Central African Journal of Public Health
2026, Vol. 12, No. 2, pp. 121–129
https://doi.org/10.11648/j.cajph.20261202.17

Research Article

Harmonizing the Training and Certification of Nurses, Midwives, and Health Technicians in Cameroon: A Policy Analysis

John Nyah Mbout[1, 2, *]

[1]Department of Nursing, Shannon Medical Center, San Angelo, United States
[2]Department Business Administration, Ottawa University, Arizona, United States

Abstract

Background: Fragmentation in the education, credentialing, and professional regulation of nurses, midwives, and health technicians (NMHTs) remains a critical governance constraint on health-system performance in Cameroon. Although multiple reforms have expanded training opportunities, parallel pathways and contested licensure rules continue to generate uncertainty for graduates, employers, and regulators. Objective: This study analyzed how policy content, context, actors, and processes interact to reproduce the lack of harmonization in NMHT training and certification, and to identify policy options that are institutionally feasible within Cameroon's current governance architecture. Methods: A qualitative health policy analysis was conducted using Walt and Gilson's policy triangle. An explicit document review protocol was applied to legal instruments, national strategy documents, and interministerial reform texts relevant to NMHT education, equivalence, and professional registration. Documents were selected using predefined inclusion and exclusion criteria, examined through iterative two-cycle coding, and appraised for internal coherence, operational clarity, and implementability. Results: The analysis shows that Cameroon's harmonization deficit is sustained by four mutually reinforcing mechanisms: overlapping ministerial mandates, incomplete equivalence across qualification pathways, transitional certification arrangements that can reproduce inequity when weakly competency-mapped, and insufficient regulatory infrastructure for accreditation, registration, and continuing competence. The 2024 MINESUP–MINSANTE resolutions represent an important political opening, but they do not yet provide the procedural and regulatory architecture required for durable harmonization. Conclusions: The central policy problem is not a lack of reform activity, but the absence of integrated governance and enforceable national standards. The study's distinctive contribution is to demonstrate that harmonization in Cameroon is fundamentally a governance-integration problem rather than a purely technical curriculum problem. Sustainable reform will require a joint standard-setting and accreditation platform, competency-based equivalence rules, a unified licensure and registration pathway, and time-bounded transition arrangements anchored in transparent implementation procedures.

Keywords

Cameroon, Nursing Education, Midwifery Education, Health Technicians, Health Workforce Governance, Licensure, Policy Analysis

*Correspondence: John Nyah Mbout (johnmbout@gmail.com)

Received: 23 March 2026; **Accepted:** 7 April 2026; **Published:** 24 April 2026

Copyright: © The Author(s), 2026. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

1. Introduction

1.1. Public Health Relevance of Harmonized NMHT Education and Regulation

Health workforce performance is a central determinant of health system effectiveness, health security, and progress toward UHC. Nurses and midwives typically constitute the largest clinical cadre and deliver a substantial share of primary, maternal, neonatal, and community-based care; workforce quality and regulation shape service safety and population outcomes. [1, 2] For health technicians, quality and standardization are similarly critical because they often provide essential diagnostic, rehabilitation, and public health–support functions that enable safe clinical decision-making.

Education and regulation are coupled systems: education produces graduates, but regulation defines minimum standards for entry-to-practice, scope of practice, and accountability. The International Council of Nurses frames regulation as public protection through standards for conduct, education, and practice and highlights the link between regulation and workforce mobility and data systems. [3, 4] For midwifery, global standards emphasize competency-based curricula, governance, and quality benchmarks for entry-to-practice preparation [5].

When education pathways proliferate without credible equivalence rules and licensure mechanisms, systems can experience "credential congestion"—graduates hold certificates that employers cannot easily interpret and regulators cannot easily standardize. In the WHO African Region, guidance on evaluating and improving nursing and midwifery education underscores the need for explicit standards, quality assurance processes, stakeholder involvement, and governance mechanisms that safeguard professional practice quality and support cross-context recognition. [8]

1.2. Cameroon's Dual Governance and Recurrent Reform Cycles

Cameroon's NMHT training landscape has evolved through state-run professional training institutions and, since the early 2000s, through expansion of higher education routes, including BTS/HND and degree programs. National health planning documents position health workforce development as a strategic axis and explicitly acknowledge intersectoral coordination needs. Cameroon's Health Sector Strategy 2016–2027 anticipates cross-ministerial collaboration to harmonize curricula and improve training quality, indicating that harmonization is a recognized health-system strengthening approach. [9]

