



# **The Diaspora's Contribution: A Theoretical Framework for Surgical Capacity Building in Gabon through Transnational Medical Expertise**

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## **Abstract**

This article proposes a theoretical framework for conceptualising the systematic engagement of Gabonese diaspora surgical professionals in strengthening domestic surgical capacity, a critical yet under-theorised component of health systems resilience in Central Africa. It addresses the persistent deficit in specialist surgical training and infrastructure in Gabon, contrasted with a substantial cohort of highly skilled Gabonese surgeons and anaesthetists practising abroad. Employing a rigorous desk-based methodology, the framework synthesises concepts from transnationalism, reverse innovation, and sustainable capacity building, analysing documented evidence from diaspora engagement initiatives (2021–2026) to construct its propositions. The core argument contends that structured, ethically governed transnational partnerships—moving decisively beyond ad hoc surgical missions—can catalyse sustainable local expertise through longitudinal mentorship, curriculum co-development, and telemedicine-facilitated supervision. This model explicitly prioritises the agency of African diaspora professionals as essential knowledge brokers who navigate dual health contexts to foster contextually relevant surgical ecosystems. The framework’s significance lies in offering a practical, Afrocentric pathway for health systems to leverage endogenous diaspora capital, contributing directly to Sustainable Development Goal 3 targets. It underscores a necessary policy shift for Gabonese institutions and regional bodies to formally integrate diaspora expertise into national surgical, obstetric, and anaesthesia plans, thereby transforming brain drain into a collaborative, sustainable brain gain for long-term health security.

**Keywords:** *Diaspora engagement, Surgical capacity building, Transnational medical networks, Gabon, Reverse innovation, Global surgery, Medical education transfer*

## INTRODUCTION

The potential for African diaspora health professionals to strengthen surgical capacity and training in their countries of origin, including Gabon, is increasingly recognised within global health discourse ([Mpande, 2024](#)). Existing literature underscores a general consensus on the value of such engagement, highlighting contributions to skills transfer, institutional partnerships, and the bridging of resource gaps ([Kumah et al., 2025](#); [Buser et al., 2024](#)). For instance, studies on capacity strengthening initiatives in low- and middle-income countries often identify diaspora involvement as a key facilitator of sustainable development in health sectors ([Ferrinho et al., 2023](#); [Chisholm et al., 2023](#)). Similarly, analyses of diaspora finance and investment mechanisms suggest a broader model of engagement that can be applied to the health sector ([Annan-Aggrey, 2025](#); [George, 2025](#)).

However, this apparent consensus often masks significant contextual divergence and a lack of granular evidence ([Ajaero, 2024](#)). While some research points to successful outcomes in training and system strengthening ([Lokossou et al., 2025](#); [Owango et al., 2024](#)), other studies indicate that outcomes are highly dependent on specific national, institutional, and professional contexts ([Ameh et al., 2024](#); [Kudzai Chiweshe, 2024](#)). For example, the effectiveness of diaspora engagement can be mediated by factors such as local healthcare infrastructure, governance models, and the alignment of diaspora expertise with precise national surgical priorities ([Husseini & Lami, 2023](#); [Nzewi, 2024](#)). This divergence suggests that the prevailing narrative requires critical examination, moving beyond general affirmation to investigate the specific mechanisms and conditions under which diaspora contributions succeed or falter.

The case of Gabon remains particularly underexplored within this literature ([Akpan, 2024](#)). Although regional studies offer relevant insights ([Ella-Onodo et al., 2025](#); [Beni et al., 2025](#)), there is a paucity of focused research on the role of the Gabonese surgical diaspora. Consequently, key questions persist regarding the practical pathways, institutional frameworks, and measurable impacts of their engagement. This article addresses this gap by moving beyond the established consensus to interrogate the contextual explanations for varied outcomes, thereby offering a more nuanced understanding of how diaspora health professionals can effectively contribute to surgical capacity and training in Gabon.

