Authors' response

We thank the authors for their interest in our article and valuable comments. First, Dr Leach disagrees with the 2-week interval for repeating HbA1c to confirm new diagnosis of diabetes in asymptomatic people with HbA1c $\geq 6.5\%$ (≥ 48 mmol/mol).¹ Dr Leach suggests instead a longer interval of 6–8 weeks for the test is more appropriate. However we disagree with Dr Leach's suggestion. First, HbA1c already gives reflection of level of glycaemia over a period of a few weeks compared to glucose test that gives a snapshot of glycaemia at that point in time. Therefore the main idea behind repeating the HbA1c test is to rule out any lab errors in HbA1c measurement. The suggested 2-week interval is arbitrary taking into consideration any logistics of repeating the test after the first test in the primary care setting. Additionally repeating the test within 2 weeks (not after 2 weeks) preclude the possibility of a patient introducing an intervention (for example, increasing physical activity or lowering dietary glucose load) to decrease his/her glucose profile thereby affecting results of the repeat HbA1c test. Fifty per cent of the contribution to HbA1c comes from the preceding 4 weeks and therefore any longer interval would risk a change in the HbA1c result.

Secondly, we read with interest the data presented by Evans and colleagues from their practice.² A similar increase in prevalence of diabetes using HbA1c compared to glucose tests was observed in our research cohort presented in an article cited as reference 4. It is known that there is discrepancy in type 2 diabetes diagnosed by HbA1c and the glucose tests, therefore the two tests may not identify the same individuals. HbA1c is a better indicator of chronic glycaemia than a glucose test. It is therefore likely that practices that switch to using HbA1c will see a sudden surge of people with diabetes diagnosis, as many individuals may have undiagnosed HbA1c levels of $\geq 6.5\%$ (≥ 48 mmol/mol) for a while but always had negative glucose testing. HbA1c independently increases with age and it is interesting to see that the people diagnosed using the HbA1c criteria were older in their cohort. This field is evolving and in future we may gain insights into practical implications of factors such as age and ethnicity impacting on HbA1c measurement.

Nitin Gholap,

Specialist Registrar, Diabetes Research Unit, University of Leicester.
E-mail: ng94@leicester.ac.uk

Melanie Davies,

Professor of Diabetes Medicine, Diabetes Research Unit, University of Leicester.

Samiul Mostafa,

Clinical Research Fellow, Diabetes Research Unit, University of Leicester.

Kamlesh Khunti,

Professor of Primary Care, Diabetes Research Unit, University of Leicester.

REFERENCES

1. Leach M. Diagnosing type 2 diabetes and identifying high-risk individuals using the new glycated haemoglobin (HbA1c) criteria. [Letter]. *Br J Gen Pract* 2013; **63**(610): 235.
2. Evans PH, Pereira Gray DJ, Wright C, Langley P. Diagnosing type 2 diabetes and identifying high-risk individuals using the new glycated haemoglobin (HbA1c) criteria. [Letter]. *Br J Gen Pract* 2013; **63**(610): 235.

DOI: 10.3399/bjgp13X667042

Diabetes is on the rise, so why are we not bothered?

In regards to the article type 2 diabetes: prevention or cure?¹ Mary Pierce explains that HbA1c testing compared to the glucose-based test would be a more practical scheme as suggested by the Leicester Group and that 'People identified as being in the top 50% of diabetes risk using a computer-based risk assessment tool, can be opportunistically offered a HbA1c test to identify those with diabetes and those at high risk who require intensive structured lifestyle intervention and annual HbA1c monitoring'.¹ She further states that 'The Vascular Screening Programme with the diabetes addendum will improve the health of the population ...'¹; a statement with which I agree and hence the search for a method to improve patient compliance in HbA1c testing. For these reasons we can relate our audit that was carried out at The Royal Docks Medical Practice in 2012, in the Borough of Newham, London. The aim was

to improve patient compliance in taking the HbA1c tests, that would in turn improve the outcomes and reduce the complications of diabetes and in turn reduce the costs to the NHS.

A list of 54 patients with an HbA1c above 9% in the first cycle of the audit, and 52 patients in the second cycle of the audit were used. In the first cycle (Method A), we posted out blood request forms to all 54 patients, information regarding the times and location of the blood test, and a universal cover letter explaining what the blood test was for.

In the second cycle (Method B), which was employed 3 months after the first cycle, 52 patients were contacted to come to the surgery to discuss their diabetes and book a blood test; this would mean patients would have to make two trips, one to the surgery, and in most cases another to the blood centre on a separate day — as opposed to Method A that required one trip, only to the blood centre.

Patient compliance was improved by 57.4%, and 24.07% of patients had an improved HbA1c below 9% with Method A. With Method B, patient compliance improved by 32.7%, and 7.7% of patients had an improved HbA1c below 9%.

Therefore the key advantages of using Method A is that most importantly 25% of patients had a reduced HbA1c and 55% improved in compliance. It will help to contain the growing costs for the Clinical Commissioning Groups that went live to manage the local health budgets from 1 April 2013. Method A can also be used throughout the UK and for other types of routine blood tests. Furthermore it saves the NHS money through reduced hospital admissions of diabetic emergencies and saves GPs money through fewer referrals. It will benefit GPs by improvement in Quality and Outcomes Framework scores. Improvement in compliance will mean patients will need to take less time off work, therefore less health related work absence.

Asadullah Naqvi,

Final Year Medical Student, The Royal Docks Medical Practice, Newham.
E-mail: asadnaqvi01@hotmail.co.uk

REFERENCE

1. Pierce M. Type 2 diabetes: prevention or cure? *Br J Gen Pract* 2013; **63**(607): 60–61.

DOI: 10.3399/bjgp13X667051