82 patients were under the care of the paediatric diabetic team at the time of study. Of these, 17 (21%) adhered to the minimum recommended tests/day (demonstrated by the red line on figure 4). This group of patients achieved a lower average HbA1c value compared to the <4 tests/day group; HbA1c values were 63.94 and 93.90 mmol/mol respectively. This was statistically significant, with a difference between the means of 29.96 mmol/mol (P=<0.05. (95% C.I.: 15.24 – 44.67)).

Upon analysis of preventable hospital admissions, there was no significant difference found based on tests/day. There was, however, a difference in HbA1c levels and preventable admissions/patient. 17 patients out of 82 (21%) were below the target set by NICE of 58 mmol/mol. In this group, the number of preventable admissions/patient was 0.12. In the >58 mmol/mol group, the number of preventable admissions/patient was 0.51. This was a mean difference of 0.39 (95% C.I. 0.09 to 0.69), which was statistically significant (P=<0.05).

No differences were found based on age.

Abiding by the currently accepted minimum standard of measurements is a key component to achieving target HbA1c levels, and therefore fewer admissions. The identification of current glucose levels provides a platform for individual and familial diabetic control. In fact, visualising the intraday changes in levels may identify factors which fluctuate blood glucose levels. This is on the condition of adequate motivation levels.

Motivational interviewing is a component of everyday life as a Paediatrician, junior doctor or diabetic nurse. This study not only provides goals for individual departments, but, also provides an evidence base for this interviewing. Upon patient admission, it would be beneficial to relay this information; in an ultimate aim to reduce: school days missed, underdevelopment, demotivation, noncompliance and risk of complications.