



# Developing a Collaborative Research Environment in Health Care: Challenges and Opportunities

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## Introduction

In health care research, the importance of interdisciplinary collaboration between psychologists, technologists, and health care professionals cannot be overstated.<sup>1</sup> Interdisciplinary research holds transformative potential to facilitate a holistic understanding of the factors that enable the implementation of targeted interventions to mitigate risks and enhance patient outcomes.<sup>2–4</sup> It is a vital conduit for enriching research outcomes, by integrating psychological insights as a leverage to drive technological developments.<sup>5</sup> To improve our understanding of the clinical relevance of the sample, it was necessary for us to comprehend the nuances of both disciplines.

Navigating the landscape of hospital-based field research can pose an array of challenges ranging from issues with data collection procedures to cooperation from health care professionals or suspending the underlying sense of suspicion related to research.<sup>6–8</sup> These challenges can arise due to various factors, such as busy schedules, competing priorities, and institutional bureaucracy.<sup>9</sup> Obtaining necessary approvals and permissions can be an exhausting process given the multiple layers of review and coordination with hospital administrators and ethics committees.<sup>10</sup> More importantly, engaging with health care professionals can be challenging due to skepticism and perceived intrusion into clinical activities.<sup>11</sup> Demanding schedules and diverse commitments affect the availability and participation of health care professionals in research activities.<sup>12</sup> It is crucial to recognize and acknowledge that this can impede the data collection process.

Drawing from personal experiences as field researchers, these obstacles underscore the necessity for garnering support for research initiatives.<sup>9</sup> In such endeavors, the acquisition of certain skills over time becomes imperative, namely effective communication, adaptability, and technical proficiency.<sup>13</sup> For

instance, when engaging with doctors, their primary focus often revolved around understanding the technical aspects and mechanisms behind the new device or intervention under investigation. Conversely, when communicating with nurses, they were particularly interested in how the new device or intervention could improve efficiency, and enhance patient outcomes in day-to-day routines. Additionally, they also highlighted that patient-related factors, such as comorbidities, demographics, and clinical history, were considered in the research design and implementation.<sup>2</sup>

For successful fieldwork, fostering rapport is a linchpin, especially when collaborating with nurses who play a pivotal role in the health care ecosystem.<sup>14</sup> Despite facing initial skepticism, nurses became staunch allies, providing invaluable support and guidance throughout the research process.<sup>15</sup> They played a pivotal role in making the whole process of interviewing patients less intimidating for the patients and those collecting data from them, thereby enabling a smoother research process.<sup>16</sup> Their intimate familiarity with the daily realities of clinical practice, nuanced understanding of patient needs and experiences, and hands-on engagement with health care technologies render them invaluable collaborators in the research process.<sup>17</sup>

Operating within multidisciplinary teams demands adeptness in approaching several different individuals for the successful accomplishment of research tasks.<sup>18</sup> Tailoring communication strategies to effectively engage with diverse stakeholders and address their specific interests and concerns also becomes important.<sup>1</sup> It becomes crucial to adapt language to suit the needs of the context, such as using technical terms that focus on usability for tech teams and emphasizing practical implications for clinicians.<sup>19</sup> As we moved further ahead in research by introducing the developed instrument into the field, there was a constant need for

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change in language and narrative with each stratum of the population, for example, there was a considerable difference in what constituted an idea of convenience, reliability, dependability, and other related metrics to the personnel developing the instrument from that of the health care professionals who were to utilize this architecture in the field practically.<sup>20</sup> Therefore, it has become of great importance to map the changes of the instrument moving from an experimental laboratory to a clinical one.<sup>13</sup> Conversely, challenges with patients and their caregivers can be based on contextual comprehension, where we had to explain the need and uses of the instrument.<sup>21</sup> Given the diverse patient sample across critical care, pediatric, and geriatric populations, technological integration, advocacy, and understanding confidentiality were a few challenging areas.<sup>22</sup> It was important to have patience while empathizing with their circumstances and requirements. A large number of people expressed their emotions existentially, downplaying their challenges in light of the more severe illness they were facing. As psychologists, we bridge this gap, conveying the needs of both groups to optimize patient outcomes.<sup>23</sup>

In our personal experience, data collection in a clinical environment differs significantly from other settings due to the constant prioritization of emergencies and critical situations.<sup>24</sup> Quoting back on the issue of scheduling interviews with health care professionals, it is only appropriate that patient well-being is given precedence over other activities in a hospital setting.<sup>21</sup> On the other hand, this also implies that we as a research team are provided with minimal time and resources to investigate the problem under study. Working in a field also entails that one repeats their observations over time—notice patterns, associate and un-associate cause and effects, and observe the behavior of the people involved in the study. Over time, we realize that there is often more to observe than one would imagine otherwise.<sup>25</sup> It is through these consistent and continuous observations that one can understand and analyze the variables under study, thereby necessitating the need for psychologists as the bridge between laboratory and field.<sup>26</sup>

Navigating through the complexities of hospital settings and collaborating with a diverse range of healthcare professionals also helped foster skills of adaptability and team work. It also instilled an understanding of professional conduct and cultivated a stronger sense of work ethic, which applies to every other workplace.<sup>14</sup> Additionally, this experience honed our skills in working with vulnerable populations and what precautions one must be mindful of taking with such groups.

This article highlights the critical importance incorporating psychological perspectives into biomedical research and its role in advancing the shared goal of enhancing patient care within both biomedical and psychological disciplines. It also focuses on the ground-level experiences of conducting research in hospital environments, which present unique challenges, such as difficulties in data collection and skepticism from health care professionals for which researchers must employ strong communication skills and adaptability to address the diverse needs of different stakeholders. By leveraging personal experiences, this study explores how

psychologists function as a conduit between laboratory research and clinical practice. Their expertise in behavioral analysis and patient interaction is instrumental in making research findings more applicable and impactful in health care settings highlighting how the contributions are crucial for translating research into practical, patient-centered interventions. The overarching objective of this perspective study is to highlight the role of psychologists in bridging the divide between laboratory-based research and real-world clinical practice and shed light on the challenges inherent in conducting such interdisciplinary research.

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#### Conflict of Interest

None declared.

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