

Current care and outcomes for children and young people with diabetes in England and Wales: Results from the National Paediatric Diabetes Audit

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Aim

To assess the current quality of care and outcomes for children and young people with diabetes in England and Wales.

Methods

The National Paediatric Diabetes Audit (NPDA) collates data on the demographic characteristics, care processes and outcomes of all children and young people with diabetes under the care of paediatric diabetes units in England and Wales.

Results

In the 2013/14 data was collected on 26,598 children and young people with diabetes from 177 Paediatric Diabetes Units. Almost all (98.3%) had at least one HbA1c measurement in the audit period. However, only 16.1% (12 years and older) received all seven recommended care processes (HbA1c, body mass index, BP, cholesterol, urinary albumin, eye screening and foot examination) compared to 12.1% in 2012/13.

Chart 1: Care processes

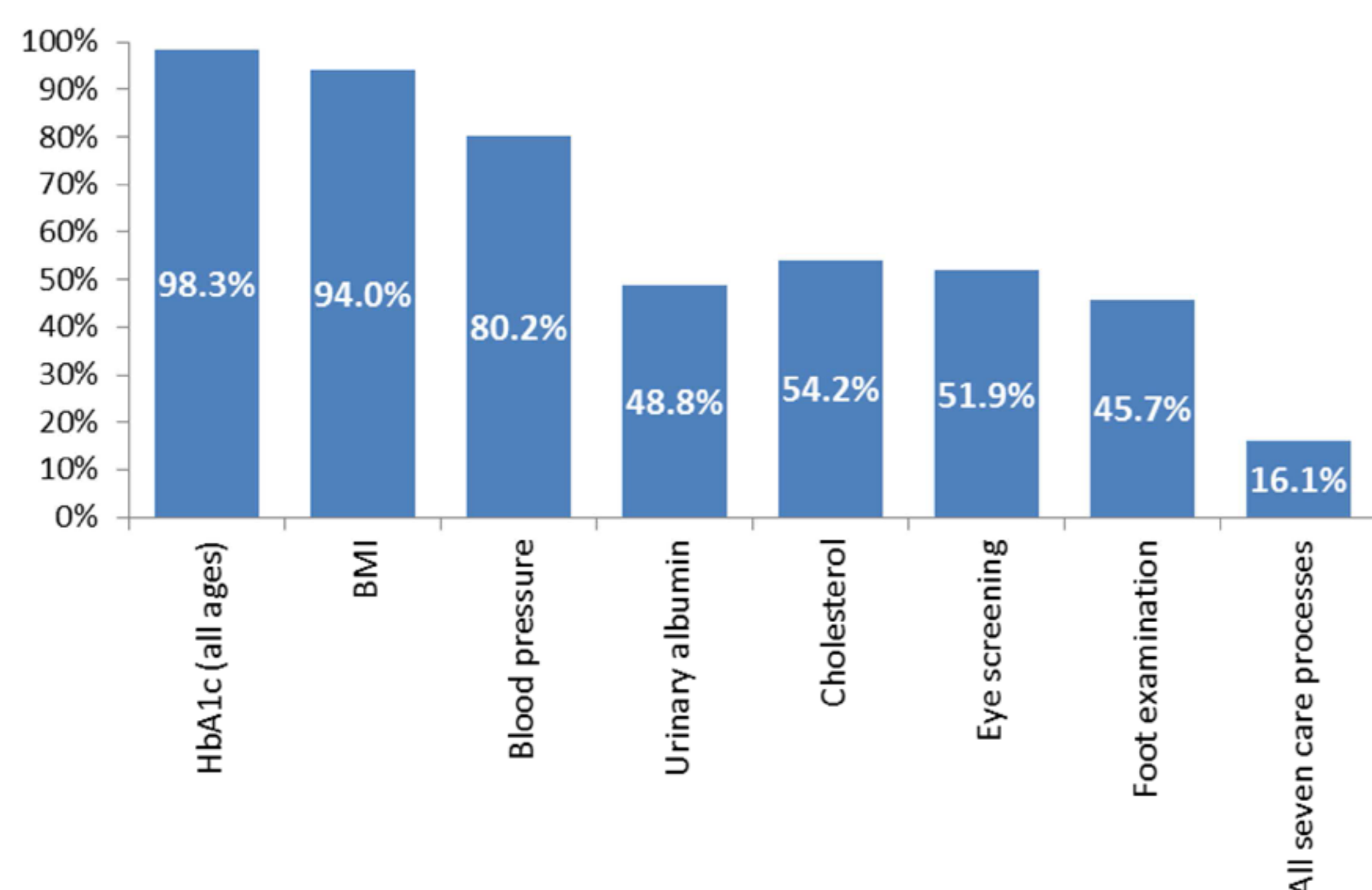
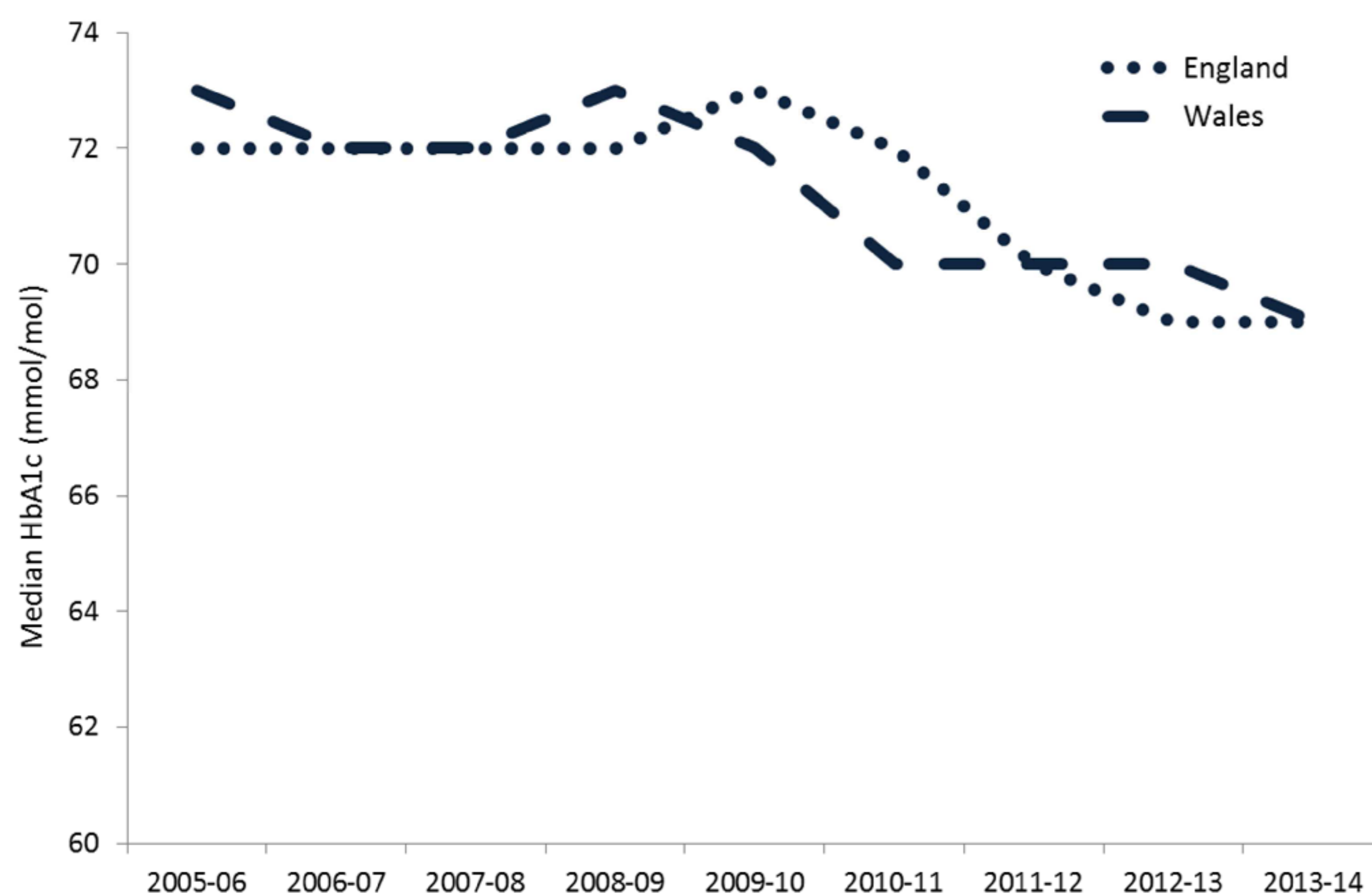


