**Long-Term Glycaemic Control with the Diabetes Discovery Initiative and Proactive Diabetes Review During Hospitalisation: An Observational Study**

**Aim**

To evaluate whether patients who received a Proactive Diabetes Review (PDR) during hospitalisation as part of the Diabetes Discovery Initiative (DDI) achieved greater long-term improvement in glycaemic control post-hospital discharge compared to those who did not.

**Methods**

This single-centre observational study included consecutive patients admitted to hospital between 1/January/2020-31/December/2023 with an admission HbA1c≥8.3% identified via the DDI. Eligible patients were automatically referred to the Inpatient Diabetes Team for PDR during hospitalisation.

Long-term glycaemic control was assessed by comparing the change in HbA1c from admission to the first available post-discharge HbA1c with the hospital pathology within 12 months. This outcome was compared between patients who did and did not receive PDR during hospitalisation using median regression and the Wilcoxon-Mann-Whitney U test.

**Results**

A total of 400 patients met the inclusion criteria, of which 241 (60.3%) patients were male. The median (IQR) age was 75.0 (65.0-82.0) years, length of hospitalisation was 6.8 (3.8-13.2) days, and admission HbA1c was 9.1% (8.6%-10.1%).

Of the 400 patients, 301 (75.2%) patients received PDR, and 99 (24.8%) patients did not receive PDR. Patients who received PDR had a greater median reduction in HbA1c (-1.1% (IQR -2.5%, -0.1%)) compared to those without PDR (-0.6% (IQR -2.0%, 0.0%)). The difference in median change from admission to first post-discharge HbA1c between patients who received PDR versus patients who did not receive PDR was -0.5% (95% CI: -0.923, -0.077, *p*=0.021). A statistically significant difference in the change from admission to first post-hospital HbA1c was still observed between patients who received PDR compared with those who did not, as assessed by the Wilcoxon-Mann-Whitney U test (*p*=0.014).

**Conclusion**

Patients identified through the DDI who received PDR during hospitalisation demonstrated significantly greater improvements in long-term glycaemic control up to 12 months post-hospital discharge compared to those who did not receive PDR. These findings support the value of early inpatient diabetes intervention in enhancing post-hospital outcomes.