EXPANDED NATIONAL NUTRITION SURVEY (ENNS):
DEVELOPMENT OF THE SURVEY DESIGN

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Background:
The National Nutrition Survey (NNS) is a designated statistical activity that generates critical data for decision-making of the government and other stakeholders. The NNS is regularly conducted every five years and an Updating Survey within the five years to provide reliable estimates of food, nutrition and health indicators at the national and regional levels.

A clamor for province and city levels data to provide more specific and relevant information for utilization of local government units (LGUs) and health practitioners motivated the conduct of the Expanded National Nutrition Survey (ENNS).

To generate reliable estimates of the different health and nutrition outcomes at the provincial and highly urbanized cities (HUCs) level of disaggregation, the sample size was increased into four folds of the previous NNSs as specified in the 2013 Master Sample of the Philippine Statistics Authority or PSA. The increase in sample size posed a big concern on how to operationalize the data collection without sacrificing the reliability of estimates.

Objectives:
This study developed a survey design called a “rolling survey” that adopted the sampling methodology of the 2013 Master Sample. The ENNS has already utilized the new survey design for the 2018 data collection.

Materials and Methods:
The selection of provinces and HUCs to be covered in the three year period is very crucial in generating the national estimates. In order to gain efficiency in the generation of national level estimates for a given year, replicated sampling was employed. The provinces and HUCs that are “similar” to one another were grouped into replicates so that gains in precision can be achieved. A total of 24 replicates were formed with at least 5 provinces in most of the replicates. Eight (8) randomly assigned replicates were covered in 2018, another set of 40 in 2019 and the remaining 37 provinces and HUCs in 2020. The 2010 Census of Population and Housing was utilized as a test data to empirically validate the design. The test variables used were the number of persons (household level), number of births registered, number of OFWs, number of women of reproduction age, number of infants, number of children below five (5) and number of disabled members to cover the most common to the relatively rare variables. These variables served as proxy and are related to the indicators collected in the ENNS. In the conduct of the actual survey, listings of households per sampling area was provided by the PSA. An average of 1,536 households per sampling domain were covered to collect data for the different nutrition and health indicators on all ENNS components except for the Biochemical and Dietary components that covered only half of the target.

Results:
Using the new survey design, the data collection for the 2018 ENNS started in January 15, 2018 and ended in November 2018. The ENNS teams were able to cover 37 areas out of the 40 targeted areas in 2018 due to some difficulties encountered in the field data collection. The data collection for the three remaining areas of 2018 ENNS was scheduled in January to February 2019 while the data organization and analysis for all areas were scheduled in the first quarter of 2019. Dissemination of results was planned in the second quarter of 2019. All generated results are at the national, provincial/HUC levels for the forty selected areas in 2018.

Conclusion and Recommendation:
The ENNS survey design is closely tied up with the 2013 Master Sample of the PSA that was designed to provide flexibility allowing sufficient samples to generate statistically reliable domain level estimates. With this survey design, it is possible to generate reliable national level estimates for each year for a period of three years. However, the ENNS design does not permit for direct regional level estimations for each year.