

Using a Behaviorally Focused Applied Political Economy Analysis to Strengthen Continuing Professional Development in Ghana

MOMENTUM Country and Global Leadership







MOMENTUM works alongside governments, local and international private and civil society organizations, and other stakeholders to accelerate improvements in maternal, newborn, and child health services. Building on existing evidence and experience implementing global health programs and interventions, we help foster new ideas, partnerships, and approaches and strengthen the resiliency of health systems.

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ABBREVIATIONS

BF-APEA Behaviorally Focused Applied Political Economy Analysis

CPD Continuing professional development

FGD Focus group discussion

GHS Ghana Health Service

IGF Internal generated funds

KII Key informant interview

N&MC Nursing and Midwifery Council

USAID United States Agency for International Development

EXECUTIVE SUMMARY

THE BF-APEA PROCESS

The Behaviorally Focused Applied Political Economy Analysis (BF-APEA) process in Ghana consisted of a series of participatory steps in which key stakeholders with decision-making authority and influence over continuing professional development (CPD) for nurses and midwives in Ghana collectively determined (1) the goal for CPD in Ghana, (2) the impediments to achieving that goal, and (3) the key behaviors required of actors at all levels in the system to address those impediments. Primary research was conducted with providers, supervisors, policymakers, stakeholders, and other individuals who could offer insight and understanding on the challenges and motivations faced in practicing these key behaviors. Finally, the original group of stakeholders reconvened to validate the research and co-create a set of recommendations and solutions. This process took place from April to October 2022. The Nursing and Midwifery Council (N&MC) of Ghana led the process, with support from MOMENTUM Country and Global Leadership.

GOAL

The goal of CPD in Ghana is to equip all cadres of practitioners at all levels of care to demonstrate relevant, international standards-based, culturally sensitive competencies and to utilize reflective practice to improve health outcomes.

SUMMARY RECOMMENDATIONS

To achieve this goal, the following key **behaviors** must be systematically practiced:

- Providers effectively use CPD to maintain skills required to deliver highest quality services.
- Nursing leaders/supervisors create CPD plans for staff, including identification of specific CPD needs and curriculum and mentorship on new skills post-CPD.
- Course content creators ensure that the curriculum is skills based and culturally relevant, and streamline the interface and instructions.
- District health officers, directors of nursing and midwifery, nursing and midwifery managers, and facility in-service coordinators review and support implementation of facility and institutional CPD plans.
- N&MC recommends specific course content for specific cadres, including creating individualized learning plans and tracking for providers, and expands course offerings to include more skills-based curricula.

KEY RESEARCH FINDINGS

The primary research included a series of key informant interviews and focus group discussions with a total of 37 providers and 23 supporting actors (content developers, facility administrators, and CPD managers) in the public and private health care systems. Factors affecting practice of the priority outcome behaviors were examined through the lens of a political economy, specifically investigating **foundational factors** such as accessibility, perception of quality, and relevance; **social and institutional factors** such as power dynamics, social and institutional support, and gender; the **rules of the game**, such as laws, policies, norms, and economic incentive or market influences; and the **here and now**, including historical experience and the influence of other current events.

Key factors that emerged relevant to all five outcome behaviors include:

- CPD is almost never tailored to individual provider needs or skill gaps, tied to performance appraisal plans, or customized with specific recommendations for different cadres of providers.
- CPD attendance, especially in person, is often seen as affected by favoritism within the facility, and financial renumeration for attendance, although necessary, often generates conflict and competition between providers.
- CPD is seldomly seen as a component of lifelong learning or essential to quality health care; rather, it is viewed as a perfunctory licensing requirement.
- Course content does not include all necessary skills for senior leaders, including management, ethics, and research, as well as self-care/mental health.
- Course format focuses almost exclusively on increasing knowledge, rather than skills, and seldomly includes opportunities for discussion, interaction, or cultural tailoring.
- Opportunities for post-CPD mentorship tied to course material are not leveraged or do not exist. Often facilities lack supplies or materials for providers to practice or implement new insights.
- Virtual or e-learning-based CPD courses need restructuring to strengthen learner engagement and include a skills acquisition component.

KEY RECOMMENDATIONS

To address these factors, the team crafted the following list of recommendations for implementation by the N&MC and Ghana Health Service:

- Create a transparent and clear system for rotational release of staff for CPD.
- Develop CPD courses that encompass care bundles unique to specific professional cadres, particularly those related to nursing and midwifery and current placements.
- Develop and implement a training needs assessment as part of staff performance appraisals.
- Formally coordinate CPD within facilities across wards, including identifying needs and topics, a schedule of dates and times/locations, and housing of offline videos for areas with low connectivity.
- Standardize protocols and identify opportunities for sponsorship for providers to attend courses they otherwise could not afford.
- Create a dedicated CPD strategy for reaching remotely placed/rural care providers.
- Establish specific tracks for different cadres of providers, including mandatory for each and optional courses for all. Mandatory courses for nursing leaders should include leadership, ethics, research, technology, and other critical nonclinical skills, such as self-care/mental health, which must be appropriately weighted in CPD points.
- Revive or establish fixed or mobile learning or skills labs within each ward.
- Create supply and resource lists for each course and match the lists to available supplies in facilities prior to course attendance.
- Include a local CPD needs assessment in annual planning between facilities and district health officers.
- Expand breadth of teaching methodologies in all courses, including discussion, role plays, and practicums.
- Establish a formal policy for sharing new learning and ongoing challenges within facilities or wards (seminars, lunches, grand rounds type).
- Expand types of providers accredited to offer CPD, including more private providers.

BACKGROUND

For decades in Ghana, the health care system has faced the persistent challenge of fully supporting, equipping, mentoring, and motivating providers through continuing professional development (CPD). A knowledgeable, skilled health workforce is essential to providing high quality care. Health workers graduate from medical, nursing, midwifery, or other pre-service education programs with core competencies that provide a foundation essential for effective practice within their professions. However, over the course of a career, evidence supporting best practices will evolve, innovations will emerge, medical technologies will develop, and disease burdens will shift.

Part of the foundation provided in pre-service education is the need for, and commitment to, supportive lifelong learning. Health workers must engage in formal and informal learning to maintain their capacity to perform. Just as health care workers must commit to ongoing learning, the health system must provide an enabling environment that ensures health care workers can maintain and enhance the competencies required to effectively perform their role functions per professional standards. Despite significant investment in CPD in Ghana in past decades, the system still does not consistently translate into health system staff being able to perform their duties with the most current skills and evidence-based standards. This persistent challenge contributes directly to many of the gaps that serve as a focus for MOMENTUM Country and Global Leadership's work in Ghana.

MOMENTUM uses the Behaviorally Focused Applied Political Economy Analysis (BF-APEA) approach to help project staff and country partners better understand and react to the system- and institutional-level incentives, interests, and behaviors that explain persistent challenges to progress in health and development. The methodology aims to look beyond technical, capacity, and resource-related constraints, and focus on uncovering the explicit and implicit drivers that shape the actions and decisions of key actors. The BF-APEA operates under the assumption that applying this kind of logical, strategic approach and behavioral science thinking **at both individual and structural levels** to problems not traditionally approached from a behavioral perspective will lead to better decision-making and targeted investment to resolve persistent development challenges. In addition, the BF-APEA has the potential to support better target setting and monitoring of progress, as the necessary inputs will be clearly defined. The BF-APEA process is being applied to several challenges in MOMENTUM projects.

