INTRODUCTION
In 2011, Physicians for Human Rights (PHR) launched its Program on Sexual Violence in Conflict Zones to confront impunity for widespread sexual violence — used as both a weapon of war and a common crime. Rare cases that made it to court often failed because of insufficient evidence to support survivors’ allegations. In that context, PHR saw medical professionals as powerful change agents and created an initiative to enhance collaboration between medical and legal professionals to collect, document, and analyze forensic evidence to hold perpetrators accountable and improve access to justice for survivors as well as to improve medical care. PHR works with doctors, nurses, trauma counselors, law enforcement, lawyers, and judges in Kenya and the Democratic Republic of the Congo (DRC) to develop comprehensive, standardized methods for collecting forensic evidence of sexual violence to increase the likelihood of effective and successful investigations and prosecutions of these crimes.

But health facilities and police stations using paper-based forms often lack proper storage for secure preservation or encounter difficulties traveling long distances to retrieve evidence due to poor roads or lack of access to vehicles. To address these challenges and to leverage mobile phone penetration even in the most resource-constrained environments, PHR developed a high-tech solution called MediCapt, a mobile application to help clinicians document forensic evidence of sexual violence during patient encounters.

PROJECT AIM
MediCapt shows promise for supporting survivors’ access to effective investigation by enabling clinicians to better document medical forensic evidence of sexual violence, preserving chain of custody, and improving data security and privacy. This project aims to determine whether the use of a mobile forensic documentation mHealth tool, the MediCapt application, in resource-constrained settings affects the ability of clinicians to collect, document, and preserve medical evidence of sexual violence during medical exams. This project also aims to contribute to the literature around the use of mHealth for collecting quality evidence and its role in a survivor-centered approach to forensic medical examination of sexual violence.

SUMMARY OF INTERVENTION
In this study, researchers will compare documentation of forensic medical evidence of sexual violence at control sites, defined as hospitals that use only paper forms, and intervention sites, those using digitized forms via MediCapt. The choice of sites will allow for comparison of DRC, a low-income country with connectivity challenges and no standardized forensic documentation of sexual violence, to Kenya, a slightly higher income country with a well-developed medical and legal guidelines for addressing sexual and gender-based violence and a standardized forensic documentation form for cases of sexual violence. In each country, two intervention sites and two control sites will be selected and evaluated.

The evaluation will use a pre-intervention, post-intervention two group (control, intervention) design without random selection to evaluate the following outcomes: the quality of evidence collected, defined as the completeness of the form, access to the form, and preservation of evidence collected; the ability of the clinician to conduct a survivor-centered evidence collection process, defined as time to complete form; and the hospitals’ ability to participate in clinical quality assurance and health reporting, defined as the time to aggregate data. PHR will take a mixed-methods approach using the MediCapt application and secondary archival data to triangulate measurements of key outcomes. The three data collection methods are:

- Semi-structured interviews and focus group discussions with clinicians and hospital administrators that will include closed-ended responses that a senior evaluator will quantify, along with open-ended responses regarding process and implementation factors related to the five outcomes above.
- Questions will capture physicians’ self-reported experiences with and measure their perceptions of the outcomes.
- Archival reviews in which researchers will download secondary archival data from MediCapt for intervention sites to measure completeness of forms and time to complete form. MediCapt enables the reviewer to download de-identified data for analyses of form completion. The time stamp feature of the application will provide an accurate picture of how long it took to fill out the form.
- Direct observation through site visits where a single observer documents average time it takes to access forms at site, complete forms, and preserve (securely store) evidence in cases of sexual violence.

The evaluation will include a baseline and final assessment of each site conducted by a local evaluator, who will send data to a senior independent evaluator for analysis. An international expert in forensic medical evaluations of sexual violence will oversee this process.

HOW THIS PROJECT ADDS VALUE TO THE FIELD
This evaluation will contribute to an understanding of the potential and opportunities for scale up of digital interventions to improve forensic documentation of sexual violence and survivor-centered care. PHR will use the application to learn about and improve PHR’s programming in both Kenya and DRC and to inform MediCapt scale-up in these countries and piloting in new countries. PHR will evaluate and publish the research findings with local partners in a peer-reviewed journal and ensure that the results are disseminated to all. PHR will also prioritize local dissemination of findings to research participants, hospital administrators, and other interested parties, such as NGOs, activist groups, and mHealth practitioners.

RESEARCH INSTITUTION: Physicians for Human Rights