**Tell Me What I Need to Know! Synthesizing Large Datasets in Search of Actionable Patterns**

The following article attempts to use association rules to rapidly distill a large dataset in search of preventable conditions, that if addressed, could reduce future injuries.

This is not an article that will appeal to statistical purists. There are leaps of logic within that verge on poetic license. However, the authors felt these leaps were justifiable in the context of driving preventive action that may ultimately prevent future injury and possible save lives! In another context we would be less likely to embrace these leaps.

**Business Challenge:**

Your boss is the Director-General of the UK Road Traffic Authority. You have been asked to analyse injury surveillance data captured by the authority in 2015 to determine whether there are preventable conditions association with road traffic injuries.

**Workflow:**

The workflow was simple and included the following:

1. Ingest and prepare the data,
2. Analyse the data, and finally
3. Visualise the data.

**Why Association Rules:**

A critical question to answer is “what do association rules offer over classical descriptive methods? ” This question is particularly relevant in light of our adoption of a simple lollipop chart to visualise the most common conditions (i.e., antecedents) associated with injuries.