Addressing confirmability

This research employed a systematic and rigorous approach towards ensuring and evaluating credibility, transferability, and dependability. A constructivist paradigm served as the basis for the research, demonstrated in our previous research experience to be an appropriate approach when evaluating workflow. Researchers rooted in the constructivist paradigm conduct inquiry in natural contexts using the conceptual basis that researchers and subjects together determine the meaning of data and findings[1-3]. To avoid terminology confusion with positivist approaches, we utilized the terms defined by Lincoln and Guba regarding elements of confirmability when conducting research in a constructivist paradigm[4]. The plan for addressing elements of confirmability is shown in Table 1. The multi-stage approach highlighted the importance we placed on ensuring the confirmability of this research.

Table 1. Addressing elements of confirmability

	During Fieldwork	**During Data Analysis**	**After Fieldwork**
Credibility	- Prolonged engagement - Persistent observation - Triangulation - Peer debriefer - Reflexive journaling	- Persistent observation - Peer debriefer - Member checks - Reflexive journaling	- Member checks - Reflexive journaling
Transferability	- Rich description of context and method - Investigation of multiple clinical sites	Rich description of context and method	Rich description of context and method
Dependability	Reflexive journaling	Reflexive journaling	

Credibility, which is analogous to **internal validity**, was established through three

distinct processes: field research activities, peer debriefing, and member checking. Activities utilized during data collection in the field to increase the credibility of the data included: prolonged engagement, persistent observation, and triangulation. Extended periods of time were allotted in the project timeline to allow for prolonged engagement with and immersion in the environment. Data analysis was conducted concurrent with data collection, allowing emergence of themes and patterns to assist in providing depth and direction of data collection, meeting the purpose of persistent observation.

A process of triangulation, or utilizing multiple approaches towards the problem, was also applied during data collection. Triangulation involved the use of multiple sources of data and application of multiple methods towards the domain. Sources of data in this study included: MSeHA staff, administrative staff, patients, nurses, nurse practitioners, and physicians. Seeking information from multiple sources promoted a richer, more thorough understanding of the problem domain. The application of multiple methods was intrinsically part of the iterative processes used in our research.

In addition to activities that ensure credibility during data collection, interaction with a peer debriefer and member checks were also used throughout the research project to ensure credibility. A peer debriefer assisted in discussing methodology, data analysis, and general fieldwork topics. According to Lincoln and Guba, the peer debriefer serves as a "devil's advocate" in the research process, challenging assumptions, providing constructive criticism, and suggesting alternative paths.

Member checking consisted of discussing research findings with the subjects of the research to collect additional layers of data, to gain feedback on the accuracy of the data, and to provide a different perspective on the findings. Member checks were

conducted with multiple research subjects through interviews.

The emphasis of **transferability**, which is analogous to **external validity**, was on transferability of research findings to similar contexts. To facilitate this, a rich description of the findings along with a through description of the context was developed to allow comparison of contextual similarities between different research sites. The project timeline allocated adequate time to investigate several distinct sites within the RHIO, providing evidence of transferability of the findings.

Dependability is analogous to **reliability**. Throughout the research project, the researcher engaged in activities to encourage reflexivity, such as journaling. Reflexivity involves being aware of the influence of the perspective of the researcher on the collection, interpretation, and analysis of the data[5]. Journaling allowed the researcher to record information such as personal reasons for selecting the research topic, perspectives on the research, reactions to fieldwork activities, and any other information not appropriate in formal field or methodology notes. The process promoted awareness of potential sources of bias for the investigator and made the perspective of the researcher transparent to others. In addition, this process allowed the investigator to "bracket" sources of individual bias in an attempt to filter them from the research[6].

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