Referral rates of patients with diabetes to secondary care are determined by practice size and confidence in treatment, not by HbA1c level

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Aims
To identify the factors affecting the referral rates of diabetic patients from primary care to secondary care.

Methods
A study was done based on 66 GP surgeries in the Cardiff and Vale University Health Board (population 515,581). HbA1c outcome data of GP surgeries were obtained from the QOF database published for 2018. Referral rates were obtained from the electronic referral database of Cardiff and Vale University Health Board over the same period. Confidence level on the treatment of diabetes among GPs was assessed as a sub-study done in nine GP surgeries in the same area by using a self-administered questionnaire. The relationship of adjusted referral rates with the GP practice size, HbA1c outcome and the confidence level was assessed.

Results
Average adjusted referral rates to the secondary care in one year was 4.23% and with a wide variation of 1.24% to 16.28%. Average percentage of diabetic patients with blood sugar <59 mmol/mol was 63.17% (range: 43.19% - 76.23%). The average confidence score of GPs in treating diabetes was 67% and ranged from 50% - 85% in the sub-study. Referral rate correlated inversely with confidence level and the practice size, but there was no correlation with the HbA1c outcome.

Conclusions
Referral rates of patients with diabetes to secondary care are determined by practice size and confidence level in treatment, not by HbA1c level. Further training in diabetes care for primary care teams is required to improve the appropriateness of referral to secondary care.