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Revolutionizing Healthcare: Lessons Learned from an Integrative Approach to Transforming the Hospital Accreditation System in Lebanon

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ABSTRACT

Background: Lebanon was the first country in the Eastern Mediterranean region to develop and implement a national hospital accreditation system, but the system has not been updated since 2011. This study aims to describe the process of developing and piloting context-specific hospital accreditation standards in Lebanon, and share lessons from extensive stakeholder consultations.

Methods: Mixed-methods approach was used for development and piloting of standards. This included extensive documentation review, stakeholder and expert consultations, standard review, and capacity building for piloting. Experts were required to review standards using pre-identified criteria and expert sub-group meetings were conducted to discuss changes. Piloting of standards included assessment of feasibility and compliance with standards/guiding measures in addition to implementation considerations.

Results: More than 60 experts were consulted. Pilot testing showed a positive outcome for clarity, feasibility, and compliance of hospitals to standards. Managing stakeholders' expectation was challenging at the policy-political encounter. The rigorous expert review led to the development of context-specific and robust standards that provided guidance for hospitals to improve quality care. Results showed that health system changes at the governance, finance and delivery levels are needed to achieve and sustain the gains of accreditation.

Conclusions: The study methodology showed the promising influence of using science in development of accreditation standards. Stakeholder involvement remains critical to push the agenda of accreditation. Continuous follow-up to the survey process is recommended to ensure optimal impact of the accreditation system. The process can be scaled up and replicated in the Eastern Mediterranean Region (EMR) and beyond.

Patient or Public Contribution: Patients and public where not involved in this study. While patients and the public bring are key for sharing lived experiences, the development of the standards required deep understanding and expertise especially with regards to healthcare and health systems.

Highlights

Implications for policy makers

- Study can be replicated in contexts without a national accreditation system
- Ensuring political commitment is critical for implementation of accreditation
- Rigorous approaches are key in managing resistance to change
- Stakeholder engagement is pivotal for developing contextualized standards

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Background

Healthcare is a dynamic sector making it susceptible to challenges, unknowns and errors. Hospital accreditation has been used as a tool tailored to the dynamic nature of the healthcare sector aiming at limiting the margin of unknown and error. Over decades hospital accreditation improved the quality of care [1], standardized procedures and practices [2, 3] and promoted patient safety [4]. It has also aided in achieving patient satisfaction, public accountability, staff development [4] and efficient use of healthcare resources [5]. The increase in medical costs [6, 7], pandemics [8] and call for value-based care [9] has pushed several governments and health care institutions to adopt accreditation processes in

their hospitals [6-9].

The Hospital Accreditation System in Lebanon

The Lebanese Health System constitutes a public-private partnership including multiple channels of financing and delivery.

Multiple sources are used to finance health including social security contributions (NSSF), general government revenues (e.g., military schemes and civil servant's cooperatives), and the private sector [10, 11]. In Lebanon, there are 165 hospitals: 82% are privately owned and run by doctors or nonprofit organizations [11]. Though the public sector is the main financer of hospital care, the private sector is the predominant service provider, whereby the ministry of public health contracts 105 private and 29 public hospitals covering around 250,000 cases per year [11, 12].

Lebanon was the first country in the Eastern Mediterranean region to develop and implement a national hospital accreditation system [13]. The national hospital accreditation program was mandated on the basis of a legislation passed in 1962 and amended in 1983 [2]. This decree sets the framework of the Ministry of Public Health (MOPH) to regulate the Lebanese hospital sector and gives it the right to evaluate, classify and accredit them. The initial hospital classification system was an Alpha-star system where a hospital was ranked based on the quantity and complexity of clinical services provided. In year 2000, an Australian consultancy team was contracted to develop new accreditation [2]. The MOPH implemented the hospital accreditation system through three national surveys, with the first implemented between 2001 and and 2002, the second between 2004 [14] and the third in 2011 [15]. The hospital accreditation system developed year 2000 showed several loopholes which include the applicability of the standards in the context of Lebanon, despite being informed by international standards their relevance to the local context was a challenge [15]. Yet, since 2011 there were no hospital accreditation surveys conducted nor updates on the standards implemented.