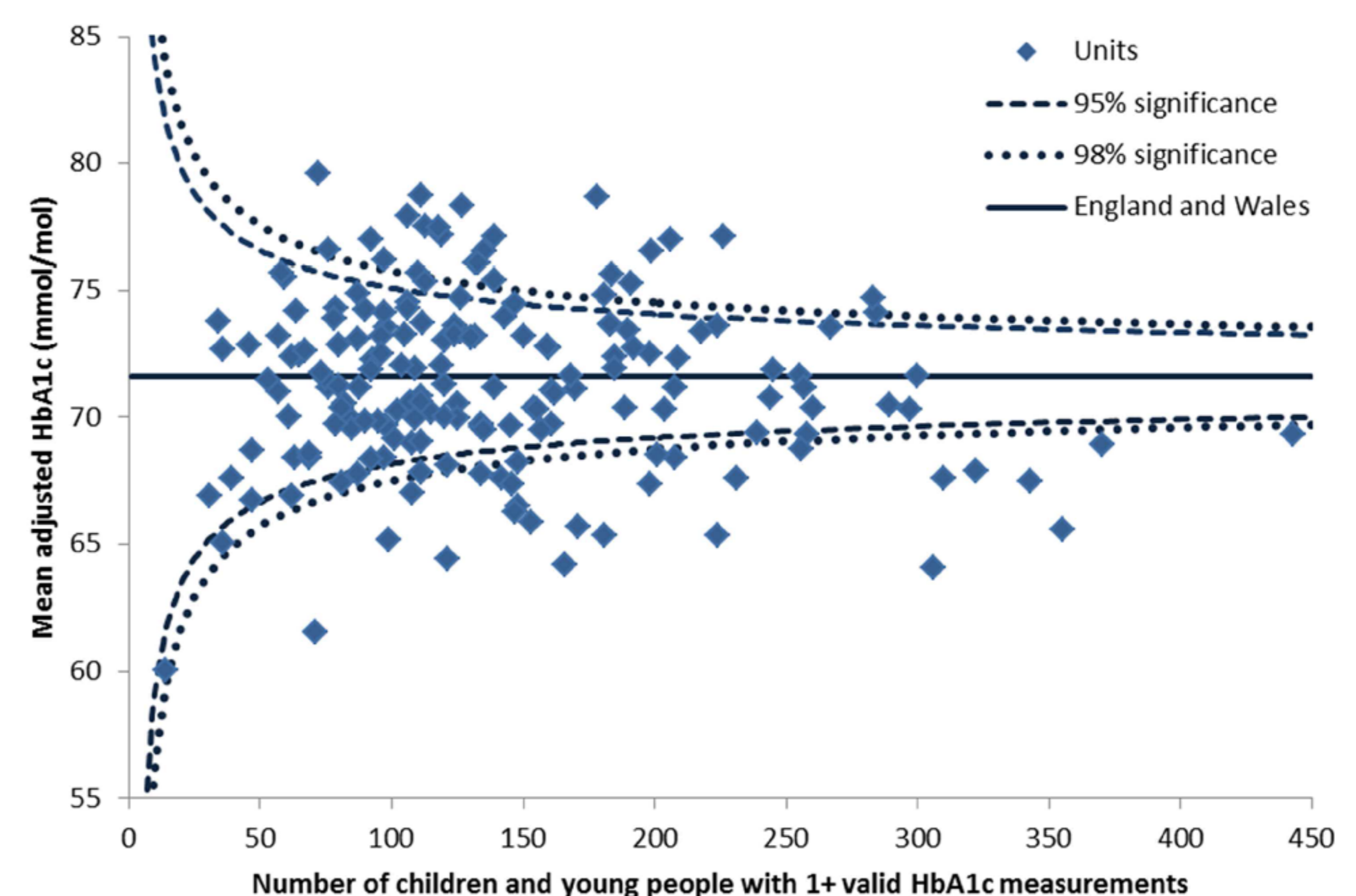
Chart 2: Median HbA1c, 2005/06 to 2013/14