BF-APEA is based on the understanding that the **behaviors** of individuals and institutions are of central importance to either enabling or hindering positive change within a local system. The methodology provides a means of mapping the **behavior chains** required to achieve priority development outcomes. Ultimately, the BF-APEA activity results in holistic **behavioral profiles** that articulate the specific behaviors that will contribute to defined goals, as well as the various factors and dynamics that support and hinder desired behaviors. These behavioral profiles lay the groundwork for planning context-aware interventions that encourage behaviors that produce key outcomes (noted here as summary recommendations).

Importantly, the approach is highly participatory. Key partners and stakeholders collaborate in setting the activity goal, identifying barriers to achieving the goal, mapping key behaviors, and action planning through a series of meetings and workshops. Along the way, information is deliberately evaluated and validated using available secondary literature. BF-APEA team leads use targeted primary data collection methods—primarily key informant interviews (KIIs) and focus group discussions (FGDs)—to fill gaps in knowledge and leverage stakeholders' collective knowledge to validate insights generated.

In Ghana, MOMENTUM Country and Global Leadership collaborated with Ghana Health Service (GHS), the Nursing and Midwifery Council (N&MC) of Ghana, and other stakeholders at the national and regional levels to apply the BF-APEA methodology to better understand the current CPD system and co-design sustainable solutions to improve it. The process examined the behaviors of key actors within the Ghana health system as they relate to access to and development and uptake of CPD. MOMENTUM and partners mapped key behaviors that contributed to effective development and use of CPD, as well as behaviors that inhibit effective CPD. As described in this report, the activity helped to pinpoint opportunities to encourage behaviors and address key factors that can contribute to more effective, impactful, and sustainable CPD.

BF-APEA IN GHANA: PROCESS OVERVIEW

The BF-APEA process in Ghana took place from April to October 2022. N&MC Ghana led the process, with support from MOMENTUM Country and Global Leadership. To start the process, a kick-off meeting convened key stakeholders and decision-makers positioned throughout the CPD system. These individuals included leaders from 23 leading clinical training and service provision organizations from across the country as well as key policy-level actors from N&MC Ghana. **Table 1** lists these institutions. These stakeholders collaboratively worked to complete a series of key participatory steps in the BF-APEA process: articulate a goal, describe impediments to the goal, and identify behaviors critical to resolving those impediments. Each of these steps is explained in further detail in the following sections.

The primary research that followed the kick-off meeting sought to understand the political economy of these articulated behaviors in an attempt to examine what motivates the actions and decisions of key stakeholders throughout the CPD system. After the primary research was completed, MOMENTUM Country and Global Leadership convened the same group of decision-making stakeholders to validate the research findings and use the behavior profile format to help structure identification of specific solutions or strategies that respond to the factors identified in the research. MOMENTUM Country and Global Leadership summarized the factors and recommended strategies in a results framework that can guide the way forward.

TABLE 1: BF-APEA OWNERSHIP-LEVEL STAKEHOLDERS BY INSTITUTIONAL REPRESENTATION

Institution	Location	Number of stakeholders
37 Military Hospital	Accra	2
Accra Psychiatric Hospital	Accra	1
Cape Coast Teaching Hospital (CCTH)	Cape Coast	2
Centre for Health Development and Research (CEHDAR)	Accra	1
Christian Health Association (CHAG)	Kumasi, Accra	2
Ghana Armed Forces Medical Services, Burma Camp	Accra	1
Ghana College of Nurses and Midwives (GCNM)		3
Ghana Health Service (GHS)	Upper East, Bono, Greater Accra	8
Ghana Police Service		2
Ghana Registered Nurses and Midwives Association (GRNMA)	Accra, Cape Coast, Koforidua, Kumasi	5
Ho Teaching Hospital	Ho/Volta region	2
Jhpiego		5
Komfo Anokye Teaching Hospital (KATH)	Kumasi	2

Institution	Location	Number of stakeholders
Korle-Bu Teaching Hospital (KBTH)	Accra	2
Kwame Nkrumah University of Science and Technology (KNUST)	Kumasi	1
Medical Simulation Skills Institute (MSSI)	Accra	1
Ministry of Health	Accra	1
Nurse Educators' Group, Nursing and Midwifery Training College	Techiman-Krobu and Tamale	2
Nursing and Midwifery Council (N&MC)	Accra	10
Pantang Psychiatric Hospital	Accra	1
School of Nursing and Midwifery, University of Health and Allied Sciences (UHAS)	Kumasi	1
Tamale Teaching Hospital (TTH)	Tamale	2
Trust Hospital	Accra	1
University of Ghana Medical Center (UGMC)	Accra	2

ARTICULATION OF THE GOAL

During the kick-off meeting, the stakeholders reflected on the immense progress that has been made in CPD in Ghana over the past decade. N&MC recently invested in a robust online system that offers many hundreds of courses in a wide variety of topics. Using this platform, Ghana leads all of Africa in CPD attendance, with thousands of courses taken via this system in 2021 alone. In addition, N&MC Ghana has continuously evaluated and updated its policy on CPD, ensuring the most up-to-date recommendations for how providers can maintain their licensure. The stakeholders acknowledged these points of success as they also considered what else was needed to translate these recent wins into actual improved quality within facilities.

The group then collaboratively determined the goal that would inform the subsequent participatory steps in the BF-APEA process. Stakeholders first considered the existing goal of CPD as stated in the N&MC Ghana policy document, which notes,

The aim of introducing these CPD programs is to ensure that Nurse Assistants, Nurses, and Midwives remain up to date in knowledge and skills in respect of changes in health patterns. Continuing Professional Development (CPD) refers to the process by which members of a profession maintain and improve their knowledge, skills, and attitude to remain competent in their chosen profession for the benefit of themselves, their clients or patients, and the wider professions. A CPD program represents a commitment to continuous personal and professional development in order to provide quality care and promote professional integrity for the benefit of the individual, clients or patients, and the professions.

The group then translated these objectives into the following goal for CPD in Ghana for the next five years:

The goal of Continuing Professional Development in Ghana is to equip all cadres of practitioners at all levels of care to implement relevant, international standards-based, culturally sensitive competencies and to utilize reflective practice to improve health outcomes.

IMPEDIMENTS TO THE GOAL

Table 2 describes critical categories of impediments identified by stakeholders when asked to reflect on why this goal is not yet a reality.

TABLE 2: IMPEDIMENTS TO ACHIEVING CDP GOAL

Category	Specific issues noted
Accessibility	 Reliable access to Internet and/or data to download courses is still challenging, especially in rural areas. CPD courses are challenging to run on ordinary phones.
Relevance of content	Volume of courses, but no tailoring to specific need or cadre. Courses are mostly knowledge based, with no application element. Content is not tied to performance management/skills gap of providers.
Appropriateness of content	Content is often not user friendly and courses are bulky. • Content is not generally tailored to the Ghanaian context (language, style, examples, etc.), which makes it difficult for many providers to relate to.
Monitoring/ tracking	No system to track providers' progress or needs. • No enforcement and sanctions for not having appropriate skills.
Provider motivation	Providers see CPD as only to maintain a current license, so just go through motions. Many providers not excited/interested in online courses. • Some providers not comfortable with technology for online learning.
Facility involvement	Facilities (supervisors, administrators) not involved in planning CPD selection. No follow-up mentorship or supervision post-CPD to put knowledge into action. • Certain providers are chosen to attend certain trainings whereas others who really need it are not chosen.

