

National Sample Survey of Registered Nurses

Proposed Contract Strategy, Materials, and Non-Monetary Incentive Plan for the 2018 Data Collection

Background

The National Sample Survey of Registered Nurses (NSSRN) has gone through a substantial redesign for the 2018 cycle. The NSSRN was last collected in 2008. Given the time lapse since it was last collected, there was significant time spent on reviewing content on the 2008 questionnaire. Improvements were made based on healthcare policy changes, and best practices in survey methodology. In addition to adding and removing content related to the registered nurses (RN) population, the National Center for Health Workforce Analysis (NCHWA) decided to add a section on Nurse Practitioners (NPs). Previously, NCHWA collected data on NPs on a separate survey called the National Sample Survey of Nurse Practitioners (NSSNP) that was last collected in 2012. The intent behind combining these two surveys is to reduce redundancy in the collection of data, which results in lower costs, and the burden on respondents that accompanied the administration of two separate surveys.

The proposed data collection design for the 2018 NSSRN is a probability sample (100,000 RNs) selected from a sampling frame compiled from files provided by the State Boards of Nursing and the National Council of the State Boards of Nursing (NCSBN). These files constitute a sampling frame of all RNs licensed in the 50 States and the District of Columbia. Sampling rates are set for each state based on considerations of statistical precision of the estimates and the costs involved in obtaining reliable national and state-level estimates. The survey will utilize a multimode data collection design, offering respondents the opportunity to participate via a web instrument and/or a paper questionnaire. Respondents will also have access to a staffed questionnaire assistance telephone line where they will be able to get login assistance, language support, and even complete the interview with a Census telephone interview agent.

To help reduce non-response bias, the 2018 NSSRN survey will be including a non-monetary incentive for half of the respondents in the first mailing and for a proportion of non-respondents of the other half in mailing contact #5. This will allow us to experimentally test the efficacy of the non-monetary incentive; that is, whether offering an inscribed syringe pen and lanyard as a token of appreciation increases response among respondents who would otherwise refuse, thus reducing non-response bias and reducing costs associated with non-response follow-up efforts.

In addition to testing non-monetary incentives, the 2018 NSSRN will evaluate the use of different materials and various non-response follow-up mailing strategies testing for response improvements using different envelopes to deliver the survey materials.

Data Collection

The Census Bureau will request survey participation from 100,000 RNs via one of two modes: Web survey or paper questionnaire. Half of respondents will receive a letter invitation with the Web URL and login ID included in the letter. The other half of respondents will be mailed a paper questionnaire with the Web URL and login ID included in the questionnaire package. Those RNs that receive a paper questionnaire in the first mailing will be randomized.

The 2018 NSSRN will include multiple contact strategy experiments to reduce both follow-up costs and nonresponse bias. There will be a non-monetary incentive experiment in the first mailing. Approximately half of the sample will be mailed an inscribed syringe pen and lanyard for the first contact attempt. Receiving a syringe pen and lanyard were discussed with the members of the nursing workforce and the feedback was that syringe pens are common in the nursing field due to the nature of the occupation. Non-monetary incentives have been used in past research studies to reduce non-response bias. The syringe pen and lanyard will be experimentally tested again in the fifth follow-up mailing with a segment of the non-responding sampled RNs/NPs from the control group from the initial mailing. Half of those non-respondents will be mailed a syringe pen and lanyard.

Additionally, the 2018 NSSRN will include an experiment to test the efficacy of an infographic in the third contact attempt. Fifty percent of the RN sample will be randomly assigned the treatment group. While the content and design of the infographic is still being developed, it is anticipated that providing respondents with a visually pleasant overview of the survey, including survey design, key estimates from past iterations, and information on how the data can benefit their community, will encourage response. Additionally, there will be logos of the several nursing organizations that endorse the NSSRN.

Contact Details

The anticipated data collection period for the 2018 NSSRN provides 4 months for sample members to respond after the first mailing. The data collection period is expected to begin with the first mailout on March 15 and extend through the end of July when the survey is planned to close out. The planned timing and structure of the contact attempts within the NSSRN data collection protocol are described in **Table 1** below.

