## A Software Tool for Planning Better Clinical Trials

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# **Key Questions in Clinical Trials** Clinical Trials Sample Size What is the necessary number of enrollments Power What level of Statistical Certainty can be achieved for a limited cohort size. for reaching certain accuracy?

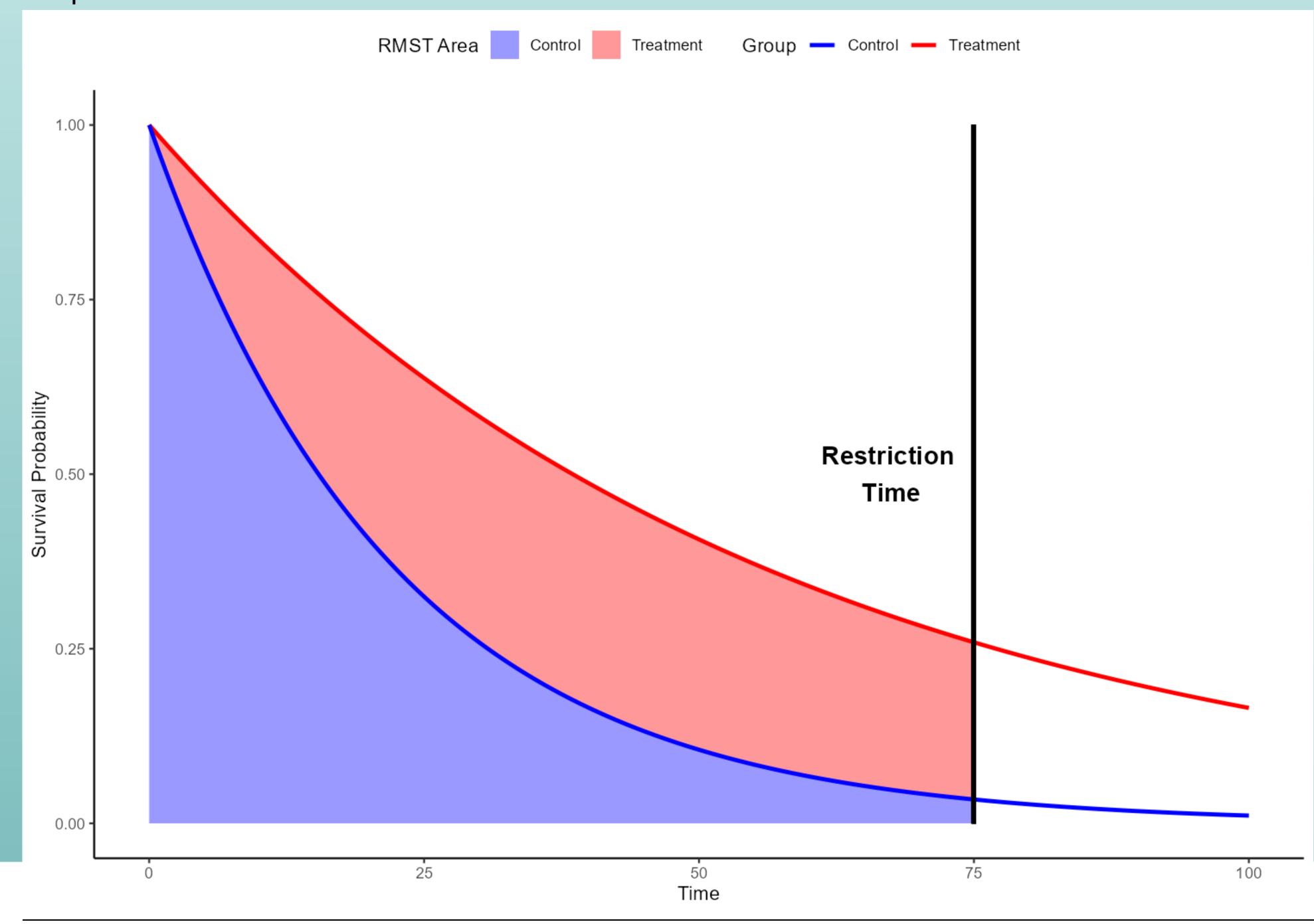
#### **Problems in Traditional Methods**

Survival trials (*Time to event*) relies on the **HR** (Hazard Ratio).

