

NHS Staff Survey: Response Rates

The NHS Staff Survey is one of the largest collections of workforce feedback anywhere in the world. On average more than 1.2 million people are invited to take part and the survey receives over 600,000 responses. The results provided detail insights into the experiences of staff working across the NHS.

We generally consider reporting of survey response rates to be good practice, because it gives users an immediate sense of the overall level of participation. But it is important to recognise that the survey's response rate provides at best only a crude measure of how representative the survey is. Focussing too much on response rates can in fact be counter-productive, both to users' understanding of the survey data and to efforts to improve the quality and utility of findings.

In this briefing note, we briefly discuss common misconceptions around survey response rates. Whilst encouraging participation from all employees is important, we argue that target response rates should be avoided and that reporting of survey data locally should focus on the content rather than on the volume of feedback received.

Terminology

Like most sciences, survey research has its own set of jargon. In this briefing we will use a number of phrases that may benefit from explanation:

- **Response rate** – simply put, this is the proportion of people who were invited to take part who then completed the survey.
- **Nonresponse bias** is the error in survey results associated with some invited people choosing not to respond. Survey results are estimates of the population rate of any given measure: for example, if 65% of staff in Anytown NHS Trust say that they are female in the NHS Staff Survey, then we would estimate the true proportion of female staff in that same trust to be 65%. If, however, female staff were less likely than male staff to complete the survey, then the survey would underestimate the true proportion of female staff, which would be higher than 65%. The difference between the estimate and the true parameter attributable to nonresponse is nonresponse bias¹.
- **Representativeness** is the extent to which survey respondents reflect the wider population of interest. In the NHS Staff Survey, the population of interest is generally all substantively employed staff within a given organisation, with some exceptions. For the 'achieved sample' of respondents to be representative, it should in effect be a random selection of staff in the organisation with no groups under or overrepresented.

¹ Note that nonresponse bias is not the only source of error in surveys. Researchers sometimes talk about 'total survey error' as comprising a range of different types of error, including measurement errors related to the design of questions and responses as well as representation errors including sampling error and nonresponse bias. A full discussion of total survey error is beyond the scope of this briefing, but for a detailed review of the subject see Groves & Lyberg (2010).

Representativeness and nonresponse bias

The goal of a survey is to understand the views, attitudes, or experiences of the population of interest. In the case of the NHS Staff Survey, we want to understand what it is like for people to work in NHS organisations, both at institutional and national level. Because the NHS is a tremendously diverse employer with staff from a wide range of backgrounds working in different occupations, this means we need to be able to hear from many kinds of people if we want the feedback collected to be *representative* – that is, if we want the feedback to be generalisable beyond the group of survey respondents to the population of the organisation (or, indeed, the NHS) as a whole.

In a detailed meta-analysis, Groves and Peytcheva (2008) argue that representativeness (and specifically nonresponse bias) will only be associated with response rates under certain circumstances. A crucial consideration is whether people's reasons for choosing to respond or not to a survey are related to the things being measured in the survey: the greater and more direct the association, the less likely it is that higher response rates will be associated with reduced nonresponse bias. For example, if staff who feel disengaged from their employer are more likely to ignore surveys, then this may lead to high levels of nonresponse bias in measures of employee engagement.

In practice, there may be many reasons why individuals choose not to respond to the NHS Staff Survey. These may include a lack of time; concerns over confidentiality; lack of confidence that the results will be used; technical issues when attempting to respond; lack of interest; or even simple forgetfulness. Some of these reasons may be associated with people's experiences at work; others likely are not.

What is a 'good' response rate?

Survey users often ask what level of response rate is 'good' or 'acceptable'. This is an understandable and reasonable question. Plainly, if no one responded – a 0% response rate – then a survey would be useless. Conversely, a survey with a 100% response rate should have no nonresponse bias – and if the survey has been conducted as a census, as is the case with the vast majority of NHS organisations' staff surveys, then it should be directly representative of the experiences of all staff. Superficially, then, one may imagine that survey representativeness increases with higher response rates, and this might suggest that there is some threshold level of representation that can be considered acceptable.

The idea of a threshold level of 'good' or 'acceptable' response rates is reinforced by companies and individuals who offer an opinion on the matter. A quick Google search reveals many suggestions for a 'good' response rate. Confusingly, the proposed figures vary tremendously – without citing specific sources, quoted figures on the first page of Google results vary from "above around 20%" to "80-90%". This causes understandable confusion for survey users.

In fact, it is quite wrong to make any generalised claim about what constitutes an 'acceptable' or 'good' survey response rate. High response rates are desirable because they are typically associated with highly representative data – but this is not always the case. In fact any survey can have issues with representativeness: as Sheikh and Mattingly (1981) argued pithily, "there is no safe level of response rates below 100%". Neither is the inverse true: surveys with lower response

rates can be highly representative. Instead of treating response rates as a direct measure of representativeness, users should therefore review their data to identify any potential gaps in representation – which may occur for different professional groups; different demographic groups; or different units or departments.

As a simple example, consider a scenario where two trusts, Trust Y and Trust Z, each operate five sites. Trust Y and Z have overall response rates of 80% and 50% respectively, but the response rates per site are as shown below:

	Trust Y	Trust Z
Site 1	100%	50%
Site 2	100%	50%
Site 3	0%	50%
Site 4	100%	50%
Site 5	100%	50%
Overall response rate	80%	50%

In this scenario, inspection of the data suggests a serious issue with representativeness in Trust Y, as no one from site 3 has responded to the survey. This is likely to result in much poorer overall representativeness than in Trust Z, where there is a lower response rate overall but where this is even across all sites.

Conclusions

The simple conclusion here is that higher response rates cannot automatically be assumed to imply more representative data – or a more engaged workforce. They should not be viewed as a survey outcome in and of themselves and NHS organisations should be cautious about focussing too heavily on response rates – particularly if this is at the expense of a focus on outcomes that are more important to staff, such as their self-reported engagement, morale, and working experiences.

We do, of course, want to maximise the response to the NHS Staff Survey so that as many people as possible can have their say and to allow the widest use of the survey. We encourage NHS organisations to continue to promote the survey and encourage their staff to respond in future – doing this will help to make sure that the survey is inclusive and useful. But organisations and survey users should be mindful that response rates only give a rough indication of representativeness; that they can be misleading; and that they must not be viewed as an indicator of staff engagement. Fundamentally, response rates are ‘metadata’ – information that describes something about our real ‘data’, the survey results – and we strongly encourage users to instead focus on understanding and improving the feedback received from staff.

References

- Groves, R. M., & Lyberg, L. (2010). Total Survey Error: Past, Present, and Future. *Public Opinion Quarterly*, 74(5), 849–879. <https://doi.org/10.1093/poq/nfq065>
- Groves, R. M., & Peytcheva, E. (2008). The Impact of Nonresponse Rates on Nonresponse Bias A Meta-Analysis. *Public Opinion Quarterly*, 72(2), 167–189.
<https://doi.org/10.1093/poq/nfn011>
- Sheikh, K., & Mattingly, S. (1981). Investigating non-response bias in mail surveys. *Journal of Epidemiology and Community Health*, 35(4), 293–296.