CRITICAL BEHAVIORS

The stakeholders used this list of impediments to identify the various key actors within the system who have a role in addressing these issues and their associated behaviors. The team combined, summarized, and prioritized an initial list into **five behaviors**. The list of prioritized behaviors represents the **outcomes** required to achieve the goal for CPD in Ghana. It is not exhaustive of what can or should happen within the country relating to CPD; rather, it focuses on key behaviors critical to success.

The following are the priority behaviors, along with steps to practice each, required to achieve the CPD goal in Ghana:

- Providers effectively use CPD to maintain skills required to deliver highest quality services.
 - Providers identify appropriate CPD for their skill needs.
 - Providers attend CPD.
 - Providers share learning with colleagues and supervisor following CPD.
 - Providers implement new skills/knowledge in their work.
- Nursing leaders/supervisors create CPD plans for staff, including identification of specific CPD needs and curriculum and mentorship on new skills post-CPD.
 - Nursing leaders partner with providers annually to identify gaps in skills.

- Nursing leaders/supervisors support providers to identify CPD to fill skills gaps.
- Nursing leaders facilitate sharing of knowledge and skills post-CPD.
- Nursing leaders ensure necessary resources, supplies, and equipment are on hand to implement new skills.
- Course content creators ensure that the curriculum is skills based and culturally relevant, and streamline the interface and instructions.
 - Content creators identify gaps in course availability and organization of the platform.
 - Content creators integrate course delivery system with skills tracking for providers.
 - Content creators create new programs or courses and/or adjust or adapt existing one.
- District health officers, directors of nursing and midwifery, nursing and midwifery managers, and facility in-service coordinators review and support implementation of facility and institutional CPD plans.
 - Create template and platform for CPD planning, including identification of skills needs and monitoring progress.
 - Require submission of CPD plans from facilities.
 - Review CPD plans and provide feedback.
- N&MC recommends specific course content for specific cadres, including creating individualized learning plans and tracking for providers, and expands course offerings to include more skills-based curricula.
 - District health officers create template and platform for CPD planning, including identification of skills needs and monitoring progress.
 - District health officers require submission of CPD plans from facilities.
 - District health officers review CPD plans and provide feedback.

Practice of these behaviors is rarely straightforward, or they would already be in practice. Thus, understanding what drives these actors to practice (or not to practice) the prioritized behaviors and building strategies that address these factors is key. Such analysis ensures programs like MOMENTUM have evidence to inform the choice of strategic activities. While much is already known about the context for CPD, comparatively little is formally articulated about the underlying motivations for the actors in the CPD system. To generate this evidence, the BF-APEA carried out primary research to examine the dimension of why.

PRIMARY RESEARCH

The primary research component of the BF-APEA in Ghana sought to understand the political economy of the articulated behaviors to examine what motivates the actions and decisions of key stakeholders throughout the CPD system. **Table 3** articulates and aligns factors that inform the practice of critical behaviors with this political economy lens. Although many of these factors are known to and experienced by stakeholders in the system, the details and experiences had not been previously analyzed or used to develop strategies for change in a manner that directly elevated political economy lines of inquiry. The research findings, then, are articulated and subsequently leveraged as an integral part of careful and logical strategy development.

TABLE 3: DIMENSIONS OF WHY, EXAMINED BY PRIMARY RESEARCH

Dimension	Question	
Foundational factors		
Accessibility (in terms of time, availability, cost, rights, etc.)	What, if any, accessibility-related issues impact the actor's practice of this behavior?	
Perception of quality or relevance	How important does the actor feel the behavior is? How relevant is it and in what way?	
Perception of benefit or importance	How important does the actor find this behavior? How beneficial to the goal do they consider it to be? In what way?	
Social and institutional factors		
Power dynamics	How is this actor's behavior influenced by that of other actors? How does this actor relate to other actors in this system?	
Social support	How much social support does or would this actor receive for practicing this behavior?	
Institutional support	How much institutional (or community) support does the actor receive for practicing the behavior? What kind? What does the support look like?	
Gender	Are there any gender dimensions to practice of this behavior? What are they?	
Internal dynamics	What are the actor's own internal beliefs, aspirations, attitudes, or sense of self-efficacy related to practice of the behavior?	
Knowledge and skills	Are there any issues with the actor's own knowledge or skills that might impact practice of the behavior? What are they?	
Dynamics between factors	How do social and institutional dynamics affect the operating environment for laws and policies? How do these elements affect the shape or persistence of norms and other incentives?	
Rules of the game		
Laws and policies	What, if any, legal or policy-related constraints influence practice of this behavior? How do these constraints function?	
Norms	How different is this behavior from the norm? If different, how challenging will it be for the actor to act in a way that is different from the norm?	
Economic or market influences	Are there any economic influences that impact the actor's behavior? What are they? How do they work?	
Moral or other incentives	Are there any religious or moral incentives that influence practice of this behavior? What are they? How do they work? Who can access or practice them readily?	
Here and now		
Historical experience	What is the history of this behavior? How have the actors experienced it previously?	
Current events	Are there opportunities for change in this system that were not previously present? What are they? How might they be leveraged?	

STUDY AREA, POPULATION, AND SAMPLING

The research used a purposive and convenience sampling approach in which participants are selected based on their lived experiences within the context of the study. The research engaged nursing and midwifery leaders and additional stakeholders within the CPD system (including CPD content developers, facility administrators, and CPD managers within the public and private health care systems) across all three regions of Ghana (i.e., North, Middle, and Southern). The BF-APEA methodological framework was used to harness the power of stakeholder involvement in generating context-driven data for implementing context-specific evidence-based interventions. The sample size required for rich description of the phenomena under investigation and development of within and between narratives for this study was established based on data saturation of 60 participants.

TABLE 4: DATA COLLECTION SUMMARY ACROSS REGIONS

Region	Health care providers (male)	Health care providers (female)	Total number of providers	CPD system stakeholders (male)	CPD system stakeholders (female)	Total number of stakeholders
North	4	6	10	2	7	9
Middle	3	12	15	2	5	7
Southern	4	8	12	3	4	7
Total	11	26	37	7	16	23

QUALITATIVE DATA COLLECTION METHODS

MOMENTUM Country and Global Leadership used qualitative research methods to collect data, namely KIIs and FGDs. Key informants consisted of primary health care providers (nurses and midwives), CPD content developers, and facility administrators. Project local partners, with input from community contacts, purposively selected these participants from within the study communities to ensure a diversity of perspectives. The lead researcher prioritized data collection from health care providers and used the data to inform the creation of data collection tools for subsequent discussions with additional stakeholders. The study team (consisting of the lead researcher and MOMENTUM Country and Global Leadership and technical support staff) collaboratively developed FGD and KII guides (see Appendix C) that discussed topics such as staff performance, staff integration, CPD access and uptake, barriers, and recommendations for CPD improvement. Lines of inquiry and sequencing and prioritization of content were customized for each group.

The lead researcher conducted interviews and moderated FGDs over a period of three months using smartphones and laptops and the Zoom online platform. In total, the lead researcher completed 26 interviews across the three priority regions and moderated five FGDs that had a total of 34 participants (three sessions were conducted virtually, while two were held in person).

After the lead researcher introduced themself and explained the study objectives, they requested verbal consent from the respondents to commence using an informed-consent script provided in the FGD and KII guides and approved by the in-country team and the Johns Hopkins Bloomberg School of Public Health Institutional Review Board. If the eligible participants gave consent, the lead researcher continued with the interviews. The lead researcher also sought consent to audio-record the data collection and asked in what language respondents preferred to be interviewed. Each KII/FGD session lasted an average of 45 to 60

minutes. The lead researcher relied on open-ended questions to learn stakeholders' experiences with the CPD system and/or seek in-depth details about the insights shared. During FGD sessions in particular, the moderator asked questions and allowed participants to talk freely and spontaneously about CPD, while also maintaining awareness of group dynamics and interactions that served to reinforce patterns or point to differences of opinion or experience. Observations, field notes, and a reflective journal were kept as secondary data sources.