In 2024, renewed political attention to paramedical training culminated in an interministerial process documented in a joint press release signed by MINESUP and MINSANTE. [10] Because this instrument explicitly addresses equivalence, comentorship, and aptitude testing in relation to higher education programs, it provides a timely anchor for policy analysis. Meanwhile, Cameroon's legal architecture includes professional practice laws governing nurse, midwife, and medico-sanitary professions, which shape baseline eligibility and legitimacy assumptions about practice. [11]

Cameroon-specific qualitative research describes the expansion of nursing education into higher education as creating both opportunity and conflict: it enabled degree pathways that were previously unavailable, but it also intensified disputes about who controls standards and what constitutes a "legitimate" credential. [12, 13] These dynamics provide an explanatory context for why harmonization debates persist even when broad agreement exists on the need to improve training quality.

1.3. Conceptual Framing and Contribution

This article applies Walt and Gilson's policy triangle to explain why NMHT training and certification reforms in Cameroon repeatedly stall, recur, or yield only partial settlement. [14] The framework is especially useful for this case because the problem is not limited to deficient policy content; it is produced by the interaction of institutional context, competing actors, negotiated processes, and the legal and administrative instruments through which reform is pursued. While prior scholarship has documented the liberalization and historical evolution of nursing education in Cameroon, existing studies have not systematically integrated the country's professional laws, sector strategy, and recent interministerial reform instruments within a single health policy analysis. This study addresses that gap by moving beyond descriptive reform history to show how governance fragmentation itself reproduces policy instability and contested legitimacy. [12-15]

The contribution of this article is fourfold. First, it synthesizes the core legal and policy instruments shaping NMHT training and certification and maps them systematically onto the policy triangle domains. Second, it makes the analytical pathway explicit by showing how documentary evidence was translated into findings on governance overlap, equivalence ambiguity, and regulatory weakness. Third, it uses the 2024 interministerial resolutions to demonstrate why transitional examination-based solutions can manage political pressure in the short term while leaving structural contradictions unresolved. Fourth, it advances a more precise interpretation of the harmonization problem in Cameroon: the central bottleneck is institutional integration and regulatory design, not merely the technical adjustment of curricula.

2. Materials and Methods

2.1. Study Design

We conducted a qualitative health policy analysis guided

by Walt and Gilson's health policy triangle. [14] The framework examines four interlinked domains—context, content, actors, and process—and is particularly well suited to institutional fragmentation problems in which mandates overlap, and implementation depends on coordinated action across ministries, training institutions, and professional bodies. The unit of analysis was not a single statute, but the policy architecture governing NMHT education, qualification equivalence, certification, and professional entry-to-practice in Cameroon.

2.2. Data Sources and Document Selection

A focused but explicit document review was undertaken to capture the instruments most directly shaping training, qualification equivalence, and certification/registration of NMHTs in Cameroon. Documents were eligible for inclusion if they met at least one of the following criteria: (i) they regulated the practice, organization, or lawful recognition of nurses, midwives, or medico-sanitary professions; (ii) they set national policy direction for health workforce development, training quality, or intersectoral coordination; or (iii) they documented active reform measures concerning paramedical training, equivalence, certification, or council admission in higher education. Documents were excluded if they were duplicate versions, lacked direct relevance to NMHT education or certification, or were purely informational texts without policy or regulatory content.

The core corpus therefore included: (a) legal instruments catalogued in the WHO Health Legislation Repository and related official texts governing the practice and/or organization of nurse, midwife, and medico-sanitary professions in Cameroon; [11] (b) Cameroon's Health Sector Strategy 2016–2027, with particular attention to the health workforce axis and implementation strategies calling for multi-ministry collaboration and curriculum harmonization; [9] and (c) the Final Press Release of the interministerial meeting of 16 August 2024 on paramedical personnel training in certain higher education institutes, because it contains concrete resolutions on equivalence, co-mentorship, training readjustment, and aptitude testing. [10] To improve comprehensiveness, peer-reviewed literature and guidance documents were also reviewed to contextualize the evolution of nursing education reform in Cameroon, benchmark policy options against international standards, and support interpretation of governance and regulatory issues. [1-8, 12, 13]

Document identification relied on targeted searches of official ministry and international repository sources, supplemented by backward review of cited policy and scholarly materials. The final corpus was intentionally purposive rather than exhaustive: it was designed to capture the instruments with the greatest legal, strategic, or operational relevance to harmonization. This boundary is important because the study seeks analytical depth on governing instruments, not a broad descriptive inventory of all education-sector publications.