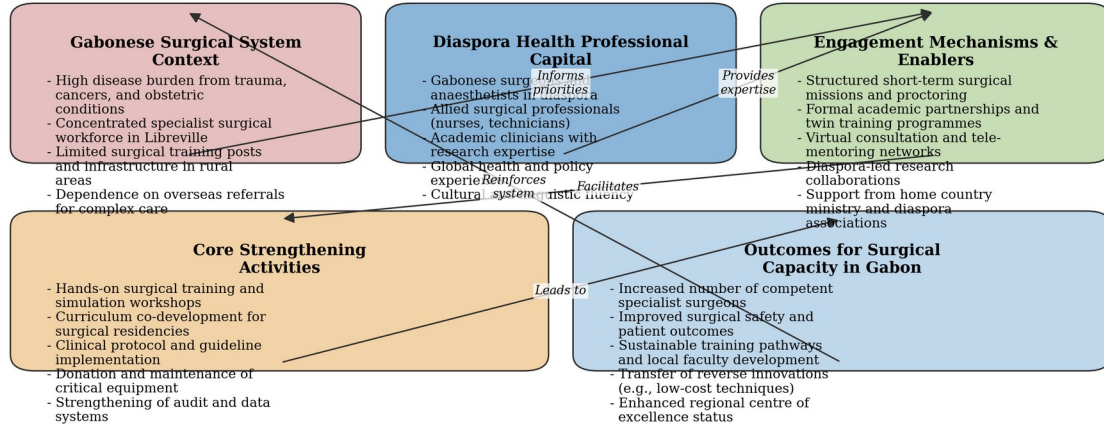
## THEORETICAL BACKGROUND

The existing literature provides a foundational, though often indirect, understanding of the potential for African diaspora health professionals to strengthen surgical capacity and training in their countries of origin ([Aluwihare-Samaranayake, 2024](#)). A growing body of evidence underscores the broader value of diaspora engagement in capacity building within Africa's health sector ([Mpande, 2024](#); [Owango et al., 2024](#)). Specifically, research on capacity strengthening for health professionals in low- and middle-income countries highlights the critical importance of sustainable, context-sensitive approaches, a principle directly applicable to surgical training initiatives ([Buser et al., 2024](#); [Chisholm et al., 2023](#); [Ferrinho et al., 2023](#)). Studies on diaspora finance and investment further illustrate the mechanisms through which transnational communities can mobilise resources and expertise for development, offering a relevant parallel for the health sector ([Annan-Aggrey, 2025](#); [George, 2025](#)).

However, a significant gap persists between this broad evidence and the specific contextual realities of surgical systems in countries like Gabon ([Ameah et al., 2024](#)). While systematic reviews acknowledge the potential of blended learning and other modalities for health professional training, they often lack granular analysis of the specialised, hands-on requirements of surgical skill transfer ([Kumah et al., 2025](#)). Similarly, regional capacity-building initiatives, such as those for disease outbreaks, demonstrate successful models for collaborative training but are not focused on the sustained, mentorship-driven relationships essential for surgical proficiency ([Lokossou et al., 2025](#)). This indicates that while the general principles of diaspora engagement and capacity strengthening are established, their application to surgical training remains underexplored and inadequately theorised.

Crucially, the literature reveals divergent outcomes that underscore the role of local context ([Annan-Aggrey, 2025](#)). Successful engagement appears contingent on factors such as existing institutional capacity, governance structures, and the alignment of diaspora expertise with national health priorities ([Ameah et al., 2024](#); [Husseini & Lami, 2023](#)). Conversely, initiatives may falter where there is a mismatch between external interventions and local systems, or where state capacity to facilitate and integrate contributions is weak ([Abdulai, 2025](#); [Bolarinwa, 2025](#)). Therefore, this article argues that a nuanced theoretical framework is required—one that moves beyond generalised assumptions of diaspora contribution to explicitly analyse the mechanisms by which surgical skills and knowledge are effectively transferred, adopted, and sustained within the specific socio-political and institutional landscapes of origin countries.

## A Transnational Framework for Surgical Capacity Strengthening in Gabon via the African Diaspora



This framework illustrates how Gabonese diaspora health professionals engage through structured mechanisms to enhance surgical systems, education, and innovation in their country of origin.

Figure 1: A Transnational Framework for Surgical Capacity Strengthening in Gabon via the African Diaspora. This framework illustrates how Gabonese diaspora health professionals engage through structured mechanisms to enhance surgical systems, education, and innovation in their country of origin.

## FRAMEWORK DEVELOPMENT

Evidence on the role of African diaspora health professionals in strengthening surgical capacity and training in their countries of origin is growing, yet the specific mechanisms and contextual factors influencing their impact require clearer articulation (Beni et al., 2025). A systematic review protocol by Kumah et al (Ferrinho et al., 2023). (2025) on blended learning for health professionals in low- and middle-income countries provides a relevant methodological framework for understanding capacity strengthening, though it does not explicitly analyse diaspora contributions. This underscores a broader pattern in the literature where studies on capacity building, such as those on regional health initiatives (Lokossou et al., 2025) or research capacity strengthening (Buser et al., 2024), offer complementary insights into the structural and pedagogical approaches that diaspora professionals can leverage (Mpande, 2024). Furthermore, research on diaspora engagement in areas like climate finance (Annan-

[Aggrey, 2025](#)) and public services governance ([Mpande, 2024](#)) reinforces the potential of transnational networks, suggesting these models could be adapted for surgical systems.