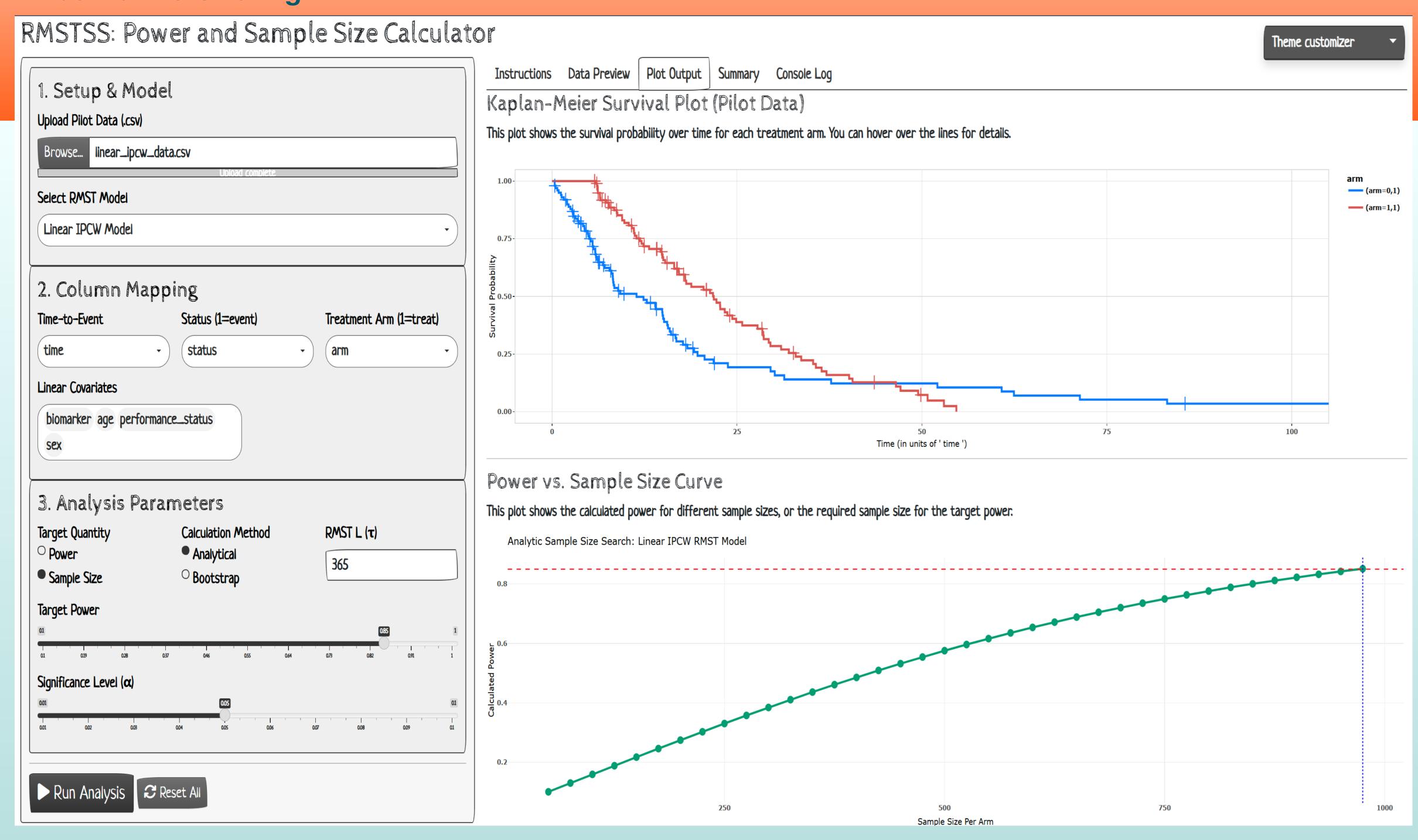
- X Depends on strong assumptions, violated in the real world.
- Can't identify treatment benefits.

#### **Our Solution: Restricted Mean Survival Time**

- ✓ Directly measures the average event-free time of patients.
- ✓ It is easy for everyone to understand.
- ✓ It provides a clear measure of treatment benefit.