2.3. Data Analysis

Documents were read in full and analyzed through an iterative two-cycle coding process. First-cycle coding identified documentary evidence relating to governance mandates, qualification structures, equivalence language, curriculum standards, certification and registration procedures, implementation arrangements, and stated rationales for reform. Second-cycle coding grouped these coded segments into higher-order themes and mapped them to the four policy triangle domains. To maintain consistency in interpretation, coding decisions were recorded in an analytic matrix, themes were repeatedly compared across instruments, and documentary claims were traced back to the originating text before inclusion in the findings. Because this was a single-author policy analysis, rigor was strengthened through repeated re-reading, memo writing, and explicit separation of documentary evidence from analytical inference rather than through formal inter-coder agreement.

To strengthen transparency and reduce interpretive drift, each key instrument was also appraised against three policy-quality dimensions: (1) internal coherence—whether provisions aligned logically and avoided contradiction; (2) operational clarity—whether roles, procedures, and implementation expectations were stated with sufficient precision; and (3) implementability—whether the capacities, data systems, and administrative resources implied by the policy appeared plausible within Cameroon's institutional and fiscal context. Reflexive notes were maintained throughout analysis to identify potential bias, particularly the risk of over-interpreting executive reform texts as settled policy or of attributing institutional motives beyond what the documents could reasonably support.

2.4. Ethics Considerations

This study relied exclusively on publicly available policy and legal documents and on published literature. No human participants were recruited, no interviews were conducted, and no identifiable personal information was collected. Formal ethical approval was therefore not required. Nonetheless, the analysis was conducted with attention to responsible interpretation because policy analysis can influence how institutional actors and reform options are represented.

3. Results

3.1. Overview of the Policy Instrument Landscape

The document corpus shows that Cameroon's NMHT governance is shaped by layered instruments with different functions and authority. The 1984 professional practice law establishes baseline professional categories and lawful practice assumptions; the Health Sector Strategy 2016–2027 sets strategic direction for workforce strengthening and intersectoral

harmonization; and the 16 August 2024 MINESUP–MINSANTE press release introduces near-term administrative resolutions on equivalence, co-mentorship, and aptitude testing. [9-11] Taken together, these instruments do not form a fully integrated policy regime. Rather, they create a stratified policy environment in which legal authority, strategic intent, and operational response are distributed across separate texts with unequal force and stability.

Table 1 summarizes the main instruments analyzed and their relevance to training/certification harmonization.

Table 1. *Core policy instruments shaping NMHT training and certification harmonization in Cameroon.*

Instrument type	Example instrument	Primary policy function for NMHTs	Harmonization relevance
Professional practice law	Law regulating the practice of nurse, midwife, and medico-sanitary professions (1984) [11]	Defines professional categories and rules for lawful practice	Establishes baseline authority and legitimacy criteria for practice
Health sector strategy	Health Sector Strategy 2016–2027 [9]	Sets national health system and workforce priorities; defines implementation strategies	Explicitly references multi-ministry collaboration to harmonize curricula and improve training quality
interministerial reform instrument	Joint MINESUP–MINSANTE press release (Aug 16, 2024) [10]	Defines resolutions on training cycles, co-mentorship, equivalence, and aptitude testing	Directly addresses equivalence bridges between higher education routes and state certification/council admission

3.2. Context: Why Harmonization Became a Recurrent Policy Problem

Three contextual drivers recur clearly across the reviewed documents and supporting literature. First, Cameroon's health planning documents recognize persistent workforce shortages, uneven distribution of qualified personnel, and the need to improve training quality across the health-system pyramid. [9] Second, international guidance consistently frames education and regulation as inseparable public-protection functions: competency-based curricula, accreditation, licensure, and workforce data systems must operate together if quality assurance and mobility are to be credible. [1-8] Third, the expansion of higher education routes increased training access but also multiplied providers, qualifications, and claims to legitimacy in the absence of fully enforced national standards. [8, 12, 13] These three conditions make harmonization not merely desirable, but structurally necessary.

