

# Assessment of the Governance and Leadership Structures of the Healthcare System in Ghana and its Implications for the Implementation of Networks of Practice: The Case of a Newly Created Region

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## ABSTRACT

### Introduction

The realization of the Sustainable Development Goals (SDGs) on health and the achievement of Universal Health Coverage (UHC) hinges on good health system leadership and governance and the effective and resilient health system structures, processes, and resources are among the key elements that can work toward the achievement of these milestones.

### Objective

The study aimed to assess three main governance and leadership components (structures, processes, and resources) to identify the challenges of leadership and governance and offer suggestions for mitigation before implementing NoP.

### Methods

The study adopted a survey relational design with a mixed method (quantitative and qualitative) and utilized a survey approach with probability and non-probability sampling. The study population was healthcare professionals in one of the newly created regions. Target respondents are senior managers at the regional and district level. Both quantitative and qualitative data analyses were conducted. SPSS v.21 and NVIVO statistical software were used to process and analyze data. Thematic and narrative descriptions and descriptive and inferential statistics were used to analyze data

### Results

The study's findings include strong associations and direct relationships between HSLG structures, processes, and resources and NoP implementation. The study further revealed that the current levels of health system structures, processes, and resources are inadequate for implementing NoP.

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## Conclusion

The current health system leadership and governance structures can only achieve 54.5% success in the NoP implementation, processes 54%, and resources 59%. Improving the structures and processes alone can increase the success of NoP implementation by 71% while investing in the resources to support the structures and processes can achieve an overall success of 83%.

## Recommendations

The study recommended a holistic approach to improving all the components of health system leadership and governance to facilitate the successful implementation of the Networks of Practice (NoP) must be pursued.

## Originality/value

The study comes as a deviation from previous studies that have tended to use only quantitative methods. Focusing on health system leadership and governance components in a newly created region with a myriad of challenges provides an important point of reflection for policymakers ahead of the full implementation of the NoP in all regions across the country.

## INTRODUCTION/BACKGROUND

A health system, healthcare system, or healthcare system has been generally described as an organization of people, institutions, and resources that delivers healthcare services to meet the healthcare needs of target populations (Piña, I. L. et al., 2017; White F, 2015). Ghana's healthcare system is pluralistic regarding ownership (public and private), healthcare models (orthodox, traditional, and alternative medicine), and financing (National health insurance, private health insurance, and out-of-pocket payments) (Ghana, MOH, 2020). Collectively, the health system of Ghana sets out to provide an Essential Health Service Package (EHSP) that covers a wide range of services including Family and Reproductive Health; communicable diseases management; non-communicable diseases and their risk factors, mental health; health emergencies; and rehabilitative and palliative care service (Ghana, MOH EHSP, 2022, p.11; Wright, J., 2015). The governance and leadership structures of the health system of Ghana are also complex and have both public, private, mission, quasi-government, and traditional layers. Healthcare delivery is decentralized and is categorized on a three-tier level: district, regional, and teaching hospital levels corresponding to primary, secondary, and tertiary healthcare delivery (Ghana, MOH, 2011 P 11-13). The institutional structure of Ghana's healthcare system is led by the Ministry of Health (MOH) as the overall policymaker and regulator with healthcare services being provided by two main public sector institutions, specifically the Ghana Health Service (GHS) which operates regional, and district, and sub-district healthcare services and the Teaching Hospitals (TH) delivering more specialized care. There are also private-sector healthcare service providers, mission and faith-based institutions, quasi-government facilities, and traditional and alternative medicine practitioners complementing the services provided by the public health facilities (Ghana, MOH, 2011, P.12). The MOH as the overall policymaker and regulator delivers its mandate through 26 specific agencies and associated organizations including regulatory bodies responsible for the training of health professionals and professional standards of conduct and practice, and accreditation of health facilities to ensure and safeguard the provision of quality healthcare services ((Ghana, MOH, 2011, P. 14-17). Four main sources are used to finance healthcare services within Ghana's healthcare system: the national kitty (central funding by the Government of Ghana), the National Health Insurance Fund (NHIF), Internally Generated Funds (IGF) from health facilities, and external financing from donors and development partners (Ghana, MOH EHSP, 2022, p.11).

To accelerate the attainment of Sustainable Development Goal 3.8 and UHC, Ghana has adopted and outdoored the Networks of Practice (NoP) as a Primary Health Care delivery approach. Initially piloted as the Primary Care Provider Network (PCPN), and now the Network of Practice (NoP), the initiative aims to solve healthcare delivery systemic challenges that have hindered the equitable delivery of healthcare services and to fashion a sustainable PHC delivery model for UHC in Ghana. The implementation structure of the NoP revolves around the Model Health Center (MoHC) and the 'hub and spokes' concept (GHS Implementation Guidelines for Networks of Practice, 2024). The NoP targets existing health structures in specific geographical

areas where providers would collaborate through planning and patient-centered networks to identify and address service gaps by sharing resources and performance management practices to deliver holistic health services to the population. The implementation of NoP is expected to cover the delivery of fairly distributed high-quality continuous care for common health conditions such as non-communicable diseases (NCDs), reproductive, maternal, neonatal, child health, adolescent health, and nutrition (RMNCAHN) through complementary contributions of all stakeholders: the government of Ghana and its healthcare agencies, the Christian Health Association of Ghana (CHAG), Faith-based organizations, the National Ambulance Service (NAS), the National Health Insurance Authority (NHIA), the Health Facility Regulatory Agency (HeFRA), Civil Society Organizations, and the Private Sector (GHS Implementation Guidelines for Networks of Practice, 2024). To ensure the successful rollout and implementation of NoP, there is a huge responsibility for governance and leadership to ensure stakeholder engagement, community sensitization, and demand generation, the mapping of facilities and determination of hubs and spokes, formation of the Networks of Practice (NoPs), training of networks on leadership, teamwork, customer care, referrals, performance improvement, community scorecards, telemedicine, and teleconsultations where applicable and eventual launch of the NoPs. Additionally, managers and leaders are to ensure effective human resources distribution, material, and financial resource mobilization, infrastructure and equipment adequacy, essential health commodities and logistics supply, transport and prompt referrals, clinical governance, mentorship, and monitoring and supervision (GHS Implementation Guidelines for Networks of Practice, 2024). However, like all healthcare delivery systems across Africa, inadequate human resources, inadequate budgetary allocation to health, and poor leadership and management are key challenges militating against the effective and efficient organization of healthcare services (Oleribe, O. O. et al., 2019). Peculiar to Ghana, Adua, E., Frimpong, K., Li, X., & Wang, W. (2017) revealed that the Ghana health system faces serious bottlenecks of inadequate financial investments, financial mismanagement, limited health workforce, and inadequate facilities. Abor, P. (2015) maintained that notwithstanding the uncountable challenges faced by health systems leadership and governance (HSLG) especially in Ghana, not much intellectual attention had been dedicated to exploring more about these challenges to proffer remedies to them. Abor argued that the limited studies conducted in this area only focused on developed rather than developing countries and therefore meanwhile, the politico-administrative developments in developing countries have direct ramifications for good healthcare leadership, governance, and best practices. Guided by the position of Abor, P. (2015), it would therefore be problematic to rely on the results from these developed countries in suggesting any meaningful model for developing countries. Suffice it to say that such an attempt would be nothing but an imposition of HSLG practices of developed nations on less developed countries. This paper therefore assesses the governance and leadership structures of healthcare delivery in the Savannah Region ahead of the rollout and implementation of the Networks of Practice initiative to identify the challenges and offer suggestions for their extenuation.

**Keywords:** Governance, Leadership, Networks of Practice, Healthcare system, Savannah Region, Ghana.

## LITERATURE REVIEW

### Healthcare system

The World Health Organization (WHO) defines a health system as "a system consisting of all organizations, people, and actions whose primary purpose is to promote, restore, or maintain health." (WHO, 2000). This definition by WHO encompasses seven components: 1. Healthcare services: Preventive, curative, and rehabilitative services, 2. Health workforce: Healthcare professionals, support staff, and management, 3. Health facilities: Hospitals, clinics, and other healthcare infrastructure, 4. Health technologies: Medical equipment, pharmaceuticals, and information systems, 5. Health information systems: Data collection, analysis, and dissemination, 6. Financing mechanisms: Funding sources, payment methods, and resource allocation, and 7. Governance and leadership: Policy-making, planning, and oversight (WHO, 2000). The WHO further provides a framework for health systems, including six building blocks: 1. Service delivery, 2. Health workforce, 3. Health information systems, 4. Medical products, vaccines, and technologies, 5. Financing, and 6. Governance and leadership (WHO, 2007). WHO's definition of health systems emphasizes the interconnectedness or interplay of several factors or components and the need for harmonization to improve healthcare delivery services. It suffices to say that governance and leadership are indispensable components of all functioning health systems.