Mean (SD) HbA1c was 71.6 (17.4) mmol/mol falling from 73.0 (18.0) mmol/mol in 2012/13. 18.4% had a HbA1c <58 mmol/mol (compared to 15.8% in 2012/13) and 23.9% had a HbA1c >80 mmol/mol (compared to 25.9% in 2012/13). Since 2005/06 median HbA1c has fallen from 72 mmol/mol in England and 73 mmol/mol in Wales to 69 mmol/mol in both countries.

Variation in demographic characteristics accounted for 10.1% of the variation in the mean HbA1c across Paediatric Diabetes Units. After adjusting for these differences there remained considerable variation in the (see Chart 3).

Chart 3: Adjusted mean HbA1c by Paediatric Diabetes Unit



14.1% (12 years and older) had abnormal eye screening and 7.1% were known to have albuminuria. 27.9% had a systolic and/or diastolic blood pressure above the 98th centile. Less than half (45.2%) were recorded as having received structured education in the past year.

Conclusion

Despite improvements in the care processes received and mean HbA1c in children and young people with diabetes most are not meeting recommended targets. Early warning markers of microvascular and cardiovascular disease are present. International benchmarking of mean (SD) HbA1c in 2011/12 showed Germany/Austria 64 (18) mmol/mol, USA 67 (15) mmol/mol compared with England and Wales 74 (18) mmol/mol. Further progress is needed to improve long term outcomes for children and young people with diabetes in England and Wales as they progress into adulthood.

For further details of the National Diabetes Audit visit

<http://www.rcpch.ac.uk/national-paediatric-diabetes-audit-npda>