

# **Using Blaise for Implementing a Complex Sampling Algorithm**

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This paper will discuss our approach using Blaise to implement a complex sampling algorithm for a study requiring immediate sampling of participants. The Blaise instrument used a roster to collect demographic data along with other personal characteristics relevant to the study. These data from the roster were used in a complicated selection algorithm to choose one or sometimes multiple household members to complete extended instruments. The algorithm required generating random numbers for implementing various sampling rates and sorting. In addition to developing these functions, we needed to be able to load test to verify the system would correctly yield the sampling rates. We describe how we used the Blaise Random Function to meet the requirements for applying sampling rates and coding approaches to implement the algorithm as well as the testing process and the results.