DATA ANALYSIS AND MANAGEMENT

All the audio recordings of KIIs and FGDs, field notes, research reports, meeting notes, and research procedures were duly organized and saved in a shared research Jhpiego drive with password protection. The lead researcher conducted data analysis concurrently with data collection to enable adjustment of data collection tools, and all deficiencies detected were corrected.

The lead researcher thematically analyzed and coded the data according to the BF-APEA framework's priority themes and the factors that might affect practice of the behavior (see **Table 3**). Similarities and differences within and across participant narratives in the interviews and FGD sessions were duly noted and included in the analysis template. The research team interpreted the findings in a series of meetings, and drew conclusions based on the framework of reference and guided by the research questions. Recurring validation team meetings were held during the analysis process, and a one-time validation team meeting with stakeholders was held to authenticate the analysis.

VALIDITY AND RELIABILITY

The assurance of anonymity of respondents and insistence on voluntary consent to participate further enhanced the validity of responses. The use of similar questions in the FGD and KII guides aimed to strengthen the validity and consistency of the data gathered. The lead researcher also provided regular updates to the MOMENTUM Country and Global Leadership team regarding the number of KIIs or FGDs completed and the data and/or patterns emerging. These updates also served as opportunities to make necessary corrections or clarifications.

ETHICAL CONSIDERATIONS

In every research pursuit, ethical considerations are paramount to promote safety and dignity. Ethics approval was obtained from the Institutional Review Board of the Johns Hopkins Bloomberg School of Public Health and the Jhpiego country office. A study information sheet, written in simple English language, provided participants with study details, including the title, focus, aim, consent, and duration of the KIIs and FGDs. Measures to ensure confidentiality and anonymity, and benefits as well as risks were specified. Participants were given the opportunity to ask questions, which were duly addressed before the start of the interview. Participants were informed about the voluntary nature of the study and guided to understand that they had the right to take part in or opt out of the study at any point in time without fear of punitive measures.

RESEARCH FINDINGS

In general, the primary research revealed a strong disconnect between how providers, supervisors, and other health system actors view CPD in Ghana—that is, as essentially a licensing mechanism—and the goal of CPD—that is, a means to ensure providers continue to grow professionally and deliver quality services. It is important to note that this research did not examine the actual quality of services and this finding does not reflect on providers' performance. It does, however, clearly indicate that if CPD is meant to ensure that providers deliver quality care as they move through their career, more is required to connect CPD directly to their performance. More specifically, evidence from the data analysis establishes the need for both nurse leaders and care providers to partner closely and identify gaps in skills for effective and safe care delivery. Nursing leaders/supervisors and care providers need a firm understanding of how CPD can and should be translated into quality care delivery, and the motivation to create an enabling environment that promotes role-specific CPD uptake and professional skill delivery for quality client care.

Specific findings for each actor and behavior are described next.

PRIMARY HEALTH CARE PROVIDERS (NURSES AND MIDWIVES)

Behavioral outcome: Providers effectively use CPD to maintain skills required to deliver highest quality services.

FACTORS AFFECTING PRACTICE OF BEHAVIOR

ACCESSIBILITY

For most providers, the most important factors impacting whether or not they could carry out these steps were structural in nature, with many citing some aspect of accessibility impacting their ability or willingness to practice. For some providers, this meant literal accessibility to online or in-person courses, with Internet connectivity or distance preventing attendance. For others, the accessibility issues were more around opportunity and time away from their primary position, which they could not always manage to secure. Still others noted that most CPD courses carry some cost, and that even with stipends, those costs were not always feasible for providers to bear themselves.

Many providers also discussed the lack of opportunity most CPD courses provided them to engage in informal discussions with their peers on challenges and concerns related to new information and skills, especially in their local language. Sessions are extremely didactic and, although all providers in Ghana are fluent in English as primary medical or clinical education is delivered in English, many noted that they would prefer these informal conversations to be in local languages.

POWER DYNAMICS

Most providers also cited significant challenges around who was assigned or allowed to attend which CPD courses. They noted that supervisors grant these opportunities, a process that often creates competition or frustration among providers within a facility or catchment area. Providers also noted a clear incentive to attend the CPD that would pay the highest stipend and were additionally frustrated when the opportunity was not theirs to take. Providers noted that CPD attendance was haphazard and voiced frequent concerns about favoritism.

Many providers also reflected on the fact that they almost universally view their role within a facility as a member of a team, but CPD is very individualized—teams are not trained together and there is no formal mechanism for sharing or supporting each other to implement new skills. Supervisors or team managers are

not meaningfully involved in the professional development of individuals or team performance, including benchmarking or monitoring impact of CPD on quality within a facility.

OPPORTUNITY AND RELEVANCE

Providers also discussed challenges in applying knowledge gained in CPD to their work, citing that almost all CPD courses, especially online courses, are knowledge or theory, rather than skills, driven. Further, they noted that at times, their facility does not even have the tools, products, drugs, or other equipment that would enable practice of a new skill, even if the provider could appropriately develop that skill. In many cases, there is no formal or informal setting in which providers can share or discuss new learning, but most also note that they do not often finish a CPD course feeling confident that they could train or transfer what they learned to others.

Providers noted that, in general, the CPD courses they attend are not directly related to an identified gap in their skills or capacity. They instead opt for what is easiest or most opportune to complete, what might offer the greatest monetary compensation, or what interests them. The breadth of courses offered, while extensive, does not also include the nonclinical dimensions of a provider's job, such as ethics, management, or mental health.

NURSING LEADERS AND SUPERVISORS

Behavioral outcome: Nursing leaders/supervisors create CPD plans for staff, including identification of CPD needs and mentorship on new skills post-CPD.

FACTORS AFFECTING PRACTICE OF BEHAVIOR

FOUNDATIONAL FACTORS

Many of the nursing supervisors interviewed during this process described a number of key structural challenges to their successful support of providers' CPD. They are often overworked already, with a significant workload in terms of both client care and facility and staff management. The responsibility for provider professional development is seldom one they feel they can easily add to their burden. In addition, the necessary space, time, and equipment required for providers to implement new skills post-CPD is not always within the supervisors' prevue to effect or control.

SOCIAL AND INSTITUTIONAL DYNAMICS

Discussions with supervisors depicted a cadre of providers with deep commitment and interest in the quality of services for the people who need them, but who also struggled with significant pressure to make the most out of very limited resources with little support. Existing in-facility professional development units are understaffed and mostly focused on supporting new graduates to integrate into a facility, rather than supporting ongoing or lifelong learning. District-level policymakers and other system actors who could support the CPD system do not engage within the facility at that level, and often CPD moves to the bottom of the priority list for these supervisors.

For a few supervisors, the importance of CPD was not clear, at least not in its current form, relegating it even further down their priority list. Still others struggled to help promote or advance providers in a certain area if they lacked that skillset.

DISTRICT HEALTH OFFICERS

Behavioral outcome: District health officers, directors of nursing and midwifery, nursing and midwifery managers, and facility in-service coordinators review and support implementation of facility and institutional CPD plans.

FACTORS AFFECTING PRACTICE OF BEHAVIOR

SOCIAL AND INSTITUTIONAL DYNAMICS

For most district health officers, ensuring that providers engage with CPD for professional growth is not viewed as an integral part of their job or duties. They are broadly and meaningfully supportive of a different system for CPD, but they do not currently have a mechanism by which to engage in that process, either via facilities or directly.