Therefore, the transformation of the current accreditation system was essential to direct the system towards deep-rooted quality practices. In 2015, the MOPH initiated the process of improving and updating the current hospital accreditation system in Lebanon. The process aimed to develop new Lebanese hospital accreditation standards according to latest evidence and international best practices and also to comply with International Society for Quality in Healthcare (ISQUA) requirements. With the MOPH's commitment to quality improvement, the MOPH launched the Lebanon national health strategy Vision 2030 which highlights the need for accreditation and quality improvement at healthcare facilities.

Health System in Time of Crisis

During times of crisis, the healthcare system often experiences deterioration and fragmentation as a result of heightened violence and insecurity, reduced effectiveness of governance, and depletion of resources [16]. Yet, an economic crisis can present an opportunity to enhance the performance and resilience of hospitals [17, 18]. Hospital accreditation may provide a solution to improving healthcare quality by providing a basis for service delivery and ensuring a culture of safety and preparedness in hospitals [19]. In fact, countries that have implemented accreditation programs were better-prepared and had well-managed incident management system to respond to health crises such as the COVID-19 pandemic [18]. Lebanon has been plagued with crises and corruption for years which necessitates enhancing performance and efficiency, therefore the importance of implementing the accreditation standards in hospitals to provide safe and high-quality healthcare services.

This study aims to comprehensively describe the process of developing and piloting hospital accreditation standards in Lebanon, managing expectations in both the private and public health sector, and lessons learned from the extensive stakeholder consultations.

Methods

Study Design

This multi-phased study used a mixed-methods approach for the development and piloting of standards. The first phase included extensive documentation review of international best practices, stakeholder and expert consultation using Delphi technique, data analysis, and standard review. Experts were required to review the standards based on a pre-identified tool and expert sub-group meetings were conducted to discuss the changes. The second phase included capacity building for the piloting of the standards and conducting the piloting of the standards using a two-staged approach. The first stage (alpha-testing) assessed the standards' feasibility for implementation, the second stage (beta-testing) aimed at assessing the compliance of the standards/guiding measures in hospital settings, and implementation considerations.

Establishing Guiding Principles for The Hospital Accreditation System

The fundamental intent of the new system is to determine the level of compliance with the new standards by all aspects of the healthcare system, and ensure the functional documented existence of structure (organizational parameters), and process (methods of practices), in order to achieve optimum clinical measurable outcomes (consequences and results) for the patient.

To ensure a comprehensive approach for continuous quality improvement, the standard development process was guided by the Donabedian Model to comply with structure, process and outcome of hospital parameters [20]. Given that this process has not been attempted previously in Lebanon, guiding principles were established early on to guide the process. The principles were set as part of an engagement between the researchers, the MOPH and the CTAH and informed by international accreditation systems. The standards were developed to reflect the guiding principles identified that include patient safety and protection from harm, continuous quality improvement, efficiency enhancement, team work, dignity and respect, costumer focus and transparency.

Phase1: Standard Development

Conducting the International and Regional Gap Analysis

A gap analysis was conducted to cross-cut the focus and themes of the following accreditation systems in Australian Council on Healthcare Standards (NSQHSS and EQuIP National Standards), Accreditation Canada, Joint Commission International (JCI), HCAC Healthcare Accreditation Counsel (Jordan) and KSA - Central Board for Accreditation of Healthcare Institutions (CBAHI) with the Lebanese accreditation system. The aforementioned systems were identified to tailor to the need for regional and international publicly available accreditation programs. Commonalities and differences were identified and a modified list of context-specific tailored list of focus and themes was developed. The themes were chosen based on the following criteria (1) aligned with ISQua standards, (2) integrated in two or more international and regional accreditation systems and (3) applicable to the Lebanese context. The list of themes was reviewed and discussed in a collaborative meeting between the researchers and the MOPH.

Targeting Each Chapter and Identifying Standards

Standards were cross-cut across each theme separately. To limit

the number of standards and given the commonalities across the accreditation systems, this exercise was done on the JCI, Accreditation Canada and CBAHI standards to identify the common standards within each theme and develop accordingly new standards for the Lebanese hospital accreditation system. For each standard specific guiding measures were identified that delineate the how to get to the standard.