## Functionality of Healthcare Systems

The World Health Organization (WHO) identified some characteristics that indicate the functionality of healthcare systems. Key among these features include good leadership and governance, robust health information systems, sufficient health financing, all-time availability of essential medical products and technologies, adequate human resources for health, and quality service delivery. WHO maintained that all components depend on effective leadership and governance. (WHO, 2010). This position by WHO explains leadership and governance's importance and crucial role in ensuring the healthcare system's functionality. According to WHO, any well-functioning health system should be able to respond seamlessly to its targeted population's health needs and expectations. All health systems are enjoined to use good and effective leadership and governance to improve the health status of individuals, families, and communities, protect people against threatening health conditions, defend people against the financial burdens of treating ill health, and ensure equitable, effective, and efficient people-centered healthcare. Again, WHO's call on health systems is for them to leverage leadership and governance to make it possible for all people irrespective of their social and financial status to fully participate and take control in decisions concerning their health and the health system (WHO, 2010). Inferring from WHO's position, it is obvious that the health systems that lack good and effective leadership and governance structures struggle to effectively respond to healthcare delivery challenges including difficulties in mobilizing financial and material resources to support health service delivery. It is also undeniable that leadership and governance serve as a hub for health systems and other components as spokes connected to leadership and governance in the continuum of components that support effective and robust healthcare systems.

## Governance and Leadership in Healthcare

Governance and Leadership in Healthcare are relatively new concepts that complement each other for effective and efficient healthcare systems. It is argued that while leadership influences good governance by enabling interagency cooperation, common understanding, and outlined roles and responsibilities, in many healthcare systems, the styles of leadership and governance differ significantly (Smith et al., 2012). Extant literature supports the fact that good healthcare leadership drives effective governance by making sure that the needs of all stakeholders remain a high priority. Leadership in healthcare offers opportunities that support and improve healthcare systems. For leadership to be seen as playing its roles effectively, governance structures must be available to provide strategic direction for leaders and assist them in building commitment and shared goals, and also provide a platform that holds leadership and the entire health system responsible (Smith et al., 2012). The health system's block of leadership and governance has been identified as having a crucial role to play in enhancing the performance of healthcare systems and achieving Universal Health Coverage (Manyazewal, 2017). According to the World Health Organization (WHO), due to its cross-cutting nature, and the fact that it offers overall policy and regulation of all other health systems, the effectiveness of the other health system building blocks: service delivery, health workforce, health information systems, health commodities, and technologies and health financing all depend on the extent to which leadership and governance can harmonize them for effective operations (Manyazewal, 2017; World Health Organization, 2010), through coordination to ensure all other health systems run perfectly to improve the performance of the entire health system (World Health Organization, 2010). There is evidence to suggest that without effective health systems leadership and governance, the optimum application of resources, including judicious use of the health workforce, the overall satisfaction of patrons and workers, and the ability of health institutions to run seamlessly would be compromised (Manyazewal, 2017; Savedoff & Smith, 2011). Leadership and governance in healthcare have been described as indispensable elements in striking a balance between the interests of the governments, public sector organizations, and the interests of civil society and other players. The duo have been cited as priority areas for ensuring and enhancing the quality, good organization, efficacy, and sensitivity of health systems toward the attainment of Universal Health Coverage (UHC). Meanwhile, developing good leadership and governance procedures and also measuring their effect have been without consensus as some pundits concentrate on structures, while others choose to rely on health outcomes (Lewis M, & Pettersson G., 2009; Saltman RB, & Duran A., 2015). Duran A, Dubois HFW, and Saltman RB. (2011) distinguishes three categories of healthcare leadership and governance: macro (national, policy-making), meso (institutional), and micro (operational at the provider level). Kooiman J. (2000) underscored that finding a perfect definition or explanation of leadership and governance in general and more so that which applies to the health sector is



often time too expansive, extensive and complicated to come by because of entrenched and complicated political interests and ambiguous divisions of governance and management aggravated by political settings in healthcare administration. Although some pundits have tried to find a compromise in defining healthcare leadership and governance as evidenced by Dwyer J, and Eagar K. (2008), “the structures and processes by which the health system is regulated, directed and controlled”, Rawls J. (1971) maintained there is still substantial arguments deep-rooted in the diversity of shared cultural values and norms on the idea of leadership and governance and the diverse methods and approaches to its definition, most notably related to the issue of shared cultural values and norms. From the complexities and the difficulties in coining a universal definition of leadership and governance, Savedoff (2011) after a thorough study of governments, corporations, and financial markets, has identified five dimensions of leadership and governance which were expected to put the debate to rest. To Savedoff, leadership, and governance are all about “(i) Coherent decision-making structures, (ii) Stakeholder participation, (iii) Transparency and information, (iv) Supervision and regulation, and (v) Consistency and stability”.

Contributing to the unending debate on leadership and governance, Mossialos E, Permanand G, Baeten R, and Hervey T. (2010) stated, “By ‘governance,’ we mean all ‘steering’ carried out by public bodies that seek to constrain, encourage or otherwise influence acts of private and public parties. This includes structures that ‘delegate’ the steering capacity to non-public bodies (i.e., professional associations). By ‘steering,’ we mean to include binding regulatory measures (laws) and other measures that are sometimes called ‘new governance’ measures – that is, a range of processes and practices that have a normative dimension but do not operate primarily or at all through the formal mechanism of traditional command-and-control-type legal institutions.” To (Flynn, 2002), healthcare or health system governance involves the process of directing its overall functionality and efficient operation through the setting of goals and objectives and supporting, and monitoring the system for attaining set goals and objectives. According to Chanturidze T, and Obermann K.(2016), to bring finality to the debate on leadership and governance in general and specifically in healthcare, the World Health Organization has over the years attempted to resolve the controversy. The World Health Organization (WHO) for instance defines leadership and governance (otherwise referred to as “stewardship”) in the healthcare sector as “a wide range of steering and rule-making related functions carried out by governments, or decision-makers, as they seek to achieve national health policy objectives that are conducive to universal health coverage” (<http://www.who.int/healthsystems/topics/stewardship/en/>).

The World Health Organization also describes Health Systems Governance (HSG) as involving processes, structures, and institutions developed to supervise and control a country's healthcare system. WHO noted that a country's health system governance structure controls the connections and interrelationships between diverse stakeholders and players involved in healthcare management and delivery, plus the state and its agencies including agencies in the private sector, public and private healthcare providers, patients, and their families, people and communities, civil society organizations, inter alia (World Health Organization, 2024). According to the World Health Organization, health systems leadership and governance are the drivers of organizational mission and vision in healthcare responsible for strategic policy frameworks, systems designs, operational oversight, development and sustenance of partnerships, regulations and incentives, and accountability. WHO maintains that a health system's governance and leadership is the arm of the healthcare system responsible for guaranteeing accessible, equitable, efficient, affordable, and high-quality healthcare services for all. These mandates by WHO thus placed at the doorstep of healthcare leaders and managers the responsibility of planning and organizing economical and fair allocation of healthcare material, financial, and logistical resources, and the development and compliance of policies and regulations to control and regulate healthcare delivery as well as processes for performance monitoring, evaluating and review. It is therefore apt to say that the fundamental responsibility of health systems leadership and governance is to uphold fairness and social justice in healthcare by resolving that at all times, the healthcare system responds to the health needs of society, irrespective of origin, socioeconomic status, culture, gender religion, political affiliation, language among other factors ((World Health Organization, 2024). Greer SL, Wismar M, Figueras J, and McKee C. (2016) articulated in their comprehensive work on healthcare governance that it is the systematic, planned approach to making and executing decisions. The governance of a health system therefore shapes its ability to respond to the various well-documented challenges that health systems face today, and its capacity to cope with both everyday challenges and new policies and problems. The authors offered a vigorous context

extracted from a pool of literature that recognizes important dimensions of governance. These features provide a framework for describing the potential of health systems to offer easily accessible, high-quality, and sustainable health comprising a high level of transparency, accountability, participation, organizational integrity, and policy capacity. The context of Greer SL et al's explanation of effective governance in healthcare focuses on clarity, responsibility, involvement, reliability, and capacity as essential viewpoints of health governance that provide the basis for decision-making and implementation of healthcare policies and guidelines. It also highlighted the fact that there is no universal good governance that applies everywhere as peculiar to every health system, governance, and its intricacies come with costs and benefits, and the diverse context must be given unbiased attention. Deep-rooted in Greer SL et al's justification is that governance and leadership in healthcare can drive the success or otherwise of policy, but care must be taken to realize that in some circumstances, approximately many policies sometimes surpass the governance capacity of health systems due to perceived bureaucracies that are hard to avoid and therefore leadership and governance in healthcare must learn to adapt, adjust, and align with the hard truth of political dominance when it comes to managing healthcare as part of policy process dynamics. Guided by the above discussions on governance and leadership in healthcare, it is hypothesized that leadership and governance in health are the essential cornerstones for leading the health sector toward achieving its strategic mission and vision, and are responsible for crafting and implementing national health strategies peculiar to each health system by setting goals and targets for improving health in collaboration with policies of other sectors that encourage and impact health so that the health system can provide quality healthcare services and assess and monitor the health status and outcomes of the population. It is undeniable that without good leadership and governance, health systems would be denied human, material, financial, and logistical resources and would be grounded to a halt.