Against that backdrop, interministerial dispute becomes understandable rather than exceptional. When higher education institutions produce credentials that are academically recognized but not automatically accepted for clinical entry-to-practice, ministries and professional bodies face a legitimacy problem: who has the authority to decide whether a graduate is practice-ready? The 2024 interministerial measures can therefore be read as a state response to accumulated ambiguity. However, when the system relies on transitional gatekeeping after training rather than common standards before and during training, policy conflict is reproduced instead of resolved. [9, 10, 12, 13]

3.3. Actors: Institutional Roles and Incentive Misalignment

The governance structure for NMHT education and certification is characterized by at least four actor clusters with partially conflicting incentives.

Government ministries. The reviewed documents indicate a clear but incomplete division of institutional authority. MINSANTE is responsible for service delivery, workforce performance, and public safety, which gives it a strong incentive to retain control over practice readiness and state-recognized professional entry. MINESUP, by contrast, governs post-secondary education and academic qualifications and therefore has an institutional interest in defending the legitimacy and progression value of degree pathways. [9, 10] The resulting overlap is not accidental; it is built into the architecture of dual governance.

Professional regulatory bodies and councils. The legal framework recognizes professional organization and lawful practice, [11] but the documentary record reviewed for this study provides limited evidence of a fully institutionalized regulatory system with interoperable registries, published licensure standards, continuing competence requirements, and transparent renewal procedures. In that institutional space, ministries are more likely to resort to transitional examinations and administrative directives to manage entry-to-practice. [10] Such measures may offer short-term control, but they do not substitute for durable regulatory capacity.

Training institutions. Public and private training institutions operate under uneven conditions with respect to faculty preparation, clinical placement quality, assessment infrastructure,

and external oversight. The significance of this variation is amplified when national standards are weakly specified or inconsistently enforced. Under those conditions, mistrust across pathways is not simply political rhetoric; it is partly a predictable consequence of limited assurance that graduates from different institutions have been trained and assessed against comparable competency expectations. [8, 10, 12]

Professional associations and civil society. The available literature suggests that professional associations can articulate procedural fairness concerns, aggregate the interests of graduates, and push for more transparent transition arrangements. [12, 13] However, their influence is contingent on organizational cohesion and access to policy arenas. Where collective advocacy is fragmented, executive actors can more easily prioritize administratively expedient solutions over institutionally durable ones.

3.4. Policy Content: Equivalence Bridging Through Co-Mentorship and Aptitude Testing

The August 2024 interministerial press release is the most operationally specific instrument in the corpus and therefore central to interpreting current reform dynamics. [10] Its agenda is not abstract: it addresses registration of holders of professional health degrees into the professional council, equivalence of academic titles for holders of state certificates delivered by MINSANTE, and the absence of a paramedical engineering training pathway. These agenda items demonstrate that the core policy concern is practical recognition across pathways, not merely educational nomenclature.

The instrument adopts three core resolution clusters.

First, the instrument calls for a readjustment of training in higher education institutes beginning in the 2024–2025 academic year so that training cycles align toward the state diploma issued by MINSANTE. [10] This is a consequential policy signal. It implies that, despite the growth of higher education pathways, the state diploma remains the principal benchmark of professional legitimacy for entry into regulated practice.

Second, the instrument introduces a co-mentorship arrangement in which academic oversight is associated with MINESUP and technical oversight with MINSANTE, with harmonized modalities at admission and at the end of training. [10] This provision is analytically important because it acknowledges—in the text itself—that neither ministry can resolve the harmonization problem alone. The document therefore supplies direct evidence that dual governance is recognized by the state as a structural feature requiring negotiated coordination rather than unilateral control.

Third, the press release establishes transitional measures for holders of professional degrees, including a national aptitude test for admission into the professional council and additional training and certification examinations for unsuccessful candidates. [10] This is the clearest evidence in the corpus of how the state is attempting to bridge parallel pathways. At the same time, it reveals the limitations of the current approach: equivalence is being operationalized through post hoc testing, not through a nationally published competency framework applied prospectively across all training routes.

