

## **Split Questionnaire Designs: are they an efficient design choice?**

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Split Questionnaire Designs (SQD) have been historically used to accommodate constraints on respondent burden. This paper investigates whether an SQD can be an efficient design option in practice to give more flexibility in meeting the range of objectives of a survey and focuses on the NSW Population Health Survey, which has previously used SQDs. The efficiency of a design can be measured by the cost required to meet constraints on the accuracy of estimates. The targets of interest to the design are analytic parameters, such as regression coefficients. It is assumed that these targets of interest are estimated using Maximum Likelihood methods.

**Key Words:** sample design, missing data, mult-matrix sampling