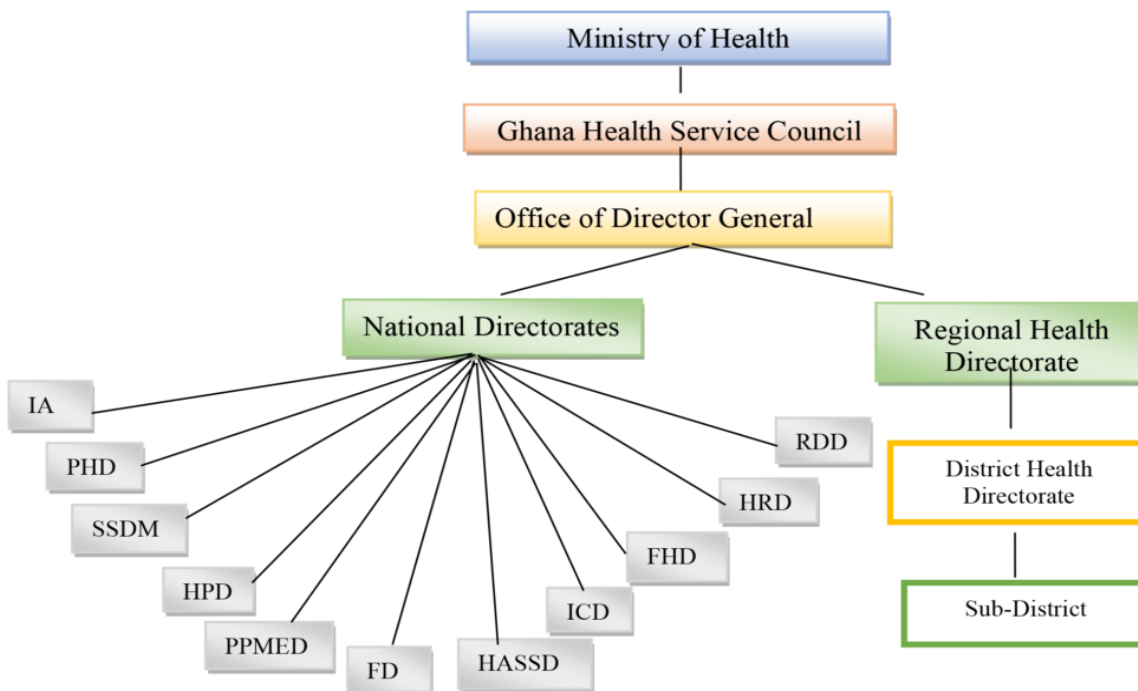
### **Nexus between Healthcare Systems governance and leadership structures and healthcare delivery**

Pundits underscored the importance of Health Systems leadership and governance (HSLG) to healthcare delivery. HSLG has been identified as the vehicle to assist health systems in achieving Universal Health Coverage (UHC) (Debie, A., Khatri, R. B., & Assefa, Y. (2022); World Health Organization, 2014), however, it has been argued that HSLG alone cannot achieve UHC without strong political leadership and collaboration to reinforce Health Systems leadership and governance resolve to effect the needed changes (Ergo A, Htoo TS, Badiani-Magnusson R, Royono R., 2019; Tao W et al., 2019). The role of leadership and governance in health extends beyond driving mission and vision to the provision of human resources, infrastructure, medicines and medical products, equipment and logistics, health information, and health systems financing to ensure the delivery of equitable, quality, and affordable healthcare services (World Health Organization, 2014) Health systems leadership and governance (HLSG) also ensure the development of strong partnerships that create responsibility systems to contain health emergencies and maintain health security (Ayanore MA et al., 2019). Extant literature indicates that HSLG with the support of society supports healthcare delivery through actions that organize, promote, and protect the health of the citizenry (Dodgson R, Lee K, & Drager N., 2017; Vickers NJ, 2017) by ensuring policy guidance, harmonization, compliance with regulations, and responsibility to ensure equity, efficiency, and sustainability of the health system (van Olmen J. et al., 2010). According to the WHO stewardship framework, the essential tasks of HSLG include policy formulation and development of strategic plans; generation of intelligence mechanisms; development of rules and regulations; development of partnerships and alliances; and safeguarding accountability (World Health Organization, 2014), as well as rule-making functions (<https://www.who.int/healthsystems/topics/stewardship/en/>). Debie, A., Khatri, R. B., & Assefa, Y. (2022) explained that the effectiveness and efficiency of HSLG at various levels of the healthcare delivery continuum are inconspicuous because of the implementation of a one-size-fits-all approach, inadequate healthcare funding, high level of corruption, insufficient human resources for health, and weak monitoring and supervision and regulatory mechanisms and high-level governmental interference in healthcare delivery operations. Debie, A., Khatri, R. B., & Assefa, Y. (2022) argued that the impact of HSLG can only be felt if the system is decentralized to grass root levels, and HSLG given the needed support in terms of power, authority, and resources (human, financial, and material) to implement plans and programs.

### **Organizational Arrangement of Leadership and Governance Structure of Ghana Health Service**

The Ghana Health Service (GHS) is the main public sector agency responsible for the implementation and management of healthcare services in Ghana. The leadership and governance structure of the Ghana Health

Service is as follows: Responding to the Minister for Health and the Ghana Health Service Council, the Director-General is the overall head of the Ghana Health Service and is responsible for providing strategic direction, leadership, and coordination of all health services in the country. Deputy Directors oversee specific departments or divisions within the Ghana Health Service, such as Public Health, Clinical Care, Administration, and Finance among others. Regional Directors are responsible for implementing national health policies and programs at the regional level and District Directors are responsible for overseeing the delivery of healthcare services within their respective districts. Health Facility Managers are responsible for the day-to-day operations and service delivery of health facilities, such as hospitals, clinics, and health centers, while health workers including administrators, doctors, nurses, midwives, pharmacists, and other healthcare professionals, play a crucial role in delivering healthcare services to the population. In terms of governance, the Ghana Health Service operates under the Ministry of Health and the Ghana Health Service Council, which provide policy direction and oversight respectively. The Ghana Health Service also collaborates with other government ministries, agencies, and development partners to improve the health outcomes of the population. These leadership and governance structures of the Ghana Health Service are designed to ensure the effective implementation of national health policies and the management and delivery of healthcare services to the people of Ghana (<https://www.ghanahealthservice.org/>; <https://www.moh.gov.gh/>)



**Note:** IAD- Internal Audit Division; PHD- Public Health Division; SSDM- Stores, Supplies and Drug Management; HPD- Health Promotion Division; PPME- Policy Planning, Monitoring and Evaluation Division; HASSD- Health Administration and Support Services Division; ICD- Institutional Care Division; FHD- Family Health Division; HRD- Human Resource Division; RDD- Research and Development Division

Figure 1: Organogram of Public Health Sector. Source: <https://ghs.gov.gh/ghs-governance-system/>

### Networks of Practice (NoP) in Health Care

Extant literature on Networks of Practice (NoP) has been a recent phenomenon with Carmone et al. (2020), defining the concept ‘Networks of Practice’ (NoP) as “a group of public and/or private health service delivery sites deliberately interconnected through an administrative and clinical management model, which promotes a structure and culture that prioritize client-centered, effective, efficient operation and collaborative learning, enabling providers across all levels of care and the community to work in teams and share responsibility for health outcomes”. This attempt by Carmone et al. (2020) to theorize Networks of Practice is arguably the first time it appeared in the global health literature as a discrete idea. Carmone et al. (2020) admitted that the Networks of Practice (NoP) in healthcare is a concept targeted at district health systems and also connects with

regional and tertiary care facilities beyond administrative boundaries to improve health system performance to achieve quality healthcare and better health outcomes. Inferring from the literature, it suffices to say that the concept of Networks of Practice in healthcare does not automatically mean changing service delivery points (SDPs) or centers, rather, its fundamental objective is to build clinical and non-clinical collaboration, partnership, and relationships between the service providers. Some healthcare systems across the globe are already practicing the Network of Practice in healthcare. In Madagascar for instance, Cordier, Kalaris, Rakotonanahary, et al. (2020) discovered that the implementation of the Networks of Practice has promoted greater availability and readiness of health services delivery at different levels of care with supported by good communication, supervision, and community involvement. Martinez Vergara et al. (2020) discovered in their study in Metro Manila, Philippines that the Network of Practice in Healthcare concept was used as a clinical vehicle to transform professional culture and generate trust between clinicians at tertiary public sector hospitals and lower-level public and private midwifery clinics. It has also been proven in a study in India that the adoption of the NoP in healthcare delivery has assisted the networks to benefit enormously from technical innovation, research, infrastructure, high-quality treatment, financial protection, increased accessibility to healthcare, and improved digital infrastructure to support telemedicine (Rajamani, Santhosh Kumar, and Radha Srinivasan Iyer., 2023).