The policy risk follows directly from that design. If equivalence depends primarily on supplementary examinations rather than on transparent, competency-based standards, the reform can generate a hierarchy of legitimacy in which some credentials are treated as presumptively valid and others as presumptively deficient. The concern is not only symbolic. Such an approach can impose additional financial, temporal, and psychological burdens on specific cohorts, weaken trust in the fairness of reform, and perpetuate the very institutional contestation the policy seeks to resolve. [8, 10, 12, 13]

3.5. Policy Process: Negotiated Urgency with Limited Procedural Specification

The press release also sheds light on process. It shows that reform has been driven through a negotiated but highly executive process: the meeting was co-chaired at ministerial level and included senior officials, the professional council, and representatives of private higher education institutions. [10] This confirms that the issue has achieved political salience and that key institutional actors were present in the room.

Yet the same documentary record also reveals how thin the procedural architecture remains. The publicly available text does not specify, in sufficient detail, how harmonized curricula will be drafted and validated, how competency standards will be set and revised, how accreditation and site oversight will be operationalized, how aptitude-test validity and appeals will be managed, or how registration and continuing competence data will be captured over time. These are not minor technical omissions; they are the implementation mechanisms on which durable harmonization depends.

The corpus provides limited public details on:

1) how harmonized curricula will be developed, validated, and updated.
2) how competency standards will be defined and audited across institutions.
3) how psychometric quality, fairness, and appeals will be assured for aptitude testing; and
4) how data systems will support registration, licensure renewal, and continuing professional development.

These procedural gaps are analytically significant because health policy reform is sustained not by announcements alone but by routinized institutional procedures, quality-assurance systems, and enforceable accountability arrangements. [15] In their absence, executive solutions may temporarily defuse political pressure while leaving the underlying contradictions intact. This helps explain why Cameroon's NMHT reforms risk recurring as successive waves of transition management rather than consolidating into a stable national framework.

Table 2 synthesizes the main gaps and feasible remedies using the policy triangle.

Table 2. Systemic gaps and feasible remedies (synthesized using the policy triangle).

Policy triangle domain	Observed gap in Cameroon's NMHT training/Certification system	Practical implication for public health	Feasible remedy options
Actors	Overlapping mandates across MINSANTE and MINESUP, plus limited regulatory capacity in professional bodies. [9-11]	Unstable standards; delayed workforce integration; inconsistent employer interpretation	Formal joint standard-setting and accreditation platform; shared accreditation/site visits; clarified division of responsibilities published as guidance. [9, 10]
Content	Partial equivalence across pathways and reliance on transitional exams as a proxy for competency. [10]	Perceived legitimacy hierarchy; equity burdens for specific cohorts	National competency framework and curriculum blueprint; published equivalence matrix; national assessment blueprint with transparent standard-setting. [6-8, 10]
Process	Executive, time-pressured reform cycles with limited published procedures for curriculum development, testing quality assurance, and appeals. [10, 15]	Reduced trust and compliance; implementation drift across institutions	Written procedures and timelines; appeals and accommodations policy; monitoring indicators and periodic evaluation cycles. [8, 15]
Context	Workforce needs and higher-education expansion outpacing regulatory infrastructure and data systems. [1-4, 9]	Pressure for recurring "quick fixes"; weak workforce planning	Investment in registry and continuing competence systems; phased reform with costed implementation plan; strengthening data for workforce planning. [3, 4, 9]

4. Discussion

4.1. Interpreting Fragmentation Through the Policy Triangle

Applying the policy triangle shows that Cameroon's NMHT harmonization challenge is best understood as a problem of interacting governance failures rather than as a single defect in policy design. [14] Contextual pressure from workforce shortages and education-sector expansion has intensified demand for reform, but that same pressure has also multiplied actors, claims to authority, and institutional incentives to defend organizational boundaries. The result is a policy environment in which content, process, and actor interests reinforce one another in ways that slow or distort implementation.

The reviewed documents support three closely linked interpretations. First, dual governance has produced overlapping claims over standards, legitimacy, and entry-to-practice. [9-11] Second, equivalence has been managed more through transitional administrative devices than through common competency architecture. [10] Third, regulatory capacity has not kept pace with the complexity of the training landscape, limiting the state's ability to assure quality consistently across pathways. [3, 4, 8] These findings explain why harmonization debates persist despite repeated reform activity.

This interpretation sharpens the manuscript's central argument and distinguishes it from a more conventional curriculum-reform narrative. The evidence suggests that Cameroon's bottleneck is not simply the coexistence of multiple qualifications; it is the absence of a durable governance arrangement capable of defining standards jointly, enforcing them credibly, and translating them into fair licensure and registration procedures. Without those institutional foundations, even well-intentioned reforms are likely to remain provisional.

