**ANALYTICAL BRIEF 15th September 2023**

The brief below accompanies the Excel spreadsheets and the Powerpoint slides provided.

Each Excel spreadsheet contains data on one of the treatment strategies, Treatment 1, 3 or 5. Within each Excel spreadsheet are 3 workbooks. Each workbook had data on patients with (1) No diabetes; (2) Pre-diabetes or (3) Diabetes.

Within each workbook, there is data on the length of stay of each patient in hospital (column F), and 9 different adverse events (columns H-P).

**Within each treatment option, we want to know:**

(a) If the length of stay (column F) is significantly different for each group of patients (i.e. No diabetes vs Pre-diabetes vs Diabetes).

(b) What is the **relative risk (and 95% confidence interval)** and statistical significance of each of the complications (each column H-P) for people with Pre-diabetes compared to the same complication in people with no diabetes (baseline).

(c) What is the **relative risk (and 95% confidence interval)** and statistical significance of each of the complications (each column H-P) for people with Diabetes compared to the same complication in people with no diabetes (baseline).

(d) What is the **relative risk (and 95% confidence interval)** and statistical significance of any of the complications (all columns H-P) for people with Pre-diabetes compared to the same complication in people with no diabetes (baseline).

(e) What is the **relative risk (and 95% confidence interval)** and statistical significance of any of the complications (all columns H-P) for people with Diabetes compared to the same complication in people with no diabetes (baseline).

**For each patient group, we want to know:**

If the length of stay is significantly different between treatment options.

If the **relative risk (and 95% confidence interval)** and statistical significance of each of the complications (each column H-P) for people with Pre-diabetes is different for Treatment options 3 and 5 compared to Treatment 1 (baseline).

If the **relative risk (and 95% confidence interval)** and statistical significance of each of the complications (each column H-P) for people with diabetes is different for Treatment options 3 and 5 compared to Treatment 1 (baseline).

If the **relative risk (and 95% confidence interval)** and statistical significance of any complication (each column H-P) for people with Pre-diabetes is different for Treatment options 3 and 5 compared to Treatment 1 (baseline).

If the **relative risk (and 95% confidence interval)** and statistical significance of any complications (each column H-P) for people with Diabetes is different for Treatment options 3 and 5 compared to Treatment 1 (baseline).