Notwithstanding its objective of improving healthcare delivery quality, and the benefits associated with the NoP as documented in extant literature, there is evidence that the implementation of networks of practice in healthcare also presents some challenges. It has been reported that NoP implementation in healthcare delivery was confronted with unproductive coordination and communication (Fasawe, O., Adekeye, O., Carmone, A. E., Dahunsi, O., Kalaris, K., Storey, A., et al., 2020; Hyre, Caiola, Amelia et al., 2019; Martinez Vergara et al., 2020), unwillingness of hospital management to support networks of care, lack of confidence between healthcare providers across different levels and sectors of care, and conflicts of professional philosophy regarding the concept (Martinez Vergara et al., 2020). In Metro Manila for instance, the management of tertiary hospitals initially objected to NoP because of the fear of loss of revenue and ambiguity about the quality of healthcare at the lower levels of the network (Martinez Vergara et al., 2020). Other challenges encountered with the implementation of healthcare NoP documented in the extant literature include administrative challenges such as inadequate transportation and communication, limited physical infrastructure, and overcrowding at higher-level facilities resulting in work overload (Austin, Gulema, Belizan, et al., 2015), insufficient health workforce (Sequeira D'Mello, Bwile, Carmone, et al., 2020), over-dependence on manual information and records management, and poor lower-level facility quality improvement initiatives (Martinez Vergara et al., 2020). It has also been discovered in a study in Dar es Salaam by Sequeira D'Mello, Bwile, Carmone, et al. (2020) that the operation of NoP failed to provide the needed high-quality healthcare delivery because, alongside its enrollment, the government implemented a redundancy policy which adversely impacted the health sector resulting in a shortage of essential and other supporting health staff to deliver and support clinical care.

Notwithstanding these impediments, Rajamani, Santhosh Kumar, and Radha Srinivasan Iyer (2023) admitted that the challenges associated with healthcare NoPs, their adoption, and implementation were due to leadership and governance deficiencies, maintaining that the robustness and responsiveness of NoPs call for effective and efficient healthcare leadership and governance both the national, regional, and district levels. Rajamani, Santhosh Kumar, and Radha Srinivasan Iyer (2023) maintained that with good leadership and governance structures, healthcare NoPs can bring about the need improvements in technology, infrastructure, access to treatment, cost minimization of cost, patient care, employee retention, recruitment, and health sector negotiating power. Although Rajamani, Santhosh Kumar, and Radha Srinivasan Iyer. (2023) made a strong case for the inclusion of a healthcare network of practice as an indispensable component of healthcare delivery frameworks, because it has the potential to promote standardization of best practices and guidelines in patient care, increase communication between patients and physicians, allied and support staff, provide sufficient prospects for improving patient care, support research, the sharing of resources, and supply chain management toward the achievement of quality of healthcare and improved health outcomes, they cautioned that without good and effective leadership and governance structures, such an initiative would be one in futility.

Inferring from the extant theoretical and empirical literature, there is no ambiguity in stating that good healthcare leadership and governance structures are essential for the successful implementation of Networks of



Practice. Effective healthcare leadership and governance can serve as a strong building block of successful Networks of Practice. Effective healthcare leadership and governance structures can foster an environment conducive to the success of Networks of Practice (NoPs). Since the success of NoPs relies on collaboration, knowledge sharing, and collective learning among healthcare professionals and the same is the bedrock of healthcare leadership and governance, the existence of strong leadership and governance would ensure several advantages specifically to the NoPs and the health system in general. Key among these benefits include strategic alignment where leadership champions the setting of a clear vision, mission, and objectives, and aligning the NoPs with organizational goals, resource allocation where effective governance secures necessary resources (financial, human, technological) for NoP initiatives, and communication and collaboration in which health leadership and governance promote open communication, encouraging interprofessional collaboration and knowledge sharing. The other advantages health systems can derive from good leadership and governance when implementing NoPs are accountability and oversight responsibilities where leadership and governance structures would assist in establishing accountability mechanisms, monitoring progress, and addressing challenges as well as the promotion of the culture of continuous learning by inculcating the of principles of ongoing learning, innovation, and improvement through a culture that supports creativity.

### Universal Health Coverage (UHC)

WHO (2010) defined Universal Health Coverage (UHC) as “ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.” According to Giedion et al. (2013), the idea of UHC has been with the world since the 19th century when health reforms were introduced in Germany by Bismarck and also with the introduction of the National Health Service in the United Kingdom in 1946. Although, both the WHO Constitution of 1948 and the Alma-Ata Declaration in 1978 ultimately stressed UHC as a vital approach to achieving “Health for All”, the concept only received international endorsement at the 58th World Assembly in 2005 with a resolution that invigorated all countries of the world to implant UHC in their health systems (WHO,2010). WHO in 2005 and 2010 suggested an enhanced financing mechanism for health care to achieve the goal of UHC, and emphasized the important role of health system resources especially health system financing for UHC stressing that countries must raise adequate funds to support healthcare and strive to reduce the dependence on direct payments to finance services to improve efficiency and equity (WHO,2010). The 1948 WHO’s Constitution recognized that “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, and economic or social condition” (WHO,1948). These fundamental human rights were also endorsed by the “Health for All” declaration of the Alma Ata conference on primary health care in 1978. (Declaration of Alma-Ata,1978). Again, the bell for UHC has developed stronger in recent times with the Rio +20 summit on sustainable development recognizing UHC for improving “health, social cohesion, and sustainable human and economic development and an antecedent to reinforce national health systems” (United Nations, 2012). Barredo L, Agyepong I, Liu G., and Reddy S. (2014) maintained that Universal Health Coverage (UHC) attempts to assist the world’s population to have access to needed, quality health services without suffering financial hardship. The United Nations General Assembly in adopting the Sustainable Development Goals (SDG) in 2015, crafted the vision statement for health: “To promote physical and mental health and well-being and to extend life expectancy for all, we must achieve universal health coverage and access to quality health care. This indeed supported Barredo L., Agyepong I., Liu G., and Reddy S.'s (2014) position on UHC.

Ghana as a country defines UHC as: “All people in Ghana have timely access to high-quality health services irrespective of ability to pay at the point of use”, intending to increase access to quality essential health care and population-based services for all by 2030. The objectives of Ghana’s Universal Health Coverage agenda include universal access to better and efficiently managed quality health care services, reducing unnecessary maternal, adolescent, and child deaths and disabilities, and increasing access to responsive clinical and public health emergency services (Ministry of Health Ghana, 2020). To achieve these goals, Ghana recognizes Primary Health Care (PHC) as the fundamental approach and intends to realize universal PHC delivery by focusing on the poor and vulnerable; particularly children and adolescents, women, and the aged, and providing financial risk protection by eliminating physical and financial barriers to accessing PHC services; especially for people who are mostly at risk of incurring adverse health expenditure at the incidence of ill

health. The country also plans to embark on sustainable strategies to improve service delivery and secure predictable financing for long-term results as well as decentralizing healthcare delivery and management by cementing district-level service governance in collaboration with the district assemblies and improve intersectoral collaboration to synergize resource mobilization, efficient use, and accountability particularly at the PHC levels of service delivery. Mobilization of domestic financing to support PHC was to be re-prioritized by rationalizing the allocation and expenditure of domestic resources and prudently managing existing and new co-financing requirements within a realistic budgetary framework to give more attention and focus to primary health care (Ministry of Health Ghana, 2020).

Ghana faces a huge challenge in its quest to improve PHC as a vehicle for achieving UHC. Available evidence suggests that service availability and quality of care are generally below expectations due to huge infrastructure and equipment deficits. More than 50% of all primary-level facilities lack basic health infrastructure and equipment. The situation even becomes more dire as government budgetary allocation to the health sector (excluding wage bill) as a percentage of GDP has been fluctuating up and down making it difficult for any significant gains to be made (Ministry of Health Ghana, 2020). Available evidence indicates that the total budget for Ghana's Ministry of Health (MOH) increased in both nominal and real terms in 2023. The health sector budget grew in nominal terms from GHS 11 billion in 2022 to GHS 15.3 billion in 2023, an increase of 39%. Between 2018 and 2023, the MOH's budget has expanded by 246% in nominal terms. Over the same period, prices have also shot up by 167% due to inflation. Adjusting for inflation, the MOH budget has increased by 29% in real terms since 2018 and increased by 7% in real terms from 2022 to 2023. However, the MOH's budget is predicted to fall in real terms by 17% from 2023 to 2026. Between 2022 and 2023, the MOH's share of the total government budget declined from 7.6% to 6.7% falling short of the Abuja Declaration target that requires governments to allocate at least 15% of their total expenditure to health to achieve UHC, which Ghana is a signatory to. Amid these challenges, it is therefore difficult to tell if Ghana's new PHC vehicle, the Network of Practice can be successfully implemented since it requires huge infrastructure, equipment, human resources, and financial commitments (UNICEF, 2023).