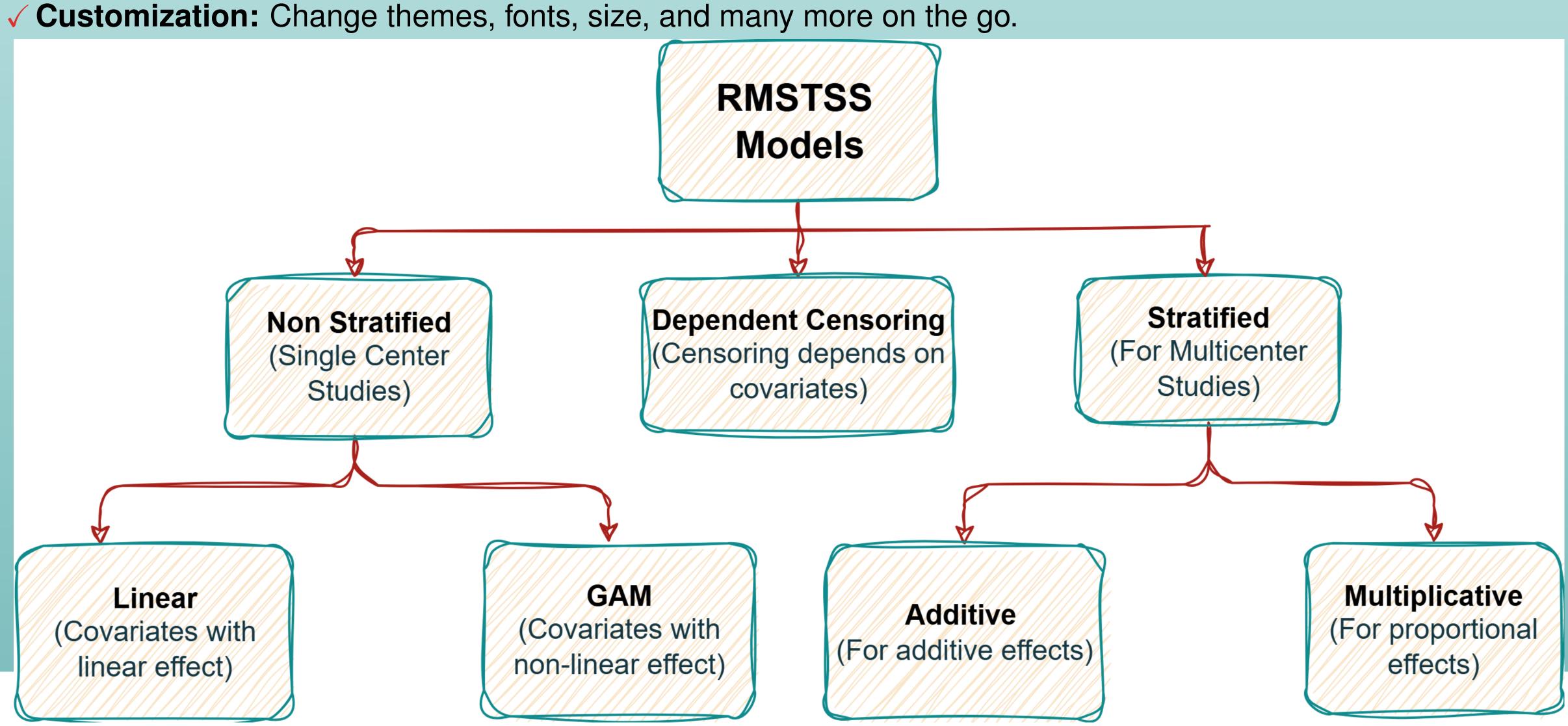


#### What We Are Offering



#### **App Features**

- √ Variable Selection: Choose variables to add in model.
- ✓ Flexible Methods: Use a Quick Check (Analytical) or a Deep Dive(Bootstrap).
- ✓ Downloadable Reports: Generate an HTML report.



### For Statisticians and Programmers

We also developed an R-Package for function-level interaction. After installing the package from GitHub, the app can be run locally using the RMSTSS::run\_app() function call. For package website scan the QR code.



1. NSF grant no. 2220726. 2. UTHSC BERD (Biostatistics, Epidemiology and Research Design).