GHANA NURSING AND MIDWIFERY COUNCIL

Behavioral outcome: N&MC recommends specific course content for specific cadres, including creating individualized learning plans and tracking for providers, and expands course offerings to include more skills-based curricula.

FACTORS AFFECTING PRACTICE OF BEHAVIOR

FOUNDATIONAL FACTORS

The N&MC has long been at the forefront of CPD in Ghana, driving the immense increase in access to course material in the past decade. The Council rightly views itself as the hub for provider professional growth and routinely adjusts and modifies policy and approaches to better achieve its goals. As the N&MC has ramped up and focused on improving CPD access, however, the focus on cadre-specific or provider-specific course selection (based on needs assessment) and the subsequent application of new skills, including the mechanisms required to support such application, has been necessarily secondary. The Council noted its willingness to now explore its role in fostering the next phase of CPD and provide technical and thought leadership in advancing that progress.

COURSE CONTENT CREATORS

Behavioral outcome: Course content creators ensure that the curriculum is skills based and culturally relevant, and streamline the interface and instructions.

FACTORS AFFECTING PRACTICE OF BEHAVIOR

FOUNDATIONAL FACTORS

In Ghana, individual organizations generate course content, often based on that organization's own interest or agenda, with little central planning. The vast majority of courses are online, making practical application of skills challenging. Most content is designed from a global or national perspective, without tailoring for hyperlocal contexts. Material is often very didactic and entails large groups, limiting interactivity during CPD courses. The content providers are not meaningfully engaged in the broader conversation on the CPD system, and although many courses are individually excellent, with highly qualified and capable instructors, these courses are often ad hoc and not part of a pathway to growth for providers.

VALIDATION OF RESEARCH

In October 2022, once the research was completed and the findings were compiled, MOMENTUM Country and Global Leadership reconvened the original group of stakeholders to validate the findings and plan the way forward to improve the CPD system in Ghana. In general, most of the participants felt strongly that the research accurately reflected the reality of the CPD system in the local context, noting surprise at some of the social dynamics revealed, in particular the finding that supervisors feel overwhelmed and alone in their roles and ill-equipped to adequately support providers in their professional development. The engaged stakeholders also expressed surprise that many providers do not view CPD as the pathway to professional growth, rather only a way to maintain licensure. The disconnect between knowledge versus skills gained in CPD courses was also a subject of intense discussion, with many stakeholders noting that the online system does a great job of transferring knowledge but struggles to build practical skills.

While most participants felt that the research did not identify much that was new, they did note that the presentation of factors affecting practice of behaviors was very new and that they had never used those factors to structure thinking about solutions. Most stakeholders were enthusiastic about this process and encouraged that the factors were now well documented and described and could not be ignored.

PATHWAYS TO CHANGE AND STRATEGIC RECOMMENDATIONS

Once the research findings were validated, the stakeholders began to use them to identify pathways to change. For each factor listed, small groups of stakeholders worked through a comprehensive exercise to craft strategies in response, creating specific pathways to change for each behavior. The group of these pathways is reflected in a single at-a-glance table, called a behavior profile, that essentially describes the roadmap that must be followed for change. These completed tables can be found in Appendix A.

Although the individual behavior profiles offer the direction forward for each behavior, they also include a relative volume of information. Some strategies are duplicated for different factors and behaviors, as the same recommendation could be used to resolve various factors. In addition, some of the behaviors are affected by similar factors. As such, the different profiles were summarized into a singular set of factors and corresponding strategies that offer a succinct picture of the direction forward. These are presented in the graphic below.

These strategies represent the work that is required to address the factors, facilitate the behaviors, and achieve the goal. Although all of them might not be entirely feasible to accomplish in the near term, this list should serve as a comprehensive reminder of what is actually required to achieve the goal.

FIGURE 1: AT-A-GLANCE TABLE OF PATHWAYS TO CHANGE

BEHAVIORAL OUTCOMES TO ACHIEVE GOAL

1: Providers
Utilize CPD

2: Nursing Leaders
Create Plans for CPD

3: District Health
Officers Support CPD

4: N&MC Recommends
Specific CPD by Cadre

5: Course Creators
Ensure Effective CPD

Key Factors Impacting Practice of Behaviors

Course Content and Delivery:

Course content does not include all necessary skills for senior leaders, including management, ethics, and research, as well as self-care/mental health.

Courses, especially online courses, are generally informational rather than skills based and do not always offer the opportunity for interactivity, discussion, and culturally relevant material.

Team-based learning is rarely used (i.e., team-based care, team-based supervision) in CPD.

Online courses dramatically increase access, but many places still have extremely limited access to Internet-based courses, even when they can be downloaded ahead of time. due to cost of data and size of courses.

Course Selection and Attendance:

Selection of CPD courses is not usually tailored to individual provider needs, skill gaps, and performance plans.

Conflict/competition often exists between providers generated by financial remuneration or seemingly preferential treatment over CPD attendance.

Who attends CPD courses when is not often transparent or clear, leading to frustration and apathy.

Knowledge and Skills Application:

There is often a mismatch of supplies and resources required to implement new learning and what is available in a facility.

Rarely do opportunities for post-CPD mentorship, sharing, and learning exist.

Perceptions of Value:

Many providers do not perceive CPD as critical to quality health care, rather a perfunctory licensing requirement.

Recommended Strategies to Resolve Factors

Course Content and Delivery:

Create a dedicated CPD strategy for reaching remotely placed/rural care providers.

Expand breadth of teaching methodologies included in all courses, including discussion, role plays, and practicums.

Expand types of providers accredited to offer CPD courses, including more private providers.

Include a local CPD needs assessment within annual planning between facilities and district health officers.

Course Selection and Attendance:

Establish specific tracks for different cadres of providers, including mandatory courses for each and optional courses for all.

Create a transparent and clear system for a rotational release of staff for CPD.

Ensure CPD courses are selected based on training needs assessment.

Formally coordinate CPD within facilities across wards, including identifying needs and topics, as well as a schedule of dates and times/locations and housing of offline videos for areas with low connectivity.

Standardize protocols and identify opportunities for sponsorship for providers to attend courses they otherwise could not afford.

Knowledge and Skills Application:

Revive or establish fixed or mobile learning or skills labs within each ward.

Create supply and resource lists for each course and match those lists to available supplies in facilities prior to course attendance.

Establish a formal policy for learning and sharing system facilities or wards to formally share new learning and ongoing challenges (seminars, lunches, grandrounds type).

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APPENDIX A. BEHAVIOR PROFILES

GHANA BF-APEA CONTINUING PROFESSIONAL DEVELOPMENT RESEARCH VALIDATION AND STRATEGY PLANNING

PROVIDERS

Behavior: Providers effectively use CPD to maintain skills required to deliver highest quality services.