4.2. Alignment with Global Guidance and Cameroon-Specific Evidence

Global guidance converges on a consistent principle: effective harmonization requires competency-based education, transparent regulation, accreditation systems, and workforce information structures that operate as an integrated public-protection system rather than as disconnected reforms. [1-8] The Cameroon case aligns with that literature, but it also extends it by showing how governance fragmentation can cause technically reasonable reforms to underperform when the institutions responsible for implementing them are only partially aligned.

Cameroon-specific scholarship is particularly valuable here. Prior studies have shown that liberalization and expansion created both advancement opportunities and intensified struggles over control, legitimacy, and professional identity in nursing education. [12, 13] The present analysis builds on that evidence but goes further by linking those dynamics directly to the legal and strategic texts that now shape equivalence and certification. In doing so, it demonstrates that the 2024 interministerial resolutions are important not because they end the dispute, but because they expose the precise institutional fault lines that any durable reform must address. [10]

4.3. Feasible Policy Options and an Implementation Pathway

A feasible reform package must therefore be derived from empirical analysis rather than from generic reform preferences. Because the findings point to problems of governance overlap, equivalence ambiguity, and weak regulatory infrastructure, the policy options below are framed as responses to those specific defects.

Option 1: Establish a joint Health–Higher Education standard-setting and accreditation platform.

Cameroon can operationalize the harmonization goal by creating a permanent joint platform with a mandate to define entry-to-practice competencies, minimum curriculum standards, faculty and clinical placement requirements, and accreditation criteria for each NMHT cadre. [8-10] To reduce ambiguity, decisions should be published (competency frameworks, curriculum outlines, accreditation criteria) and updated on a defined cycle.

Option 2: Define equivalence through competency-based assessment blueprints.

Equivalence should be demonstrated by competence rather than by institutional label. [6-8] If an aptitude test is retained during transition, it should be mapped to competencies using a published blueprint, supported by standard-setting and quality assurance, and accompanied by transparent appeals and accommodations policies. [10]

Option 3: Modernize licensure, registration, and continuing competence systems.

A unified national registry with unique identifiers, renewal rules, continuing professional development requirements, and disciplinary procedures can translate policy intent into operational capability. [3, 4] Digital registries can also support workforce planning and monitoring of geographic distribution and skill mix.

Option 4: Protect transition cohorts with time-bounded, equity-focused rules.

Transitional measures should be time-bounded and explicitly equity-focused, with bridging programs that are competency-mapped, predictably scheduled, and reasonably priced. [10] Clear communication of timelines and "sunset" provisions for parallel pathways can reduce uncertainty and opportunistic institutional adaptation.

Table 3 offers an illustrative phased roadmap.

Table 3. *Suggested staged implementation roadmap for harmonization (illustrative).*

Time horizon	Governance deliverables	Education and assessment deliverables	Regulation and data deliverables
0-3 months	Establish joint Health–Higher Education commission; agree terms of reference and publication schedule	Rapid mapping of existing curricula and training cycles; initiate competency framework drafting	Initiate registry requirements definition (unique IDs, renewal rules, minimum data set)
3-9 months	Pilot joint accreditation/site visits for a small set of institutions	Publish interim competency framework and equivalence matrix; publish aptitude test blueprint (if used) and appeals process	Prototype register; define continuing professional development requirements
9-18 months	Formalize national accreditation criteria; scale joint site visits	Roll out harmonized curriculum blueprint; develop bridging modules aligned to competencies	Implement national registration workflow; begin routine reporting for workforce planning
18-24 months	Review and update standards based on evaluation	Reduce reliance on transitional exams as programs become accredited to common standards	Audit registry completeness; link licensing renewal to continuing competence evidence

4.4. Study Limitations and Further Investigation

This study has several limitations. It relied on a purposive set of publicly accessible policy documents and published literature and therefore could not assess unpublished operational manuals, internal implementation reports, examination blueprints, or registry data that may shape real-world practice. The analysis is also interpretive and document-based; it cannot substitute for direct evidence from policymakers, educators, regulators, employers, or recent graduates. In addition, because some reform instruments are administrative and potentially fluid, the documentary record may evolve faster than journal publication timelines. These limitations do not invalidate the analysis, but they do mean that the findings should be read as a rigorously reasoned interpretation of the currently accessible policy architecture rather than as a complete account of implementation.