### **Empirical Studies on Leadership and Governance in Health Care**

A study conducted in Tanzania on leadership and governance in Primary Health Care discovered that ineffective leadership and governance practices pose major difficulties to the delivery of quality health services. The study further found that in more than 95% of health centers providing comprehensive emergency obstetric and newborn care (CEmONC), and managed by newly recruited medical doctors, no guideline is available to offer practical guidance to the doctors in handling health facilities and associated health services. They had not been given any oriented leadership and managerial roles or responsibilities, a situation that has adversely impacted the performance of these facilities (Ntuli A. Kapologwe et al., 2023). A study conducted in Ghana on the effects of healthcare governance and ownership structure on the performance of hospitals by Abor, P. (2015) discovered that health facilities with good governance structures outperform those without such structures. Abor's study further found that the availability of effective and efficient health system governance structures and their features health in health institutions explain their incredible performance relative to those lacking those structures. The study additionally indicated that mission-based and private hospitals perform far better than their counterparts in the public sector because of the existence of effective board governance structures. In their study in some hospitals in South Africa, Govender, S., Gerwel Proches, C. N., & Kader, A. (2018) discovered weak leadership and governance structures with adverse consequences of overcrowding of patients, inadequate financial and material resources for operational activities, acute shortage of human resources for health (doctors, nurses and allied health staff etcetera), physical infrastructure limitations, and limited medical equipment and technology. Govender, S et al., (2018) further found that regardless of the emergence of modern management practices in health care, there is still a significant number of old-school managers running health facilities with most of them lacking the skills and knowledge to conduct a proper assessment of the challenges facing the healthcare system. According to Govender, S et al.,(2018), these leadership deficiencies are blamable for contributing to poor healthcare service delivery in many hospitals in South Africa. Govender, S et al.,(2018), suggested the advancement of strong leadership capabilities for healthcare managers through training and development, integrating leadership approaches into the broader healthcare continuum, and they must be elastic and adjustable to fluctuating

conditions that would reflect health workforce diversity so they can contribute to healthcare delivery effectiveness and efficiency.

In a systematic review of the importance of leadership style towards quality-of-care measures in healthcare settings, Sfantou, D. F. et al., (2017), maintained that efficient healthcare governance and leadership play very crucial roles in improving quality of care and amalgamation of the health system. Sfantou, D. F. et al., (2017), further explained that governance and leadership styles have a strong correlation with the quality of healthcare, and concluded that healthcare governance and leadership are fundamental and indispensable in ensuring a well-synchronized and cohesive platform and environment for effective and efficient healthcare delivery. Bismark and Studdert (2014) undertook an on governance and leadership of quality of care in Victoria, Australia, and discovered that specific governance and leadership roles of healthcare managers such as setting priorities, measuring progress, ensuring accountability, shaping organizational culture, developing and driving strategy, and allocation resources are among the factors that shape quality healthcare as they are directly linked with how healthcare is organized and delivered. Bismark and Studdert (2014) further discovered that the existence of good healthcare leadership and governance structure accounted for effective monitoring of performance, identification, and mitigation of risks, meeting front-line employees, and holding staff accountable. They also assist in managers' continuous rendezvous with staff and customers, employment of the right caliber of staff and leaders, support for innovation, and general motivation for staff to ensure the quality of healthcare delivery. In a study in Iran by Ghiasipour et al (2017), it was found that healthcare leadership weaknesses such as defective organizational structure, poor human resources management, incoherent work designs and structures, incompetent leaders themselves, and the highly polarized healthcare context adversely affect the delivery of good quality healthcare services. Ghiasipour et al (2017) further identified administrative complexities, over-centralization, leadership inability to mobilize resources, bureaucracy, poor human resources mix and skill sets, poor regulations and programs, sociocultural issues, and socio-economic issues also adversely impacting quality healthcare deliver.

### Conceptual framework

The Conceptual framework for this study is undergirded by comprehensive resources from books and journal articles (Shi, L., & Singh, D. A., 2020; WHO, 2019; Porter, M. E., & Teisberg, E. O., 2006; Brinkerhoff, Derick & Fort, Catherine & Stratton, Sara., 2009; Berwick, D. M., & Hackbarth, A. D., 2012; Centers for Disease Control and Prevention (CDC), 2022; Healthcare Financial Management Association, 2020)

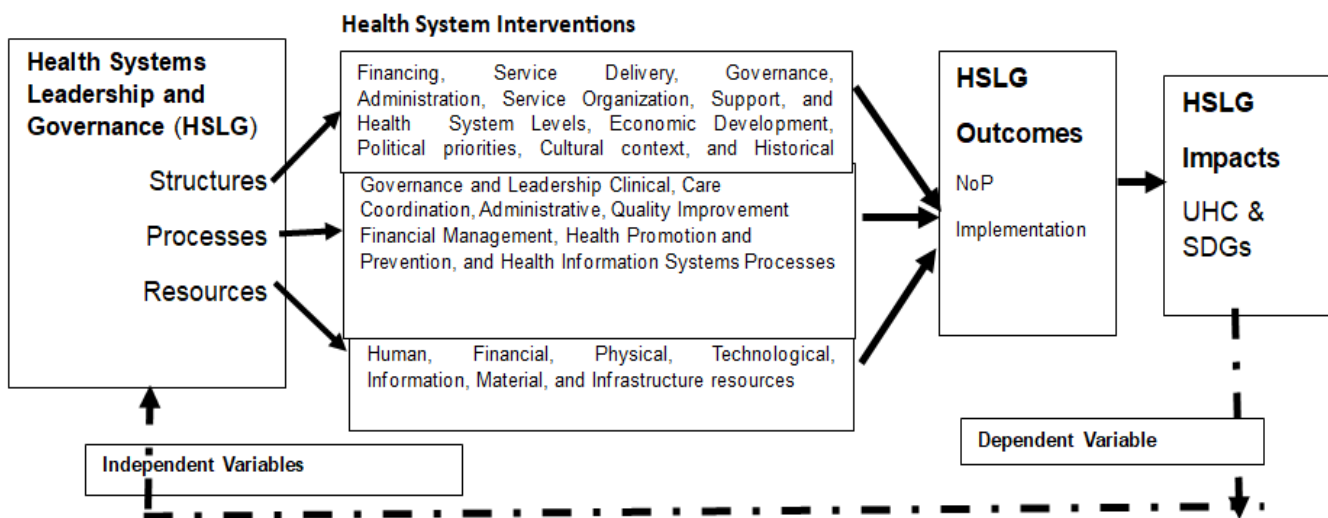


Figure 2. Conceptual framework

### Assumptions Underlying the Conceptual Framework

The conceptual framework assumes that Health system structures include Financing, Service Delivery, Governance, Administration, Service Organization, Support, and Health System Levels, Economic

development, Political priorities, Cultural context, and Historical development. The conceptual framework further assumes that health system processes comprise Governance and Leadership Processes, Clinical Processes, Care Coordination Processes, Administrative Processes, Quality Improvement Processes, Financial Management Processes, Health Promotion and Prevention Processes, and Health Information Systems Processes. The conceptual framework additionally assumes that healthcare system resources comprise Human, Financial, Physical, Technological, Information, Material, and Infrastructure resources. It is believed that when healthcare systems leadership and governance get the needed support or interventions or inputs in the form of structures, processes, and resources, NoP will be delivered as an outcome/output that would translate into the achievement or otherwise of Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs). The system will take feedback from successes and failures to either consolidate gains or improve deficiencies.

## Hypotheses

Based on the extant literature, empirical studies, and the conceptual framework and its assumptions, it is believed that the successful implementation of any healthcare delivery policy or intervention, and in this case the Networks of Practice as a tool for improving primary healthcare delivery to achieve Universal Health Coverage and the Sustainable Development Goals 3.8 strongly depends on the impact of healthcare systems leadership and governance. Stochastically, the study assumed that there is a general linear association between the dependent variable, implementation of the Networks of Practice, and the independent variable healthcare system leadership and governance in the form  $y_i = a + bx_i + e_i$  the term  $y_i$  is the  $i$ th value of the dependent variable and  $x_i$  is the  $i$ th value of the independent variable. With the various independent variables considered in the study, the general association between the dependent and the independent variables has been considered as  $y_i = a + bx_{i,1} + bx_{i,2} + \dots + bx_{i,n}$  where  $y_i$  is the dependent variables,  $a$ , the constant represents the mean value of the dependent variable when all the independent/predictor variables in the model are equal to zero,  $b$ , the intercept/slope of the linear model, and  $x_{i,1} + x_{i,2} + \dots + x_{i,n}$  is the number of independent variables. In light of these, the following hypotheses were proposed and tested.

**Ho\_1:** There is no relationship between healthcare systems leadership and governance structures and implementation of Networks of Practice (NoP)

**Ho\_2:** There is no relationship between healthcare systems leadership and governance processes and implementation of Networks of Practice (NoP)

**Ho\_3:** There is no relationship between healthcare systems leadership and governance resources and implementation of Networks of Practice (NoP)

**Ho\_4:** There is no relationship between the inadequacy of healthcare systems structures, processes, and resources and the implementation of Networks of Practice (NoP) to achieve Universal Health Coverage (UHC)

## METHODOLOGY

### Design and Initial Study Population

The study was conducted in Ghana and covered a newly created region. It utilized a survey research design. Yamens' sample formula was used to select respondents. The study population consisted of healthcare professionals, including Directors, Senior managers, and key Middle-level staff. The total estimated study population was approximately 200 staff. To triangulate the results for more validity and reliability, a mixed method (both quantitative and qualitative) approaches were employed.