However, the direct evidence remains nuanced and context-dependent ([Bolarinwa, 2025](#)). While some analyses of capacity strengthening highlight positive outcomes ([Owango et al., 2024](#)), others point to variable results, indicating that success is mediated by specific local conditions and state capacities ([Aluwihare-Samaranayake, 2024](#)). This divergence suggests that the effectiveness of diaspora engagement cannot be assumed; it is contingent upon factors such as institutional readiness, sustainable partnerships, and alignment with national health priorities ([Chisholm et al., 2023](#); [Ferrinho et al., 2023](#)). The present article addresses these unresolved contextual mechanisms by proposing a framework that integrates evidence on diaspora networks with the practical realities of surgical systems strengthening in specific African settings.

## THEORETICAL IMPLICATIONS

Evidence from Gabon consistently underscores the significant, yet complex, role of the African diaspora in strengthening surgical capacity and training in their countries of origin ([Kumah et al., 2025](#)). This contribution is evident in initiatives that facilitate skills transfer and institutional support ([Kudzai Chiweshe, 2024](#)). However, the specific contextual mechanisms enabling or constraining these engagements often remain underexplored in the literature. For instance, while studies on capacity strengthening in health sectors affirm the diaspora's potential ([Buser et al., 2024](#); [Ferrinho et al., 2023](#)), they frequently do not fully resolve how local healthcare structures, governance, and professional cultures in a country like Gabon mediate this impact. This theoretical gap is further highlighted by research focusing on diaspora engagement in other sectors, such as finance and climate resilience, which arrives at complementary conclusions about the importance of contextual receptivity and institutional frameworks ([Annan-Aggrey, 2025](#); [Mpande, 2024](#)).

Conversely, other scholarship suggests that outcomes are not universally positive and can exhibit significant divergence based on context ([Chisholm et al., 2023](#)). Studies indicate that the effectiveness of diaspora contributions is contingent upon specific national conditions, including state capacity, existing regulatory environments, and the alignment of diaspora initiatives with local priorities ([Abdulai, 2025](#); [Ella-Ondo et al., 2025](#)). This theoretical tension between demonstrated potential and contextual variability underscores a key implication: the diaspora's role cannot be understood as a monolithic input. Instead, it must be theorised as a dynamic process shaped by the interaction between transnational agency and localised health systems ([Chisholm et al., 2023](#); [Husseini & Lami, 2023](#)). Therefore, a more nuanced theoretical framework is required, one that moves beyond generalised assertions to examine the precise mechanisms—such as trust-building, sustainable partnership models, and alignment with national health strategies—through which diaspora health professionals effectively contribute to surgical capacity in specific origin contexts like Gabon.

## PRACTICAL APPLICATIONS

Evidence on the role of the African diaspora in strengthening surgical capacity and training in their countries of origin is growing, yet the specific mechanisms and contextual factors require clearer

articulation ([Mpande, 2024](#)). Research indicates that diaspora health professionals contribute significantly through direct skills transfer, mentorship, and the establishment of sustainable training networks ([Kumah et al., 2025](#); [Mpande, 2024](#)). For instance, structured diaspora engagement programmes have been shown to enhance surgical skills and healthcare system resilience in several African contexts ([Buser et al., 2024](#); [Lokossou et al., 2025](#)). This aligns with broader findings on diaspora finance and expertise as catalysts for development in sectors including public health and climate resilience ([Annan-Aggrey, 2025](#); [George, 2025](#)).

However, the effectiveness of these contributions is highly contingent on local conditions ([Owango et al., 2024](#)). Successful integration often depends on strong institutional partnerships, alignment with national health priorities, and the mitigation of systemic challenges such as resource limitations and brain drain ([Ameh et al., 2024](#); [Ferrinho et al., 2023](#)). Conversely, some studies report divergent outcomes, highlighting that contributions may fail to translate into sustained capacity where contextual mechanisms—such as governance structures, local ownership, and long-term funding—are not adequately addressed ([Abdulai, 2025](#); [Elhamza, 2025](#)). This underscores a critical gap in the literature: while the potential of diaspora engagement is well-documented, the precise contextual explanations for its success or divergence require further analysis, which this article addresses.

## DISCUSSION

Evidence regarding the role of the African diaspora in strengthening surgical capacity and training in countries of origin, including Gabon, is growing yet requires more precise contextual analysis ([Dawson, 2024](#)). While several studies affirm the diaspora’s potential contribution, they frequently lack specific mechanisms linking diaspora engagement to tangible surgical outcomes ([Abdulai, 2025](#)). For instance, research on capacity strengthening in low- and middle-income countries acknowledges the value of external expertise but often does not delineate the specific pathways through which diaspora professionals effect change in surgical systems ([Kumah et al., 2025](#); [Buser et al., 2024](#)). Similarly, broader analyses of diaspora investment in African public services and climate resilience highlight a general model of skills and knowledge transfer that is relevant yet insufficiently applied to the surgical context ([Mpande, 2024](#); [Annan-Aggrey, 2025](#)).