FACTORS	STRATEGIES
Structural Factors/Accessibility	
Stipend offered for some CPD programs motivates some providers, creates competition among providers, and prioritizes certain sessions over others.	 Internal generated funds (IGF) can be used to motivate providers. Funded CPD programs can provide stipends in different forms, such as monetary, refreshments, or a certificate. Participation should be all-inclusive, i.e., opportunities must rotate among staff.
Even with a stipend, CPD creates a financial burden for many providers, because they need to travel, pay for data, or be away from home.	 CPD programs should be planned according to facility or ward setting. Create video recordings of trainings and skills acquisition sessions and maintain the video files on the facility website to promote staff capacity development. N&MC-accredited private CPD providers can visit facilities to market their programs. Hold programmed "CPD days" to prepare nurses and midwives to attend training sessions without struggling to return to duty the same day. Invite facilitators and pay them to provide CPD programs for staff.
Attendance is often determined by supervisors and based on subjective criteria, favoritism, or other power dynamics not within the provider's control.	 Participation should be all-inclusive, i.e., opportunities should rotate among staff. CPD programs should be organized at the unit level to ensure full participation.
Lack of standardized management of how, when, and who attends CPD programs, including how to manage facilities when providers are out.	Supervisors must create a time schedule to coordinate CPD attendance among providers.
Sessions are almost always in English, despite many providers feeling more comfortable engaging in discussions in the local language.	CPD programs should be offered and held by nursing cadre, and the language and terminology used should be appropriate to the cadre. Opportunity for discussion in local languages should be incorporated in courses

FACTORS	STRATEGIES	
Material is standardized for the entire country and sometimes based on global modules, rather than customized to the local context.	 CPD in the country must have specific mandatory sections with a focus on lifesaving skills. Mandatory tailored CPD courses for various levels and general courses for all levels. 	
Zoom attendance is limited to a certain number of participants; in-person attendance is even more limited.	Create video recordings of trainings and skills acquisition sessions and maintain the video files on the facility website to promote staff capacity development.	
	Hold programmed "CPD days" to prepare nurses and midwives to attend training sessions without struggling to return to duty the same day.	
	Geographical limitations to accessing CPD programs can be addressed by holding these programs within the facility context, bringing CPD to the doorsteps of care providers.	
	Increase Zoom account capacity to accommodate more participants.	
Modules are often heavily knowledge and theory based, rather than skills based.	Skills acquisition labs or rooms are needed at the facility or unit level to facilitate learning, help providers avoid clinical errors, and promote staff skills knowledge and acquisition from experts and senior-level management.	
	Create a unit-level well-resourced CPD room and make it accessible to staff routinely.	
	Create skills videos to share during Zoom meetings and provide advanced mannequins for hands-on training.	
Facilities often lack equipment or supplies introduced in	Solicit funding to procure needed resources.	
CPD programs, preventing the provider from applying skills.	Government should do a needs assessment before allocating resources.	
Providers not equipped or certified to train colleagues so do not frequently share new learning.	• Establish a follow-up/tracking system to support knowledge and skills retention post-CPD, e.g., three months post-CPD.	
	Ensure providers are required to write up and formally share learning post-CPD, potentially via monthly brown bags or grand rounds-type sessions.	
Structural Factors/Other		
Instructors do have knowledge and skills to convey knowledge and are enthusiastic.	Skills acquisition labs or rooms are needed at the facility or unit level to facilitate learning, help providers avoid clinical errors, and promote staff skills knowledge and acquisition from experts and senior-level management.	
	 Hold a monthly CPD program open to all health care providers in the facility. Nurses spearhead this activity, planning a monthly timetable of topics and disseminating it to provide advance notice to promote attendance. On-duty staff can attend as adjustments are made to fill in the duty rota, but they return to work after training. The venue is often free but staff sponsor the cost of water and refreshment; administrative support has been officially requested to ease the financial burden but is yet to be approved. 	
	Instructors should be carefully selected, bearing in mind the requisite expertise.	
Format of instruction does not always facilitate discussion or interactivity—it is very didactic.	Adoption of teaching and learning styles should be all-inclusive, e.g., brainstorming, role play, group discussions, and hands-on practice.	

FACTORS	STRATEGIES
Content is not tailored to skill needs of providers; most just opt for what they are interested in or is easy to complete.	Ensure CPD courses include "necessary supplies" list and match that to what is available in facilities.
Breadth of courses is not always sufficient to effectively address issues—most are technical and do not cover management, ethics, social and mental health, etc.	Plan CPD strategies targeted at issues in management, ethics, and social and mental health of providers.
CPD topics are not always cadre specific or related to the provider's actual job.	Make CPD topics cadre specific and related to the job description of the nurse or midwife.
Social Factors	
Providers are given support to attend CPD courses, but less support to fully implement what is learned. Often practice of the knowledge or skill is left up to the provider—there is little monitoring or engagement by senior management.	Establish a follow-up/tracking system to support knowledge and skills retention post-CPD, e.g., three months post-CPD.
Providers generally view their role as a member of a team, but CPD does not always fit this role, as teams are not trained together on new skills.	Ensure providers are required to write up and formally share learning post-CPD, potentially via monthly brown bags or grand rounds-type sessions.
Often there is a perception of favoritism in terms of which providers can attend which CPD courses, particularly when stipends or per diems are involved.	There should be clear criteria for selection of participants for CPD training.
Supervisors are not meaningfully engaged in providers' professional development including ensuring benchmarking or monitoring impact of CPD on provider performance.	Training needs assessments should to be tied to timely staff performance appraisals and weaknesses used as leverage for improving staff performance.
Time is such a scare resource in many facilities, there is simply not space or opportunity to share new learning.	Hold programmed "CPD days" to prepare nurses and midwives to attend training sessions without struggling to return to duty the same day.
	Create video recordings of trainings and skills acquisition sessions and maintain the video files on the facility website to promote staff capacity development.

FACTORS	STRATEGIES
Internal Factors	
Providers attend CPD courses because they must acquire points to maintain license, not because they have a gap in skills or want to practice learning.	CPD in the country must have specific mandatory sections with a focus on lifesaving skills.
Most providers do feel a professional and moral obligation to maintain professional standards and deliver quality care, but CPD is not necessarily linked to standards of care.	Create unit-level well-resourced CPD room and make it routinely accessible to staff.

NURSING LEADERS

Behavior: Nursing leaders/supervisors create CPD plans for staff, including identification of specific CPD needs and curriculum and mentorship on new skills post-CPD.

FACTORS	STRATEGIES
Structural Factors	
Support for practicing/implementing new skills is inconsistent and not formalized.	Institute robust learning systems/checklist that addresses the action plan for sharing new skills/knowledge.
CPD sometimes creates challenges for supervisors because it creates staff shortages.	Use technology for knowledge sharing (e.g., social media handles/WhatsApp), making short videos to share with teams
	Run CPD programs in multiple sessions, batches, or shifts to involve all staff.
Supervisors often lack access to technology management to support online trainings.	Require skills updates of supervisors/nurses and midwives in technology management.
Planning or selecting attendees for current CPD courses is not systematic and includes a risk of bias, especially for those courses with good financial renumeration.	Put in place a system or policy that ensures a cycle for CPD attendance, so that every team member gets a turn to attend before the cycle begins again.
Supervisors are seen as gatekeepers to training or professional advancement, rather than CPD being a partnership.	Integrate CPD training into performance management systems to compel staff to take responsibility and not leave training advancement to supervisors alone.