### Sampling and Sample Sizes

#### Quantitative Sampling

The inclusion criteria used for selecting respondents were Directors, Senior managers, and Middle-level staff who had worked in the region from 2020 till date. The sample size for this study was determined by the



Yamane’s formula:  $n = \frac{N}{1+N(e)^2}$ ; Where:  $n$  is the sample size;  $N$  is the estimated study population per the inclusion criteria (200); and  $e$  is the sampling error (5%) or (0.05) (Yamane, 1967). Using the sampling formula,  $n = \frac{N}{1+N(e)^2}$ ,  $n = \frac{200}{1+208(0.05)^2} = \frac{200}{1+0.52} = \frac{200}{1.52} = 132$ . Thus, the initial sample size for this study was 132. However, to account for non-response, a 10% margin was added yielding 145 respondents.

**Qualitative Sampling**

A purposive sampling was used to select a sample of 20 respondents from across the region. Respondents in this sample included Directors at the regional and the district level.

**Quantitative Data Collection**

The study used Questionnaire Administration for quantitative data collection. The questionnaire was administered via the online Google form. The survey instruments were carefully considered based on applicable literature (Payne et al. 2020; Morton et al. 2020) and consisted mainly of two parts: first, demographic details and second questions soliciting responses on demographic details such as age, gender, professional category, level of education, and years of experience of the respondents. The second segment of the questionnaire, which has four dimensions, dealt with healthcare systems leadership and governance structures, processes, and resources, and their potential influence on the implementation of the Networks of Practice (NoP). The study also interviewed 20 officers (Regional level Directors, District Directors, Medical Superintendents, Hospital Administrators, and other senior officers for their qualitative opinions on healthcare systems leadership and governance structures, processes, and resources, and their potential influence on the implementation of the Networks of Practice (NoP). The study collected data between August and October 2024.

**Qualitative Data Collection**

In-depth face-to-face interviews were used to collect qualitative data. The interview guide was based on the dimensions of the quantitative instrument but with options for follow-up questions, suggestions, and comments and opinions from respondents. Respondents were interviewed for their qualitative opinions on healthcare systems leadership and governance structures, processes, and resources, and their potential influence on the implementation of the Networks of Practice (NoP).

Table 1. Hypotheses Testing: ANOVA\_HSLG\_NoP

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 952.133        | 2  | 476.067     | 5.185 | .007 |
| Within Groups  | 12118.800      | 30 | 91.809      |       |      |
| Total          | 13070.933      | 32 |             |       |      |

A one-way ANOVA was conducted to compare the implications of the three HSLG components (structures, processes, and resources). Normality checks and Levene’s test were carried out and the assumptions met. There was a significant difference in mean  $F[(2, 30)= 5.185, p =0.007]$  between the three components. The One-way ANOVA result indicates that there is a significant difference between the means of the three groups ( $p = 0.007$ ), and the difference between the groups is not due to chance (less than 0.5% probability). The F-statistic (5.185) represents a medium-sized effect (moderate to large effect size). In general terms, the one-way ANOVA revealed a significant effect of the predictor variables on the outcome variable,  $F[(2, 30)= 5.185, p =0.007$ . The general rule of thumb that is often used in regression analysis is that if  $F > 2.5$  then the null hypothesis can be rejected, and since the F-statistic is 5.185 which is greater than 2.5, it is an indication that the regression model would be effective in its explanation of the variation in the dependent variable, and hence, the null hypotheses were rejected.

## Reliability and validity

The Cronbach Alpha test was run to establish the reliability of the survey instrument (Cronbach,1951). Four scales were tested: HSLG Structures, HSLG Processes, HSLG Resources, and General opinion of the combined effect of how all three elements can impact the implementation of NoP in the region. Thirty-two (32) respondents were used to conduct the reliability test of the instrument. The overall reliability coefficient was 0.814, above the generally accepted threshold of 0.7. This was considered good, and the instrument was deemed reliable for the study. To ensure the instrument measures what it's supposed to measure, all four validity tests (construct, content, face, and criterion) were conducted to ensure that the instrument measures the concept that it's intended to measure, the instrument is fully representative of what it aims to measure, that instrument appears to be suitable to its aims, and that it results would accurately measure the concrete outcome they are designed to measure. The table below illustrates the reliability coefficients of the various elements of the survey instrument.

Table 2. Reliability coefficients

| S/N | Research Instrument (Scale)                                      | Number of Items | Cronbach Alpha Coefficient |
|-----|--|-----------------|----------------------------|
| 1   | HSLG Structures  | 11              | .886                       |
| 2   | HSLG Processes   | 8               | .764                       |
| 3   | HSLG Resources   | 9               | .856                       |
| 4   | General Opinion of Combination of HSLG SPR on NoP Implementation | 2               | .749                       |
|     | <b>Overall</b>   | <b>31</b>       | <b>.0814</b>               |

## Quantitative Data Presentation

Data were analyzed using SPSS version 21. Descriptive, Narrative, Regression, and Correlation analyses were used to present the results of the study with p-values of less than 0.05; ( $p < .05$ ) accepted as statistically significant.

## Qualitative Data Presentation

Content analysis was used for qualitative data analysis and field data was methodically organized and coded into themes using Nvivo 7 statistical software for content and thematic analysis. Demographic data were quantitatively presented, and other results were descriptively presented. Descriptive statistics (percentages) and narrative analysis were used to describe the views, perceptions, and opinions of respondents with direct quotations to support the analysis.

## Ethical considerations

Since this is an operational research, no formal approval was obtained. However, the consent of all participating respondents was also secured before the data collection. No personal information of respondents was included in the study.

## RESULTS

Table 3: Demographic Variables of the Participants

| Index  | Category | Number | Percentage | Mean | SD |
|--------|----------|--------|------------|------|----|
| Gender | Male     | 95     | 65.5       |      |    |

|                     |   |            |              |              |              |
|---------------------|---|------------|--------------|--------------|--------------|
|                     | Female  | 50         | 34.5         |              |              |
|                     | <b>Total (N)</b>                                | <b>145</b> | <b>100</b>   |              |              |
| Staff category      | Directors: Regional                             | 1          | 0.7          |              |              |
|                     | Deputy Directors: Regional, District, Hospitals | 37         | 25.5         |              |              |
|                     | Senior managers: Regional, District, Hospitals  | 68         | 46.9         |              |              |
|                     | Senior managers: Region, District, Hospitals    | 39         | 26.9         |              |              |
|                     | <b>Total (N)</b>                                | <b>145</b> | <b>100.0</b> |              |              |
| Level of Education  | Masters   | 64         | 14.5         |              |              |
|                     | First Degree                                    | 46         | 40.0         |              |              |
|                     | Diploma   | 20         | 12.7         |              |              |
|                     | Certificate                                     | 15         | 32.7         |              |              |
|                     | <b>Total (N)</b>                                | <b>145</b> | <b>100.0</b> |              |              |
| Years of Experience | Over 25 years                                   | 25         | 17.2         |              |              |
|                     | Up to 15 years                                  | 37         | 25.5         |              |              |
|                     | Up to 10 years                                  | 48         | 33.1         |              |              |
|                     | Below 10 years                                  | 35         | 24.1         |              |              |
|                     | <b>Total (N)</b>                                | <b>145</b> | <b>100.0</b> |              |              |
| Age                 | Less than 40                                    | 58         | 40.0         |              |              |
|                     | 40-45   | 35         | 24.1         |              |              |
|                     | 46-50   | 21         | 14.5         | <b>42.59</b> | <b>8.436</b> |
|                     | 51-55   | 20         | 13.8         |              |              |
|                     | 56 and above                                    | 11         | 7.6          |              |              |
|                     | <b>Total (N)</b>                                | <b>145</b> | <b>100.0</b> |              |              |

Note. N = Sample Size, P = Percentages, M = Mean, SD = Standard deviation

The sample as a whole was relatively middle-aged ( $M = 42.59$ ,  $SD = 8.44$ ). Participants ages ranged from 27 to 59 years ( $M = 42.59$ ,  $SD = 8.44$ ). This implies that the respondents' ages are clustered within a range of  $42.59 \pm 8.44$  (i.e., between 34.15 and 51.03). The moderate SD (8.44) suggests variability around the mean and also supports the generalizability of results in similar populations but with consideration for individual differences.

## Quantitative Data Analysis

### Correlations and Regression between Independent variables and Dependent Variables

A correlation analysis was done to determine the relationship between the dependent and independent variables regarding their potential impact on NoP implementation. Liner regression technique was used to assess the

likely strength of the relationship between the dependent and independent variables concerning NoP implementation.

Table 4. Correlation Between Dependent and Independent Variables

| Variables          | HSLG Structures | HSLG Processes | HSLG Resources |
|--------------------|-----------------|----------------|----------------|
| HSLG Structures    |                 |                |                |
| HSLG Processes     | .991**          |                |                |
| HSLG Resources     | .099            | .110           |                |
| NoP Implementation | .738**          | .737**         | .765**         |

Note \*\*. Correlation is significant at the 0.01 level (1-tailed).

Health System Leadership and Governance Components (Structures, Processes, and Resources) were compared to NoP Implementation using Pearson’s Correlation. There was a strong positive correlation between all the independent variables and the dependent variable (HSLG Structures, HSLG Processes, HSLG Resources, and NoP Implementation ( $r = 0.738, p < .01, r = 0.737, p < .01, r = 0.765, p < .01$ ), which was significant.