Expert Consultation

Experts were nominated from the syndicate of private hospitals in Lebanon and the Ministry of Public Health and recruited based on a pre-identified selection criterion. A national expert consultation launching process was conducted to inform the experts of the process. Experts were then divided to groups based on the standard theme. Delphi technique was used of the revision of the standards. In the first consensus meeting, experts reviewed the standards based on the clarity and importance and the guiding measures based on clarity, specificity and inclusiveness. Standards measuring below 70% on any clarity, specificity and inclusiveness of its guiding measures was marked for modification any standard scoring less than 50% on importance was marked to be removed. Guiding measures measuring below 70% on clarity or specificity were marked for modification. Results were shared with experts during a consensus meeting and revised standards were integrated into tool 2.

In the second consensus meeting, experts reviewed the standard to identify the feasibility and surveyability of the guiding measures and risk score of the standards. If the cumulative average of surveyability and feasibility was less than 70%, the guiding measures measuring was marked for review. Averages were calculated for the risk score. COR (Critical Organization Requirements) standards were identified based on the risk score, standards with a risk score of 6 were marked as COR standards. were revised according to the expert consultations after each consensus meetings and results were validated with participants.

Phase 2: Piloting the Standards

Pilot

Piloting was conducted using a two-staged approach with the aim to evaluate standards and criteria in terms of a pre-identified criteria, to assess the pilot standards against practices, to evaluate the standards' applicability and implementation consideration, rather than the hospitals' performance and to assess for capacity building needs. A selection criterion was developed for the identification of hospitals for the piloting (Figure 1). The first stage (alpha-testing) assessed the standards' feasibility for implementation, the second stage (beta-testing) aimed at assessing the compliance of the standards/guiding measures in hospital settings, and implementation considerations. For the first stage of piloting, three hospitals were selected taking into consideration size (small, medium, large), geographic location and ownership(public/private). For the alpha testing, hospitals were provided with a self-assessment survey that entailed all the standards and filled out the feasibility and clarity of the standards. The hospitals also identified any additional comments or additional standards/guiding measures that they believe is missing from the theme and indicate areas were capacity building is needed. Results were analyzed quantitatively using SPSS version 23. Standards were marked for review if the total average of clear and feasible was greater than 66%. Review of the standards was conducted after the first round of pilot. For the beta testing, three hospitals were selected taking into consideration size (small, medium large), geographic location and ownership (public/private) and were provided with a self-assessment survey to complete to whether the standard is currently implemented in their hospital or not. Trained assessors visited the hospital after the self-assessment phase was completed and conducted their onsite assessment on each standard and checked if the standard is implemented or not. Results from the alpha and beta testing were analyzed using SPSS.

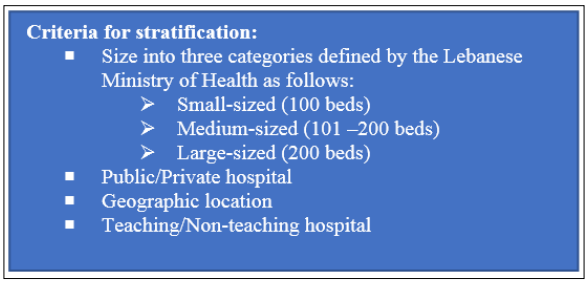

Figure 1: Criteria for Stratification

Phase 3: Mock Survey

The mock survey aimed at assessing challenges in the standards in terms of surveying, building capacity of the hospital and preparing it for the actual survey and simulating the scoring system. Capacity building was provided to seven surveyors on the process of assessing the hospital's compliance to the standards. Surveyors rated all standards using the following criteria, met, in-development, not met and not applicable. All standards were surveyed at the hospital over three days.

Results

Technical Findings

Consensus Meetings

A total of 62 experts were selected based on a pre-identified criterion (Figure 2) to participate in the consensus meetings.

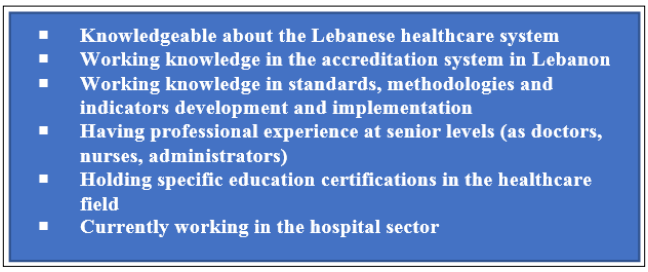

Figure 2: Experts Selection Criterion

Based on tool 1 (response rate 100%) the majority of the standards were clear, important, inclusive and specific (figure 3). 43.49% of the standards were marked for review, 20.9% of the guiding measures were marked for review and 1.27% of the standards were marked to be removed.

