

"I've got a text!" Feedback from prospective participants on the use of SMS surveys in real-world studies

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Background & Objectives

SMS notifications can be a useful component of digital patient-reported real-world studies to encourage engagement and a more complete dataset, particularly considering that 98% of mobile phone users have been found to open their SMS messages¹. Occasionally, studies have implemented SMS surveys, such that participants' responses to a short or single-question SMS survey may trigger the release of a follow-up online survey. In this way, participants who are eligible for the follow-up survey can be identified efficiently and the completeness of the dataset may be improved.

The objective of this project was to gain insights into preferences on the use of SMS surveys and notifications in longitudinal digital patient-reported real-world studies.

Methods

Members of the public were invited to complete a five-minute bespoke web-based survey. The survey comprised demographic and multiple-choice questions eliciting participants' preferences regarding the use of SMS surveys and notifications in longitudinal digital real-world studies.

Results

Twenty-four participants (mean age: 46; range: 27-75) completed the survey, 71% of whom reported living with a chronic health condition. Participants most commonly reported living with endocrine, neurological and rare diseases (Figure 1). A small proportion (8%) also reported that they were caregivers of someone living with a chronic condition.



Figure 1: Disease classes reported by participants

Overall, 71% of participants reported being very likely or somewhat likely to opt in to receiving SMS surveys asking one question about their, or a dependent's, health condition, if participating in a longitudinal digital real-world study. The majority of participants (79%) reported that they would be very likely or somewhat likely to subsequently respond to a single-question survey administered via SMS (Figure 2).



Figure 2: Participants' preferences for SMS surveys about a health condition

If their response to the single-question SMS survey were to trigger a follow-up online survey, 63% of participants reported being very likely or somewhat likely to complete it. Once per week and once every few weeks (both 38%) were the most commonly reported frequencies that participants would prefer to receive an SMS survey. Half of participants reported an overall positive opinion regarding SMS notifications.

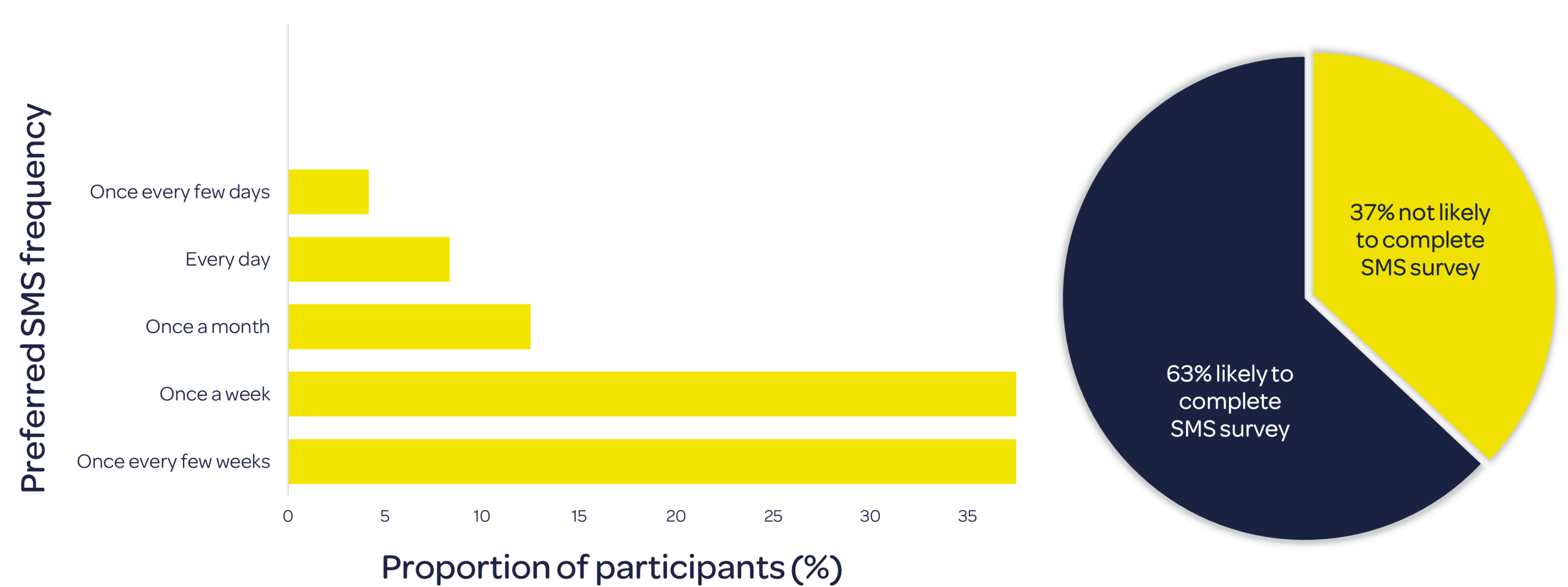


Figure 3: Participants' preferences regarding follow-up SMS surveys

Discussion & Conclusions

Similar to previous studies, a high proportion of participants in this study were willing to engage with SMS surveys regarding a health condition². The wide participant age range demonstrates that SMS surveys may be utilized across younger and older cohorts. The self-predicted probability of opting in to receiving SMS surveys was high, and that of responding to a single-question SMS survey was higher still – this demonstrates a notable willingness among the cohort to comply with the low commitment levels required for engagement with SMS surveys.

Our findings suggest that limiting the number of SMS survey questions and customizing the timing of SMS delivery to once a week could result in optimal participant engagement and data completeness. It should be noted that, while the small sample size may limit the generalizability of these findings, they provide useful insights given the importance of participant engagement for remotely collected data.

To conclude, the use of SMS surveys and notifications in longitudinal digital real-world studies was well accepted by participants and should be considered in future studies to improve engagement and dataset completeness.

References

- ¹Roy PK, Singh JP, Banerjee S. Deep learning to filter SMS spam. *Future Generation Computer Systems*. 2020;102:524-533.
- ²Whitford HM, Donnan PT, Symon AG, et al. Evaluating the reliability, validity, acceptability, and practicality of SMS text messaging as a tool to collect research data: results from the Feeding Your Baby project. *J Am Med Inform Assoc*. 2012;19(5):744-749.