Table 5. Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .765 <sup>a</sup> | .585     | .582              | .793                       |

a. Predictors: (Constant), HSLG Resources, HSLG Processes, HSLG Structures

The table indicates that the predictor variables explained 59% variance in the outcome variable. However, the combined correlation of all 3 independent variables with the dependent variable is 0.765 which lies within and close to the individual correlations and is considered a strong positive and significant ( $r = 0.765, p < .01$ ).

Table 6. ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1     | Regression | 112.332        | 3   | 37.444      | 57.829 | .000 <sup>b</sup> |
|       | Residual   | 91.296         | 141 | .647        |        |                   |
|       | Total      | 203.628        | 144 |             |        |                   |

a. Dependent Variable: NoP Implementation. b. Predictors: (Constant), HSLG Resources, HSLG Processes, HSLG Structures

The ANOVA was significant at the .01 level,  $F(3,141) = 57.83 = p = 001$

Table 7. Linear Regression Analysis with NoP Implementation

**Coefficients<sup>a</sup>**

| Variable   | Beta | SE   | 95%CI |       | P    |
|------------|------|------|-------|-------|------|
|            |      |      | LL    | UL    |      |
| (Constant) | .346 | .240 | .521  | 1.471 | .000 |



|                 |     |     |        |       |      |      |
|-----------------|-----|-----|--------|-------|------|------|
| HSLG Structures | .71 | .05 | -0.034 | 0.297 | 0.74 | .000 |
| HSLG Processes  | .71 | .06 | 0.440  | 0.779 | 0.74 | .000 |
| HSLG Resources  | .83 | .06 | -0.127 | 0.106 | 0.77 | .000 |

Note \*\* $p < .01$

The table shows the impact of health system leadership and governance structures, processes, and resources on NoP Implementation. A significant regression was found  $F(3,141) = 57.83 = p = 001$ . The  $R^2$  value of .59 revealed that the predictors explained a 59% variance in the outcome variable. The regression equation was  $\text{NoP Implementation} = .346 + .71 (\text{HSLG Structures}) + .71 (\text{HSLG Processes}) + .83 (\text{HSLG Resources})$ . The findings revealed that HSLG Structures positively predicted NoP implementation ( $\beta = .74, p < .01$ ), HSLG Processes positively predicted NoP implementation ( $\beta = .74, p < .01$ ), whereas HSLG Resources positively predicted NoP implementation ( $\beta = .83, p < .01$ ). However, if all predictors are zero, the expected value of the dependent variable is approximately 0.346. Again, this value of the constant by itself does not provide enough information about the overall fit of the regression model. Thus, other statistics, such as R-squared, p-values for the coefficients, and residual analysis, are needed to assess how well the model explains the variability in the dependent variable. Since the predictors in the real world cannot be zero ceteris paribus, there is a need to interpret how well the model explains the variability in the dependent variable based on the other variables in the model summary.

### Qualitative Data Analysis

#### Healthcare systems leadership and governance structures and implementation of Networks of Practice (NoP)

On the potential impact of Healthcare systems leadership and governance structures and implementation of Networks of Practice (NoP), the majority of respondents (75%) expressed varied opinions. One respondent said, *“We need to face the fact; that our leadership and governance structures are nowhere near what is expected to implement NoP. We lack so many things. Where are even the funds going to come from?”*. Another respondent said *“Go to the districts, sub-districts, and the facilities, you don’t need God to tell you that we are only muddying the dirty waters. I am skeptical about the success of this initiative. Former ones yielded no substantial results”*. Another group of respondents was optimistic about the success of NoP with the current Healthcare system leadership and governance structures. Their sentiments were revealed in the following statements: *“Although the current structures are quite good and are the same we are using to achieve the current results, improving upon it would help to accelerate the implementation success of NoP”*, *“This is a new region and the improvement in our leadership structure has been phenomenal. I think we can achieve and exceed whatever target the NoP has for us”*

#### Healthcare systems leadership and governance processes and implementation of Networks of Practice (NoP)

Concerning Healthcare systems leadership and governance processes, three opinions dominate respondents' positions. In the first category constituting about 45%, some respondents believed that the region has what it takes in terms of the processes to achieve NoP. As indicated by a respondent *“From where I sit, I can say that Governance and Leadership, Clinical, and Care Coordination Processes are superb. What we need is improvement in financial management to be able to pull through”*. Another responder also remarked: *“Public health is quite stronger than clinical care and we need to improve clinical care if we want to successfully implement NoP”*. The second opinion on the potential impact of healthcare systems leadership and governance processes on the successful implementation of NoP is that 9 out of the 20 participants, (45%) admitted that there should be a reorganization of processes such as governance and leadership, clinical care coordination, quality improvement, and financial Management. Thirty percent (30%) of the respondents said public health processes instead of clinical care should be improved if NoP is to be successfully implemented. The following statement reaffirms this position. *“We don’t need to invest too much in clinical care at this*

*time. What we have for now is more than enough. We need to focus more attention on public health including health promotion, health information, and education to conscientize people and reduce disease burden, this way we can easily implement NoP*". The third philosophical position on this theme indicated that in terms of clinical care and public health interventions, enough has been done, and what is urgently needed is financial and administrative structures to support the NoP implementation.

### **Healthcare systems leadership and governance resources and implementation of Networks of Practice (NoP)**

An overwhelming majority of the respondents (90%) indicated that the current level of health systems leadership and governance resources: human, financial, physical, technological, information, material, and infrastructure resources are woefully inadequate to support any successful NoP implementation. One participant iced the cake by saying *"There is no way we can get there with the current level of resources, both human, material, and financial. Just remember what Albert Einstein said that problems cannot be solved with the same mind that created them, so with the same level of resources we can never successfully implement NoP*". Another respondent said "It is unfortunate. Which resources are there to use for NoP implementation? We don't have staff, ambulances, equipment, and medicines, so how are we going to implement that NoP"

## **DISCUSSIONS**

Extant literature revealed studies that have been conducted on the impact of effective governance and leadership in health service delivery particularly in the past few decades (Kanste O., Kyngas H., Nikkila J., 2007). Some of these studies have identified strengths and weaknesses in governance and leadership in health service delivery with the weaknesses outweighing the strengths in most of the studies (Schreuder J. et al., 2011). According to Schreuder J. et al. (2007), most of these studies, however, adopted either qualitative or quantitative approaches and did not integrate the two methods for effective outcomes. The present study attempted to fill this void, by using a mixed method to assess the governance and leadership structures of the healthcare system in Ghana and its implications for the implementation of Networks of Practice.

The current study found a strong positive correlation between all the independent variables and the dependent variable (HSLG Structures, HSLG Processes, HSLG Resources, and NoP Implementation ( $r = 0.738, p < .01, r = 0.737, p < .01, r = 0.765, p < .01$ , which was significant. These findings aligned with extant literature and the findings of previous studies (Govender, S. et al, 2018; Sfantou, D. F. et al., 2017; Bismark & Studdert, 2014; Ghiasipour et al., 2017; Oleribe, O. O. et al., 2019; Ghana, Adua, E., Frimpong, K., Li, X., & Wang, W., 2017; Ergo A, Htoo TS, Badiani-Magnusson R, Royono R., 2019; Tao W et al., 2019; World Health Organization, 2014; Ntuli A. Kapologwe et al., 2023; Abor, P., 2015; Govender, S. et al, 2018; Sfantou, D. F. et al., 2017; Bismark & Studdert, 2014; Ghiasipour et al., 2017), and have implication for successful NoP implementation. Significant regressions were found  $F(3,141) = 57.83 = p = 001$  with a direct relationship between the predictors and the outcome. The regression equation was  $\text{NoP Implementation} = .996 + .71 (\text{HSLG Structures}) + .71 (\text{HSLG Processes}) + .83 (\text{HSLG Resources})$ . This implies that there is an improvement in the health system leadership and governance structures, processes, and resources, NoP implementation would also improve and vice versa. The regression model revealed an  $R^2 (.58.5)$  indicating that in general terms, the predictor variables explain approximately 59% of the variance in the outcome variable. The correlation coefficients revealed that the predictor variables positively predicted NoP implementation HSLG Structures ( $\beta = .74, p < .01$ ), HSLG Processes positively predicted NoP implementation ( $\beta = .74, p < .01$ ), and HSLG Resources positively predicted NoP implementation ( $\beta = .83, p < .01$ ). The implication of this is that a unit increase in HSLG Structures will induce a .74 percentage point improvement in the success of NoP implementation. It also means that when HSLG Processes improve by a unit, NoP implementation will also improve by .74 percentage points. The results again suggest that a unit improvement in HSLG Resources will attract a .83 percentage points improvement in NoP implementation. The reverse is also true, so, if HSLG Structures and HSLG Processes fail by a unit, NoP implementation will suffer a .74 percentage points failure, and if HSLG Resources dwindle by a unit, NoP implementation will crash by .83 percentage points. This therefore means that every effort must be made to improve the structures, processes, and resources of the health system leadership and governance for NoP to achieve its desired objectives and outcomes.