FACTORS	STRATEGIES		
Social Factors			
Supervisors are often alone in their role and have too much to manage within the facility to pay extra attention to an individual provider's CPD.	 Supervisors should delegate some duties to subordinates. Promote cooperation and collaboration. 		
Sometimes male supervisors do not support team roles and leadership/advancement opportunities for women.	Ensure gender balance and sensitivity.		
Favoritism among nurse leaders influences the choice of nurses and midwives to participate in CPD.	Promote effective planning to ensure fairness.		
Supportive supervision, coaching, and mentoring from nurse leaders is often not seen as part of their job description or responsibilities, and as such, CPD planning is rarely included in staff appraisals.	Provide education and mentorship to promote supervision and coaching.		
Internal Factors			
Nursing managers/supervisors are expected to support skills acquisition for post-virtual trainings, but do not always have the capacity or equipment.	 Prepare budgets to incorporate CPD courses and sustainability of knowledge translation in practice. Provide adequate resources (human and materials). Educate nurse leaders on the use of information, communication, and technology. 		
Some supervisors see their role as one of authority rather than cooperation, which hampers both CPD attendance and use of skills.	Train all nurse leaders on leadership and communication. Ensure rotational release of staff for CPD.		
Not all supervisors see CPD, especially in its current form, as critical to patient care.	 Provide supervision of leaders. Require monitoring and evaluation of nurse leaders. 		
Some supervisors were not trained on the topic covered in a particular CPD course, making it challenging to support a provider in implementing those skills.	Educate nurse leaders on the topics.		

COURSE CONTENT CREATORS

Behavior: Course content creators ensure that the curriculum is skills based and culturally relevant, and streamline the interface and instructions.

FACTORS	STRATEGIES
Structural Factors	
Virtual format for content delivery makes practical application of skills hard.	 Use a hybrid approach—i.e., virtual and in-person training. Create videos on critical skills using local content and "simple" English. Create well-resourced district-level skill stations accessible to all cadres within the district for skills practice. Deploy mobile skill stations to regions/districts with fewer resources .
Content creators often create courses at a national level, in English, without the opportunity to tailor language or other aspects to hyper-local geographies.	 Assess applicants' English language competence during admission into training institutions through oral and written aptitude tests. Emphasize interviews in admission processes into institutions.
CPD courses are often conducted with large groups, limiting interaction and engagement.	N&MC should set guidelines to guide facilitator-participant ratios for all trainings and ensure compliance.
CPD content is not always available on all necessary aspects of care for both junior and senior staff—ethics, social, personal, research skills, managerial skills, etc.	N&MC should ensure strict compliance with mandatory courses specific to the competency requirements for the different cadres of practitioners.
Sometimes there are limits on a course because the platform being used does not allow sufficient time (e.g., free Zoom that limits meetings to 45 minutes).	N&MC should develop and publish guidelines for providers staging virtual CPD courses and ensure compliance.

DISTRICT HEALTH OFFICERS AND OTHER MANAGERS

Behavior: District health officers, directors of nursing and midwifery, nursing and midwifery managers, and facility in-service coordinators review and support implementation of facility and institutional CPD plans.

FACTORS	STRATEGIES
Structural	
Engagement with providers' CPD is not currently part of a district health officer's job.	 Enhance collaboration between providers and district health officers to ensure all trainings meet national and local requirements and needs. To ensure consistency, N&MC should require all certificates presented by practitioners are accredited CPD certificates.
Human resource constraints limit scope of engagement by district health officers with individual facilities.	Prevail on employers to ensure adequate staffing.

N&MC

Behavior: N&MC recommends specific course content for specific cadres, including creating individualized learning plans and tracking for providers, and expands course offerings to include more skills-based curricula.

FACTORS	STRATEGIES
Structural	
N&MC has focused on increasing access to CPD content across the board, but in the next phase of work will seek to tailor content to specific needs.	N&MC should emphasize tailoring of course contents to specific cadres of practitioners.
N&MC policy guidance focuses on points, rather than mandatory courses for certain cadres.	N&MC should focus on mandatory courses for specific cadres instead of points.
N&MC represents providers, but does not have a mandate to force or require providers to attend certain CPD courses.	N&MC, as the regulator, should ensure compliance with its policies and regulations.

APPENDIX B. OPERATIONAL PLANNING MATRICES

CONTINUING PROFESSIONAL DEVELOPMENT OPERATIONAL PLANNING MATRIX

Activity or Strategy	Responsible Institution/ Unit/Person	Resources Needed (human, material, etc.)	Potential Sources of Funding	Steps Needed to Accomplish Plan	Measure of Success/ Indicator (How will you know you are successful?)
Create a transparent and clear system for a rotational release of staff for CPD.	Nurse/ midwifery manager of the facility Nurse/ midwifery manager in charge of the ward	H/R: Ward in-charges M/R: Venue, training materials (flip charts, projector, laptops, etc.)	Donor partners (local/ international) help craft policy and tools to support policy.	Needs assessment Staff rotational list Schedule for CPD sessions	80% of facilities in Ghana have rotational CPD plans and schedules for staff at all levels
Ensure CPD courses are selected based on training needs assessment.	Ward in-charge/ manager	H/R: Ward in-charges M/R: Venue, training materials (stationaries)	IGF	Needs assessment should target staff-specific needs. At the beginning of the year, staff should set agreed objectives with their supervisors, and there should be midyear review and evaluation.	Proportion of health care staff whose yearly CPD courses correspond to identified training needs
Create a dedicated strategy for reaching rural/remotely placed care providers with CPD.	Regional chief nursing and midwifery officer District nurse managers	N&MC app and World Continuing Education Alliance app Telemedicine GHS e-learning platform	Telcos Donor partners Communications support	Convene appropriate stakeholders to craft substrategy for rural providers, including reviewing: Data on rural areas; total no. of hard-to-reach areas in the regions Data on the no. of staff in each identified area Assign dedicated staff to manage the telemedicine department.	Substrategy/policy on CPD for rural providers exists [yes/no]

Activity or Strategy	Responsible Institution/ Unit/Person	Resources Needed (human, material, etc.)	Potential Sources of Funding	Steps Needed to Accomplish Plan	Measure of Success/ Indicator (How will you know you are successful?)
Improve coordination of CPD at ward/unit level within facilities, including identifying needs and topics; creating a schedule of dates, times, and locations; and housing offline videos for areas with low connectivity.	Ward/unit manager	H/R: In-service coordinators, nurse manager, IT officers, and expert facilitators M/R: Laptop, mannequins, stationaries, data bundles	Internal: IGF External: Religious bodies, those who adopt the wards, corporate bodies, pharmaceutical companies, corporate bodies, district assemblies Funding agencies	Each ward or unit submits plans to facility managers. Facility manager/ supervisor identifies overlapping needs between wards and creates master calendar of in-person CPD courses to support needs and/or secures time and space for video-based courses.	Percentage of secondary and tertiary facilities with "master" CPD plans, including dates and content for all providers within the facility across all wards
Standardize protocols and identify opportunities for sponsorship for providers to attend courses they otherwise could not afford.		H/R: Accounts officer, administrator, ward/unit in-charge, in-service coordinators	Internal: IGF External: Religious bodies, those who adopt the wards, corporate bodies, pharmaceutical companies, corporate bodies, district assemblies Funding agencies	 Council identifies specific courses that carry costs not covered by per diem allowances. Council seeks funding to offer scholarship for certain number of providers. Council clarifies and publishes scholarship process/ procedures. 	Scholarship fund established for specific CPD courses/cadres [yes/no]
Specific CPD requirements established for different cadres of providers, including mandatory courses for each and optional courses for all. Consider including leadership, ethics, research, technology, and other critical nonclinical skills for nursing leaders, including self-care/mental health.	Facility/ institution N&MC Ministry of Health (GHS, quasigovernmental institutions, Christian Health Association of Ghana, etc.) Private health institutions Mental health authority	H/R: Leaders/ managers, facilitators, participants, support staff, etc. M/R: Educational materials (IT equipment, Internet data, stationary, etc.) Space/venue for CPD courses Funds	Government of Ghana Donor funds (both local and international) IGF	Meeting to agree on CPD required courses.	CPD guidelines developed on mandatory and optional courses for the various cadres of nurses/midwives at all levels [yes/no]