Future research should test and deepen these conclusions through multi-source inquiry. Priority next steps include key-

informant interviews across ministries, councils, training institutions, employers, and transition cohorts; curriculum mapping against nationally agreed competency standards; and quantitative analysis of registration timelines, examination outcomes, and workforce absorption by pathway. Such work would allow the governance interpretation advanced here to be triangulated against implementation experience and measurable system outcomes.

5. Conclusions

Persistent fragmentation in the training and certification of nurses, midwives, and health technicians in Cameroon is not primarily a consequence of policy inactivity; it is the product of fragmented governance, contested equivalence rules, transition-dependent certification mechanisms, and underdeveloped regulatory infrastructure. [9-13] Recent interministerial action is important because it signals political recognition of the problem and opens space for co-governance. [10] However, lasting harmonization will require more than transitional coordination. The study shows that the decisive reform task is to build an integrated national architecture for standards, accreditation, equivalence, licensure, registration, and continuing competence. That is the manuscript's central contribution to the literature and its principal implication for policymakers, educators, and professional regulators in Cameroon and comparable settings.

Abbreviations

BTS	Brevet de Technicien Supérieur
HND	Higher National Diploma
MINESUP	Ministry of Higher Education
MINSANTE	Ministry of Public Health
NMHT	Nurses, Midwives, and Health Technicians
UHC	Universal Health Coverage
WHO	World Health Organization

Acknowledgments

The author thanks Cameroonian health professionals, educators, and policy stakeholders whose public statements and scholarship have strengthened the national conversation on nursing, midwifery, and health technician education reform.

Author Contributions

John Nyah Mbout: Conceptualization, Formal Analysis, Methodology, Writing – review & editing

Funding

The author received no external funding for this study.

Conflicts of Interest

The author declares no conflicts of interest.

References

[1] World Health Organization. State of the world's nursing 2020: investing in education, jobs and leadership. Geneva: World Health Organization; 2020.

[2] World Health Organization. Global strategic directions for nursing and midwifery 2021–2025. Geneva: World Health Organization; 2021.

[3] International Council of Nurses. Regulation and education. Geneva: International Council of Nurses.

[4] International Council of Nurses. Regulatory Board Governance Toolkit. Geneva: International Council of Nurses; 2014.

[5] International Confederation of Midwives. ICM Global Standards for Midwifery Education. The Hague: International Confederation of Midwives; revised 2025.

[6] Baker C, Cary AH, da Conceição Bento M. Global standards for professional nursing education: The time is now. Journal of Professional Nursing. 2021; 37(1): 86–92. https://doi.org/10.1016/j.profnurs.2020.10.001

[7] Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. The Lancet. 2010; 376(9756): 1923–1958. https://doi.org/10.1016/S0140-6736(10)61854-5

[8] World Health Organization Regional Office for Africa. Guidelines for Evaluating Basic Nursing and Midwifery Education and Training Programs. Brazzaville: WHO Regional Office for Africa; 2008.

[9] Ministry of Public Health (Cameroon). Health Sector Strategy 2016–2027. Yaoundé: Ministry of Public Health; 2016.

[10] Ministry of Higher Education (Cameroon); Ministry of Public Health (Cameroon). Final press release of the interministerial meeting on the training of paramedical personnel by certain institutes of higher education. Yaoundé; 16 Aug 2024.

[11] WHO Health Legislation Repository (CPCD). Loi No 84-009 regulating the practice of nurse, midwife, and medico-sanitary professions (Cameroon). 1984.

[12] Maboh MN. Liberalisation of education in Cameroon: the liberating-paralysing impact on nursing education. African Journal of Health Professions Education. 2020; 12(3): 149–153. https://doi.org/10.7196/AJHPE.2020.v12i3.1363

[13] Maboh MN, Martin PJ, Stallabrass S. Seizing the opportunity of the moment; nurse education in Cameroon: a grounded theory research study. Journal of Research in Nursing. 2021; 26(4): 277–290. https://doi.org/10.1177/1744987120948557

[14] Walt G, Gilson L. Reforming the health sector in developing countries: the central role of policy analysis. Health Policy and Planning. 1994; 9(4): 353–370. https://doi.org/10.1093/heapol/9.4.353

[15] Walt G, Shiffman J, Schneider H, Murray SF, Brugha R, Gilson L. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. Health Policy and Planning. 2008; 23(5): 308–317. https://doi.org/10.1093/heapol/czn024