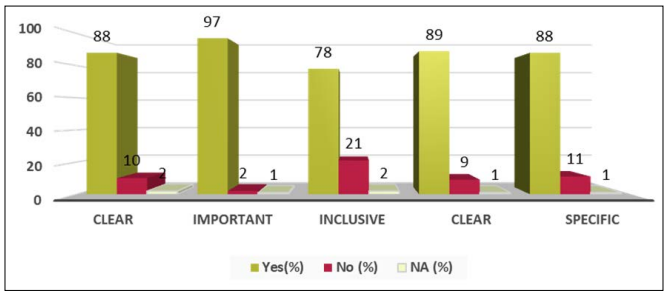

Figure 3: Expert Responses Tool 1

The response rate was 98% for tool 2. The majority of the standards were feasible (94%) and surveyable (94%) (Figure 4), 7.4% of the guiding measures were marked for review. (Figure 5) showcases the distribution of risk score across the standards.

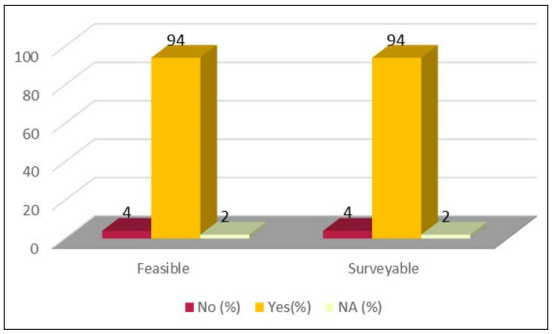

Figure 4: Expert Responses Tool 2 (Feasibility and Surveyability of Guiding Measures)

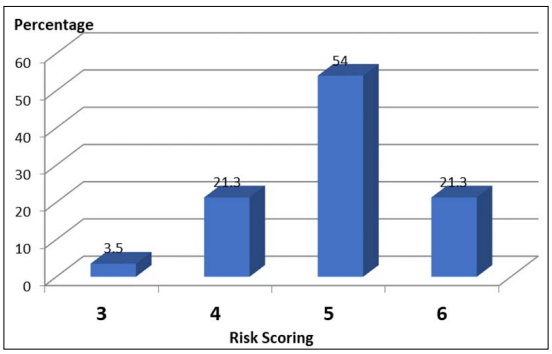

Figure 5: Expert Responses Tool 2 (Risk Score)

Piloting

Based on the selected criteria which includes feasibility, clarity and compliance to the standards, the researchers and the MOPH identified three hospitals for the alpha-testing and three hospitals for the beta-testing. To prepare for the piloting, theresearch team provided key focal persons from pilot hospitals with training on the pilot tools.

Alpha-Testing

Participants attributed high scores on feasibility (99%) and clarity (96%), and 4% of the guiding measures were marked for review.

Beta-Testing

The results were positive showing that the implementation of the standards is feasible in the hospitals. Standards that showed >66% "not in place" and/or "not applicable" mainly reflected on the availability of the service in the hospitals such as, burn care, radiation therapy, organ donation, laser exposure, ambulance services and mental health inpatient and outpatient care.

The results from the six pilot hospitals reflected positively on the clarity, feasibility, and compliance of the hospitals to the standards and guiding measures, which showed that the standards are aligned with the hospital services and context in Lebanon.

Mock Survey

Based on the pilot results, the importance of conducting a full-fledged survey was discussed with key stakeholder's survey as the Syndicate of Private Hospitals, the MOPH and education institutions. A mock survey was conducted a private hospital in the South Governorate of Lebanon. Prior to the mock survey extensive capacity building was provided to the surveyors by the research team. 12 team members (surveyors, evaluators and observers) conducted the full mock survey over 3 days covering most hospital units/ departments and services. The surveyors covered the three sections from the most recent hospital accreditation standard (1) Hospital management, (2) Quality and Risk Management and (3) Patient Centered Care. The mock survey reflected positively of the feasibility and applicability of the standards in the context of Lebanon. Minor revisions were made on some standards to clarify the standards for better comprehension. As of the final debrief, the hospital staff and executives reflected positively on the standards and the process and emphasized that the standards allowed to identify areas for improvement in the hospital. Additionally, four scoring modalities were developed and tested resulting from the mock survey and accreditation decision trees were drafted accordingly. After intensive meetings with the MOPH and partners, one scoring modality was selected.