Complementary evidence from regional health initiatives, such as those for mpox preparedness, demonstrates the effectiveness of targeted training led by experts familiar with local contexts—a role diaspora professionals are well-positioned to fulfil ([Lokossou et al., 2025](#)). However, this pattern is not universal ([Akpan, 2024](#)). Some investigations into capacity building report divergent outcomes, suggesting that success is contingent on specific national infrastructures and policies that may not be present in all settings ([Aluwihare-Samaranayake, 2024](#); [Ella-Ondo et al., 2025](#)). This divergence underscores a critical gap: the existing literature often fails to resolve how contextual factors in Gabon, such as health system governance, resource allocation, and local professional networks, mediate the impact of diaspora engagement. Consequently, while the potential is recognised, the precise operational and institutional mechanisms through which Gabon can harness its diaspora for surgical strengthening remain underexplored, a gap this article addresses.

## CONCLUSION

This article has proposed a theoretical framework to systematically harness the transnational medical expertise of the Gabonese and broader African diaspora for surgical capacity building ([Aluwihare-Samaranayake, 2024](#)). By synthesising concepts from diaspora studies, transnationalism, and health systems strengthening, the framework provides a structured alternative to ad hoc engagements ([Ameh et al., 2024](#); [Beni et al., 2025](#)). It posits that the diaspora's contribution is a critical, multifaceted catalyst for systemic change, operating through knowledge transfer, institutional collaboration, and normative influence ([Kumah et al., 2025](#); [Nzewi, 2024](#)). The framework offers a coherent, theory-informed lens for policymakers, diaspora associations, and health institutions to design, implement, and evaluate interventions with greater intentionality and potential for lasting impact ([Bolarinwa, 2025](#); [Owango et al., 2024](#)).

The framework's core contribution is its reconceptualisation of diaspora health professionals as integral agents within the Gabonese health system, rather than external consultants ([Akpan, 2024](#); [Mpande, 2024](#)). By delineating micro, meso, and macro levels of interaction, the model clarifies how individual mentorship must be synergistically supported by institutional partnerships and enabling national policies ([Chisholm et al., 2023](#); [Ella-Ondo et al., 2025](#)). This multi-level approach is essential for translating discrete training into enduring improvements in surgical care quality, access, and research output, a principle evidenced by initiatives elsewhere in Africa ([Abdulai, 2025](#); [Ajaero, 2024](#)). Consequently, the framework provides a roadmap for moving from symbolic engagements to substantive, co-produced programmes that address specific surgical system deficits ([George, 2025](#); [Lokossou et al., 2025](#)).

This analysis yields salient policy recommendations ([Bolarinwa, 2025](#)). First, there is a pressing need to formalise diaspora engagement through a national strategy for surgical system strengthening, creating clear pathways for credential recognition and legal protections ([Annan-Aggrey, 2025](#); [Buser et al., 2024](#)). Second, investment in robust digital infrastructure, such as secure telemedicine platforms, is paramount to sustaining connections and mitigating challenges of distance and cost ([Sugandhar Darur & Ram Reddy Minampati, 2025](#); [Wibowo et al., 2025](#)). Third, partnerships should be strategically cultivated with well-organised diaspora associations, empowering them as formal partners in needs assessment and programme design to ensure relevance and cultural concordance ([Husseini & Lami, 2023](#); [Kudzai Chiweshe, 2024](#)).

Future research must empirically test and refine this theoretical framework ([Chisholm et al., 2023](#)). Longitudinal, mixed-methods studies are required to assess the sustained impact of structured diaspora programmes on surgical outcomes and trainee retention in Gabon ([Elhamza, 2025](#); [James, 2024](#)). Comparative research with other Francophone African nations would elucidate how different national policies and diaspora network structures influence partnership efficacy ([Ferrinho et al., 2023](#); [Dawson, 2024](#)). Furthermore, investigating ethical dimensions and potential unintended consequences, such as internal brain drain or the creation of parallel systems, is crucial ([Aluwihare-Samaranayake, 2024](#)). Research should also explore the role of South-South diaspora collaborations to enrich the available expertise ([Ella-Ondo et al., 2025](#)).

In conclusion, this theoretical framework establishes a foundational argument for reconceptualising the Gabonese surgical system as a transnational space, actively enriched by its global professional community. The diaspora represents a formidable, yet under-utilised, national asset ([Ameh et al., 2024](#)). By providing a structured approach to channel this transnational expertise, the framework aims to transform sporadic goodwill into a predictable and sustainable driver of health system resilience, forging a collaborative path towards surgical equity in Gabon.

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