Online survey implementation in clinical research – methodological lessons learnt

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Background

- Surveys are a useful tool to collect data in an accessible manner as the information can be captured remotely, at a larger and faster scale than if it was collected in-person (Story et al., 2019).
- With the growing popularity of survey studies within clinical research, it is important to acknowledge and anticipate, where possible, **challenges arising from collecting data online**.
- To this effect, this work seeks to share some of **the lessons learnt when conducting survey studies in the field of clinical research**, taking an example from recent work conducted at Parexel International.

Methods

- Questionnaire development experts created the content for two main surveys: a health care professionals (HCP) survey and patient survey.
- These questionnaires were tested using standard survey methodological principles and best practices for instrument development (Groves et al., 2009; Hollis et al., 2014).
- Surveys were programmed using a web-based survey online tool which does not require software download and is General Data Protection Regulation (GDPR) compliant.
- A **soft launch** was conducted where the two surveys were extensively tested in house by native speakers before being launched in the study sites themselves.

Results

- While it may seem "easy" to collect data online, the survey **design** will dictate how, what and the quality of the data collected.
- Robust **planning and testing of surveys is paramount** – particularly for studies which are complex in nature due to their design.
- For example, studies involving more than one country and/or more than one study site for participant recruitment may be subject to varying degrees of: local regulations (ethics committee requirements or country-specific regulations); recruitment strategies and informed consent processes – which all need to be incorporated in the survey design itself.
- Some of the recommendations resulting from the lessons learnt for such international multi-center studies are included in the Table below.

Recommendation	Description
Site feasibility	Feasibility efforts **prior** to survey launch are important to estimate appropriate survey completion rates.
Country specific links	Specific links as opposed to a singular link allows for a staggered launching approach of surveys by country. This may be useful with varying ethics approval timelines between countries.
Authentication codes	Using a "code" to access the survey will control access. This should limit fraudulent activity and increase confidence that the intended participants (e.g. those with a specific diagnosis) are the ones accessing the survey.
Implementing a separate "verification survey"	The verification of patient-reported medical data (e.g. year of diagnosis, treatment plan) by HCPs may be required in specific instances. Adding a separate verification survey (with these medical points) to be completed by HCPs is useful when in-person consultations are not possible, and the information needs to be verified by clinical staff.

Conclusions

- Sharing best practice methods for survey development is important to ensure **rigorous research** and **robust outputs** when collecting data online.
- An important caveat to these survey recommendations is that they should be implemented considering the overall study design and research questions. Additionally, feasibility efforts should be carried out as closely as possible to survey launch.
- Taken together, the practical methodological lessons presented may be particularly valuable for multi-center involving patients where medical points are to be "verified" by clinical staff but in person consultations are not possible.

REFERENCES

Story DA, Tait AR. Survey Research. Anesthesiology. 2019 Feb;130(2):192-202. doi: 10.1097/ALN.0000000000002436. PMID: 30688782

Groves RM, Fowler FJ, Jr., Couper MP, Lepkowski JM, Singer E, Tourangeau R. Survey methodology, 2nd edition. Hoboken, NJ: John Wiley & Sons, Inc.; 2009.

Hollis KA, Gilsenan AW. Design and implementation of surveys to assess patient and healthcare provider understanding of risks and safe use condition. In: Andrews E, Moore N, editors. Mann's pharmacovigilance. Chichester: John Wiley & Sons, Inc.; 2014.

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