Table 1: 2018 NSSRN Proposed Mailout Plan

2018 NSSRN -MAILOUT PLAN															
Contact #1	Estimate Mailing Count	Contact #2	Estimate Mailing Count	Contact #3 80%	Estimate Mailing Count	Contact #4	Estimate Mailing Count	Contact #5 60%	Estimate Mailing Count	Contact #6	Estimate Mailing Count	Contact #7 50%	Estimate Mailing Count	Contact #8	Estimate Mailing Count
Initial Web	25,000	Reminder (T)	12,500	Web # 2	5,000	Reminder (B)	5,000	Paper #1 w/incentive	3,750	Reminder (T)	3,750	Paper #2	3,125	Reminder (F)	3,125
				Web # 2 w/Infographic	5,000	Reminder (B)	5,000	Paper #1	3,750	Reminder (T)	3,750	Paper #2	3,125	Reminder (F)	3,125
		Reminder (B)	12,500	Web # 2	5,000	Reminder (T)	5,000	Paper #1 w/incentive	3,750	Reminder (B)	3,750	Paper #2	3,125	Reminder (F)	3,125
				Web # 2 w/Infographic	5,000	Reminder (T)	5,000	Paper #1	3,750	Reminder (B)	3,750	Paper #2	3,125	Reminder (F)	3,125
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				Web # 2 w/Infographic	5,000	Reminder (B)	5,000	Paper #1	3,750	Reminder (T)	3,750	Paper #2	3,125	Reminder (F)	3,125
		Reminder (B)	12,500	Web # 2	5,000	Reminder (T)	5,000	Paper #1	3,750	Reminder (B)	3,750	Paper #2	3,125	Reminder (F)	3,125
				Web # 2 w/Infographic	5,000	Reminder (T)	5,000	Paper #1	3,750	Reminder (B)	3,750	Paper #2	3,125	Reminder (F)	3,125
Paper	25,000	Reminder (T)	12,500	Paper #2	5,000	Reminder (B)	5,000	Paper #3 w/incentive	3,750	Reminder (F)	3,750				
				Paper #2 w/Infographic	5,000	Reminder (B)	5,000	Paper #3	3,750	Reminder (F)	3,750				
		Reminder (B)	12,500	Paper #2	5,000	Reminder (T)	5,000	Paper #3 w/incentive	3,750	Reminder (F)	3,750				
				Paper #2 w/Infographic	5,000	Reminder (T)	5,000	Paper #3	3,750	Reminder (F)	3,750				
Paper w/incentive	25,000	Reminder (T)	12,500	Paper #2	5,000	Reminder (B)	5,000	Paper #3	3,750	Reminder (F)	3,750				
				Paper #2 w/Infographic	5,000	Reminder (B)	5,000	Paper #3	3,750	Reminder (F)	3,750				
		Reminder (B)	12,500	Paper #2	5,000	Reminder (T)	5,000	Paper #3	3,750	Reminder (F)	3,750				
				Paper #2 w/Infographic	5,000	Reminder (T)	5,000	Paper #3	3,750	Reminder (F)	3,750				
	100,000		100,000		80,000		80,000		60,000		60,000		25,000		25,000

These experimental conditions are described in **Table 2** below.

Table 2: Conditions for NSSRN Contact Experiments

Mailing	Experimental Condition
1	Web vs. Mail
	Incentive vs. No incentive
2	Trifold vs. Bifold Reminder
3	Web vs. Mail
	Infographic vs No Infographic
4	Trifold vs. Bifold Reminder
5	Incentive vs Non-Incentive for Non Respondents
6	Trifold vs. Bifold Reminder
	Final Notice
7	None
8	Final Notice

Research Questions

This design implies the following as research questions that the contact strategy seeks to answer:

- Is there a different response pattern for web vs. mail respondents?
- Does the use of a non-monetary incentive impact sample members' propensity to respond?
- Does the type of reminder mailing (trifold vs. bifold) have a differential impact?
- Does a non-monetary incentive offered to nonrespondents during data collection impact sample members' propensity to respond?
- Does the final notice envelope have an impact?

Validation

The proposed research questions will be deemed successful if there is a significant difference between to the groups with 3% level of detection.

Papers finding increases in response rates among physicians using a pen:

Link: <https://academic.oup.com/aje/article/162/3/261/171240/Increasing-Response-to-Mailed-Questionnaires-by>

Citation:

Emily White, Patricia A. Carney, Ann Shattuck Kolar; Increasing Response to Mailed Questionnaires by Including a Pencil/Pen. *Am J Epidemiol* 2005; 162 (3): 261-266. doi: 10.1093/aje/kwi194

Link:

http://www.academia.edu/19592352/A_small_unconditional_non-financial_incentive_suggests_an_increase_in_survey_response_rates_amongst_older_general_practitioners_GPs_a_randomised_controlled_trial_study

Citation:

Pit et al.:A small unconditional non-financial incentive suggests an increase in survey response rates amongst older general practitioners (GPs): a randomised controlled trial study.

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2013 14:108.