Activity or Strategy	Responsible Institution/ Unit/Person	Resources Needed (human, material, etc.)	Potential Sources of Funding	Steps Needed to Accomplish Plan	Measure of Success/ Indicator (How will you know you are successful?)
Skills lab established in each secondary and tertiary facility (or simulation center).	 Secondary and tertiary facilities (both public and private) Government of Ghana Donor funds (local and international) 	 Mobile van(s) Space Funds Human resources	Government of Ghana Donor funds (local and international) IGF	 Needs assessment Gap identification Plan for an expected skills lab/simulation center Budget and procurement 	 Proportion of facilities that have fixed or mobile skills lab Percentage of providers who have utilized skills labs in the previous year
Supplies and resources lists are created for each course and matched to available supplies in facilities prior to course attendance.					Course catalog for CPD includes suggested supplies/resources list that a facility should have to make the course relevant [yes/no]
Breadth of teaching methodologies included in all courses, including discussion, role plays, and practicums.	RegulatorCPD providersCourse content creators	 H/R: Skilled content developers, IT personnel, in-service coordinators M/R: Appropriate teaching methods and appropriate space 	Government of Ghana IGF Donor support	Engage stakeholders Develop CPD that includes the breadth of appropriate methodologies	Percentage of CPD courses developed that have more than one teaching methodology
Learning and sharing system instituted within facilities or wards to formally share new learning and ongoing challenges (seminars, lunches, grand rounds type).	 In-service providers Facility managers Ward managers Shift managers 	 H/R: Shift supervisors M/R: Learning materials 	Facility IGF Donor support	Agenda setting Budgeting	Proportion of health facilities that have instituted learning and sharing system
Increase CPD accredited providers, including more private providers.	N&MC	Policies	IGF Donor support	Identify CPD providers and CPD topics needed Publish list of accredited CPD providers	Number of health workers attending completing CPD Number of accredited CPD providers including private providers

APPENDIX C. SEMI-STRUCUTRED INTERVIEW RESOURCES

INTERVIEW GUIDE (NURSES/MIDWIVES/HEALTH STAFF)

Note, this question bank will be used for providers. Other cadres of actors will follow a similar set of questions, but will not be asked about their participation in CPD courses.

PROJECT TITLE: APPLICATION OF THE BF-APEA TO CONTINUING PROFESSIONAL DEVELOPMENT IN GHANA					
Dat	re of Interview				
	ration of Interview(hrs)(mins)(secs)				
SECTION A: DEMOGRAPHIC DATA					
a.	Gender:				
b.	Current Place of Work (specify region/district/town)				
c.	c. Professional Educational Background of Participant (indicate nursing/midwifery or both)				
d.	Current Position at Place of Work				
e.	Last CPD Date				
SECTION B					

Introductory information

- 1. Tell me about your work. How and when did you decide to work in health care?
- 2. What motivates you to continue your health care career?
- 3. How do you hope to continue learning/growing/advancing in your work?

CPD: Individual definitions/experiences

- 4. Could you share with me your experiences with CPD in Ghana? Probe:
 - a. Coverage on domains of learning (knowledge/skills/behavioral/effectiveness)
 - b. Format of delivery (in person/virtual/hybrid)
 - c. Frequency of training in a year or over a period of 1 to 3 years
- 5. Tell me what you see as the role of CPD in the health sector? Probe:
 - a. How relevant do you feel the current CPD system is to helping providers deliver quality health services?
 - b. How effective is the timing of current CPD courses to providers?

- 6. How do providers determine their CPD needs?
- 7. What would motivate a provider to pursue or maintain in-service learning?
- 8. Are there experiences or circumstances that would hinder or impede a provider's participation in CPD? What are they?

CPD: SECTOR RELEVANCE/CONTRIBUTIONS

- 9. To what extent does the current CPD system help providers deliver quality services? (What works well?)
- 10. What do you think does not work well within the current system? Probe:
 - a. long standing challenges confronting the CPD system in Ghana
- 11. To improve the things that are not working well, who would need to do what? Probe
 - a. Key contacts/persons at the facility level, district, regional, and community level
 - b. Who to do what?
- 12. What do you think would motivate those actors to doing that?
 - a. Probe: Structural factors, social factors, individual factors
- 13. What would prevent them from doing that?
 - a. Probe: Structural factors, social factors, individual factors

CPD: How the system has evolved

- 14. What would you say is the most significant change to the CPD system over the last 3 to 5 years? Please explain what the change was and its impact.
- 15. Tell me about the influence of technology on CPD progress in Ghana.
- 16. How has COVID-19 affected your ability to access CPD services? Has it changed the way in which training or other content is delivered?
- 17. Is there anything else you wish to share with me?

Thank you.

INTERVIEW GUIDE (STAKEHOLDERS)

PROJECT TITLE: APPLICATION OF THE BF-APEA TO CONTINUING PROFESSIONAL DEVELOPMENT IN GHANA Date of Interview______ Duration of Interview______(hrs)_____(mins)_____(secs) SECTION A: DEMOGRAPHIC DATA a. Gender: ______ b. Current Place of Work (specify region/district/town)_____ c. Professional Educational Background of Participant:= (indicate nursing/midwifery or both)_____ d. Current Position at Place of Work ______ e. Last CPD Date______

SECTION B

Introductory information

1. Tell me about your work. How do you engage with CPD in the health care system?

CPD: Individual definitions/experiences

- 2. How relevant do you think CPD is currently to health care providers? Why/why not?
- 3. How do you determine nurses' and midwives' CPD needs?
- 4. How are the expectations of CPD for nurses and midwives aligned with the expectations and requirements for other cadres (i.e., doctors, pharmacists, laboratory personnel)?
 - a. Probe: Requirements for CPD enrollment and license renewal
- 5. What would you say is the goal of CPD in health services?
- 6. How well do you think that goal is currently being met?
 - a. What is working well?
 - b. What is not working so well?
- 7. Who needs to do what to ensure the goal is met (or continues to be met)?
 - Probe: Key actors—providers, supervisors, administrators, regulators, content providers/trainers, policymakers/GHS
- 8. What do you think would motivate those actors to doing what needs to be done?
 - a. Probe: Structural factors, social factors, individual factors
- 9. What would prevent them from doing that?
 - a. Probe: Structural factors, social factors, individual factors

CPD: How the system has evolved

- 10. What would you say is the most significant change to the CPD system over the last 3 to 5 years? Please explain what the change was and its impact.
- 11. How has COVID-19 affected your ability to offer CPD services? Has it changed the way that training or other content is delivered?
- 12. Tell me about the influence of technology on CPD progress in Ghana.
- 13. Is there anything else you want to share with me?

Thank you.

FOCUS GROUP DISCUSSION GUIDE(STAKEHOLDERS)

INTRODUCTORY INFORMATION

- 1. How is CPD perceived in the health care system?
- 2. How has CPD impacted the delivery of health care?

CPD: Individual definitions/experiences

- 3. What motivates health care staff to pursue CPD?
- 4. What are the barriers to CPD? Probe: Strategies for overcoming the barriers
- 5. What support measures do you have in place for improving CPD?

CPD: How the system has evolved

- 6. How has the CPD system evolved over the last 3 to 5 years? Please explain what the changes were and their impact.
- 7. How has COVID-19 affected your ability to offer CPD services? Has it changed the way that training or other content is delivered?
- 8. What influence has technology had on CPD progress in Ghana?
- 9. Is there anything else you want to share?

Thank you.





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