Discussion

This study demonstrated that a collaborative and evidence-informed approach which involves public and private stakeholders and experts can lead to context-specific, applicable, responsive and implementable accreditation standards and ensures buy in and support from stakeholders that take into consideration major international standards and are aligned with ISQua accreditation guidelines. In November 2023, the Ministry of Public Health announced that the standards were International Society for Quality in Health Care (ISQua) accredited.

While the importance of hospital accreditation standards is highlighted in the literature, there is limited knowledge on how to strengthen the development and implementation of standards based on reliable and critically peer-reviewed evidence [21]. This study addresses the above-mentioned gap by employing a rigorous and multi-faceted methodology for developing and piloting hospital accreditation standards in Lebanon. The Donabedian model was employed in this study to ensure a comprehensive approach for continuous quality improvement, mainly emphasizing structure, process, and outcome measures for improved quality of care [22] moving into an outcome-based accreditation system.

To achieve the potential benefits of accreditation, the development of the standards requires the government and policymakers' commitment [23]. Power influences from private and public sector stakeholders including high-ranking officials and hospital administrators and executives, resulted in significant resistance to change as a result of the standards, specifically due to their financial implications. Although certain factors may pose a challenge to control, the management of resistance to change at the organizational and systemic levels was accomplished through the implementation of evidence-informed standards and a collaborative approach [24].

Lessons Learned from the Technical Lens

The Rigorous Expert Review of Accreditation Standards Resulted in the Development of Context-Specific and Robust Standards that Served as a Blueprint for Enhancing the Quality of Care in Hospitals. The input of context experts, who possessed a comprehensive understanding of the local healthcare environment, encompassing various cultural, social, economic, and political factors affecting healthcare delivery, was instrumental in shaping these standards. Their wealth of knowledge and experience helped shape the accreditation standards to ensure relevant, practical and effective standards. Furthermore, the engagement of experts

working in hospital settings was pivotal in assessing the feasibility and sustainability of the standards, thereby encouraging greater ownership and adoption of the standards [21]. The rigorous review of the standards by experts was crucial in developing context-specific and applicable standards which reflected positively during the pilot and mock survey [7, 25]. It was highlighted that engaging key national stakeholders in both public and private sector is critical to develop a national vision for accreditation which in turn relocates national funding towards quality improvement [19].

Developing Standards Based on International Best Practices Provided an Evidence-Base to Advocate for the Integration of the Standards within the Accreditation System and Improved Stakeholder Acceptance to Those Standards. By basing the standards on evidence-informed best practices, healthcare providers have been enabled to align themselves with global benchmarks, enhancing their competitiveness in the international marketplace while providing patients access to top-notch care. Furthermore, developing evidence-informed standards has instilled trust in the standards while identifying the most cost-effective way to deliver care.

Piloting the Standards was Perceived Positively by the Hospitals and was A Critical Step that Showed that Health System Changes at the Governance, Finance and Delivery Levels are Needed to Achieve the Expected Outcome and Sustain the Gain of Accreditation. The pilot phase provided an opportunity to assess the accreditation standards in a limited and controlled setting. This enabled the early identification and mitigation of any potential challenges or issues that could arise during broader implementation, thereby ensuring a smoother and more successful process. The positive perception of the pilot phase by hospitals underscores the significance of engaging healthcare providers in the development and implementation of accreditation standards. This engagement fostered trust and collaboration between stakeholders, and ensured that the standards are appropriately tailored to the specific needs and resources of healthcare facilities. The success of the pilot phase highlighted the importance of health system changes at the governance, finance, and delivery levels to achieve the expected outcomes of accreditation. This can involve a range of activities, such as improving financial management systems, investing in healthcare infrastructure, and developing effective governance structures to support the delivery of quality care. The pilot phase served as a critical tool for building momentum and support for accreditation, facilitating the creation of a culture of continuous quality improvement and reinforcing the importance of adhering to best practices[7, 25]. Ultimately, this can translate to sustained enhancements in the quality of care and improved patient outcomes over the long term.

