold of 7.0. Over the study period, diabetes increased from 2.8 % of the population to 5.12% - a 79% increase, while total GB increased by only 55%. Annual GB of individual new patients decreased from 14.7 (Cl 13.1-16.3) to 7.9 (7.3-8.6). Among 5027 patients accessing structured care in 1996, average GB increased steadily. The major increase was amongst those initially treated with diet alone - GB 7.0 (6.4-7.7) to 10.1 (9.3-11.0), and with oral hypoglycaemics - 13.8 (13.0-14.5) to 15.9 (15.1-16.8). High GB was a strong predictor of hyperglycaemic emergency. Increased GB was due to treatment failure and increased diagnosis of type 2 diabetes. Effective early intervention would reduce the burden of the disease and decrease emergency admissions.