**Jackson, Mitra, Francis & Dove (2022). Using saturated count models for user-friendly synthesis of large confidential administrative databases. *JRSSA.***

*Summary*

* Proposes a model for synthesizing large data bases. The model takes two parameters as input to specify the utility/risk levels *a priori*.

*Conclusions*

* These authors propose a synthesis method based on saturated count models that meets predefined metrics for risk or utility using two parameters
* This is similar to our method which chooses synthesis model parameters to meet one specific metric for general synthesis models (ours is more general?)
* The parameters and are chosen to set the expected values of the metrics, which are the desired utility/disclosure risk metrics
* We do the same thing! We are optimizing for synthesizing from the same data generating distribution which sets the expected value of the disclosure risk metrics to the desired levels.

*Relevant Details*

* The paper focuses on synthesizing tabulated count tables
* Each cell in the table has its own parameter – this is a saturated model so that it preserves all associations in the synthetic data
* **Confidence interval overlap metric (Karr 2006):**
* Where and
* This is the mean of two ratios: the length of the confidence interval intersection divided by the length of the interval from the original data and the length of the interval from the synthetic data