Lessons Learned from the Political/Policy Lens

Aligning Accreditation Standards with National Health Policies and Strategic Plans

Upon initiating the accreditation process, a thorough assessment of previous standards, local policies and plans was conducted to identify current practices, policy loopholes and future plans. The standards were aligned with national health policies and strategic plans and regularly updated during the process as new policies were developed to guarantee that they conform to the country's overarching objectives and priorities, and to preclude inconsistencies during the execution of the standards.

Managing Stakeholders' Expectation and Interests Especially at the Policy-Political Encounter

Engaging with a diverse range of stakeholders in the standard development and piloting process was critical for the success of the initiative however, this came with an array of different viewpoints and interests. Initially, it was crucial to engage stakeholders at an early stage of the standard development process and deliver clear and concise information regarding the objectives, timelines, and potential advantages and obstacles of the policy. This approach facilitated the development of trust and collaboration, while ensuring that stakeholders have a thorough understanding of what to anticipate. Several conflicts and disagreements arose during the process due to the policy-political encounter and conflicts of interest. As so, mediation and arbitration processes were implemented to help address stakeholder concerns and ensure the standard development process remains on track.

Managing stakeholder expectations is an ongoing process that requires continuous communication, monitoring, and evaluation. Remaining transparent and open to feedback from stakeholders, particularly those who may be directly impacted by the standards was a critical step to overcome potential unintended consequences or issues that may arise during implementation of the standards at the long run, and provided an opportunity to address these concerns in a timely manner [26].

Implementing a Collaborative Approach Requires Commitment from High-Level Stakeholders

Securing the support of high-ranking officials and the public and private sectors, such as the Director General of the Ministry of Public Health and the President of the Syndicate of Private Hospitals, proved pivotal for the success of the process[19]. Regular meetings were held to keep all stakeholders up to date on the process, challenges, goals, and expectations of the collaborative approach which served to clarify everyone's role and responsibilities. Despite the benefits of the standards, opposed the changes in the content of the standards, and the high-level stakeholders served as a driving force to address and resolve the opposition.

Managing Resistance to Change at the System and Organizational Levels was a Challenge that was Backed up by Ensuring Evidence-Informed Standards

Given the diverse range of stakeholders engaged in the process, including several high-ranking hospital administrators and executives, the team encountered significant resistance to change, particularly with regards to standards that carried significant financial implications. Despite this, the team drew upon evidence-based standards to fortify their case for change and effectively managed the resistance. The key to successful change management lay in clear and transparent communication throughout the process, outlining the why the change is necessary, what it involves, and how it will be implemented. Standards that remained subject to extensive debate or lacked consensus were incorporated into the piloting phase and addressed at a later stage, with input from high-level stakeholders duly considered and integrated.

Limitations and Strengths

This initiative is one of its kind in Lebanon and the region which developed context-specific evidence informed accreditation system for Lebanon. Also, the extensive engagements with the public and private sectors which supported the co-development of robust implementable standards. This study is one of the very few studies describing the process of standard development from initiation to implementation.

With regards to limitations, given that the hospital accreditation system was launched in 2023, this study does not describe the actual survey of the standards. There is a need for follow up research designs to measure the impact of the standards on the institutional and health system level. Continuous follow-up to the survey process is recommended to ensure optimal impact of the accreditation system. There are also limitations in the review of accreditation programs taking into consideration that not all global identified accreditation programs were utilized for the gap analysis.

Conclusion

The multi-faceted approached utilized for the development of context-specific evidence informed hospital accreditation standards is promising. The study highlights the importance of the policy-politics interface and collaborative approaches in advancing health system reform and managing stakeholder expectations. These ISQua accredited standards need to be complemented by health system strengthening mechanisms such as incentives and primary healthcare accreditation to advance the healthcare system to into a high-quality value-based care system. Evidently the implementation of the standards is promising in providing an overarching policy framework for quality improvement at the system level, ensure hospital efficiency especially during crisis and respond to the needs of the population while enhancing health outcomes.

The process followed was effective to achieve the process goals, which can be scaled up and replicated in the other countries, especially low resource countries and countries in crisis

Conflict of Interest: The Authors Declare that they have no Conflict of Interests.

Ethics Statement: Not Applicable

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