However, the qualitative responses painted a gloomy picture of the current state of the structures, processes, and resources of the leadership and governance of the health system. The study found 75% disagreement on the ability of the HSLG structures to impact success in the implementation of the NoP evidenced in the statements from the respondents. What this means is that although the assumption that health system leadership and governance structures can positively influence NoP, the existing structures are not resilient and dynamic enough to ensure its realization. The qualitative analysis further revealed that about half of the respondents agreed that clinical, administrative, health information, public health promotion, and disease prevention processes are fairly adequate, but indicated that governance and leadership, clinical care coordination, quality improvement, and financial management processes need to be improved to ensure successful NoP implementation. The opinions expressed by the respondents and the results of the quantitative analysis all point to the fact that HSLG processes are not that bad but only need to be further improved to support the structures and the resources for NoP implementation. Concerning health system leadership and governance resources, the qualitative responses were very revealing when ninety percent (90%) of respondents gave NoP implementation a slimmer chance of success by contending that the health system lacks almost every resource: human, financial, physical, technological, information, material, and infrastructure for any meaningful NoP implementation. Some respondents also maintained that NoP will face operational challenges because of poor roads, lack of electricity in most of the rural areas, and non-availability of ambulances to facilitate referrals. These revelations imply that no matter the level of structures and processes that are in place, NoP may not be fully successful because resources to support them are either inadequate or virtually nonexistent.

## CONCLUSION

This paper evaluates the potentials of governance and leadership of healthcare delivery under three main themes: structures, processes, and resources and their potential implications for the implementation of the Networks of Practice. The major findings of the study are that there are perceived strong correlations between health systems leadership and governance structures, processes, and resources for implementing the Network of Practice but the current structures processes, and resources are not adequate to assist in successfully implementing the NoP. The study additionally discovered that at their current state, health system leadership and governance structures can only achieve 59% success in the NoP implementation if the status quo remains. The study further found that improving the structures, processes, and resources can reasonably increase NoP implementation. This is suggestive that a universal approach to improving all components should be adopted to facilitate the successful implementation of the Networks of Practice (NoP).

## RECOMMENDATIONS

The concept of NoP is about strengthening primary health care services to ensure that essential health services are accessible and of high quality for all individuals. Thus, based on the extant literature, empirical studies, and the findings of the study, the following recommendations for improving the health system structures, processes, and resources for successful NoP implementation are made. The Ministry of Health should explore opportunities for external funding from international organizations, donor agencies, or public-private partnerships to support the domestic financing of the health system to increase budgetary allocation to the Ghana Health Service (GHS) to be able to implement the Networks of Practice. The Ghana Health Service (GHS) should invest in health delivery technologies to help streamline health service delivery processes, improve communication, and reduce administrative burdens. This initiative could include implementing electronic health records, telehealth platforms, and user-friendly data analytics tools. The Ministry of Health should support the GHS to provide the necessary medical equipment and logistics including transport and medicines to support the implementation of the NoP. The GHS should also address health workforce equity by fairly distributing essential health staff to reduce disparities in access to care, and quality of care, to improve health outcomes. The GHS should additionally ensure that the regional and district levels improve governance and administration by implementing transparent and accountable processes to ensure efficient use of resources and effective decision-making and also advocate for health system challenges to be a top priority on the political and collaborator's agenda and work towards building consensus among all stakeholders on health system reforms. At the regional level, authorities should focus on improving workforce

planning, development, and succession by addressing human resource disparities at the local level and putting measures in place to attract and retain qualified staff, investing in training and development, and exploring innovative staffing models. Regional authorities should also optimize clinical workflows by streamlining processes to improve efficiency and reduce waste. This could involve implementing lean management principles, standardizing procedures, and using data to identify areas for improvement. Regional and district managers should strengthen financial management by developing comprehensive budgets, negotiating favorable contracts with suppliers, and exploring alternative funding sources. On the clinical front, regional and district managers should focus on patient safety by implementing evidence-based practices, investing in safety training, and using data to track and improve safety performance. They should also work to improve communication and collaboration by establishing clear lines of communication, fostering a culture of teamwork, and using technology to facilitate communication to ensure a well-functioning health system. Regional and district managers should learn from historical developments by evaluating past successes and failures of previous health system initiatives to inform current decision-making and work within their cultural contexts by tailoring health policies and programs to the cultural beliefs, norms, and practices of the population to avoid repeating mistakes to ensure acceptance and effectiveness of NoP.

### **Originality**

This study arguably is the first of its kind towards the implementation of NoP. The study applied a mixed method and localized the scope of the study to Ghana. It presents a deviation from previous studies that have tended to use only quantitative methods and concentrated on foreign contexts. Focusing on health system leadership and governance components (structures, processes, and resources) to showcase the challenges that need to be addressed ahead of full NoP implementation provides a point of reflection for policymakers. Academic and operational literature have also been enhanced toward leadership and governance in health especially in the areas of structures, processes, and resources to improve the implementation of not only the Network of Practice, but also other initiatives targeted at improving healthcare delivery.

### **Limitations of the Study**

The study covers only one of the 6 new regions in Ghana. This limitation in coverage could affect the opinion pool and generalization of the findings.

### **Future Research**

Future research should expand the coverage to cover at least or more than half of the new regions to widen the scope of the results and findings for comparative analysis and effective planning and decision-making.

### **Conflict of Interest**

The author(s) declared no conflict of interest in this study.

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The views, perceptions, and opinions articulated in this article outside literature, empirical evidence, and participants' responses are exclusively those of the authors and do not essentially replicate the official policy or position of any affiliated agency of the authors or participants.

## **REFERENCES**

1. Abor, Patience. (2015). The effects of healthcare governance and ownership structure on the performance of hospitals in Ghana. *International Journal of Law and Management*. 57. 107-140. 10.1108/IJLMA-04-2014-0031.



2. Adini B, Ohana A, Furman E, Ringel R, Golan Y, Fleshler E, Keren U, Reisner S.(2016). Learning lessons in emergency management: the 4th International Conference on Healthcare System Preparedness and Response to Emergencies and Disasters. *Disaster Military Med.* 2016;2(1):1–6. doi: 10.1186/s40696-016-0026-3.
3. Adua, E., Frimpong, K., Li, X., & Wang, W. (2017). Emerging issues in public health: a perspective on Ghana's healthcare expenditure, policies, and outcomes. *The EPMA journal*, 8(3), 197–206. <https://doi.org/10.1007/s13167-017-0109-3>
4. Austin A, Gulema H, Belizan M, et al.. Barriers to providing quality emergency obstetric care in Addis Ababa, Ethiopia: healthcare providers' perspectives on training, referrals and supervision, a mixed methods study. *BMC Pregnancy Childbirth* 2015;15:74. 10.1186/s12884-015-0493-4
5. Ayanore MA, Amuna N, Aviisah M, Awolu A, Kipo-Sunyehzi DD, Mogre V, Ofori-Asenso R, Gmanyami JM, Kugbey N, Gyapong M. (2019). Towards resilient health systems in Sub-Saharan Africa: a systematic review of the English language literature on health workforce, surveillance, and health governance issues for health systems strengthening. *Annual Global Health.* 2019;85(1).
6. Barredo L, Agyepong I, Liu G, Reddy S. (2014). Goal 3 Ensure healthy lives and promote well-being for all at all ages. *The Magazine of the United Nations. UN Chronicle.* 2014;4:9-10. <https://unchronicle.un.org/article/goal-3-sdgs-and-healthier-2030>.
7. Berwick, D. M., & Hackbarth, A. D. (2012). Eliminating waste in US health care. *Journal of the American Medical Association*, 307(14), 1513-1516. DOI: 10.1001/jama.2012.362
8. Bismark MM, Studdert DM. Governance of quality of care: a qualitative study of health service boards in Victoria, Australia. *BMJ Qual Saf.* 2014 Jun;23(6):474-82. doi: 10.1136/bmjqs-2013-002193. Epub 2013 Dec 10. PMID: 24327735; PMCID: PMC4033274.
9. Brinkerhoff, Derick & Fort, Catherine & Stratton, Sara. (2009). Health governance and decentralization in Rwanda. <https://www.researchgate.net/publication/266792474HealthgovernanceanddecentralizationinRwanda><https://www.researchgate.net/publication/266792474HealthgovernanceanddecentralizationinRwanda>
10. Carmone AE, Kalaris K, Leydon N, et al. (2020). Developing a common understanding of networks of care through a scoping study. *Health Syst Reform*; 6:e1810921. 10.1080/23288604.2020.1810921
11. Centers for Medicare & Medicaid Services. (2022). National Health Expenditure Data (Report No. CMS-1500). U.S. Department of Health and Human Services.
12. Chanturidze T, and Obermann K.(2016). Governance in health – the need for exchange and evidence: Comment on "Governance, government, and the search for new provider models." *Int J Health Policy Manag.* 5(8):507–510. doi:10.15171/ijhpm.2016.60
13. Cordier LF, Kalaris K, Rakotonanahary RJL, Rakotonirina L, Haruna J, Mayfield A, Marovavy L, McCarty MG, Tsirinomen'ny Aina A, Ratsimbazafy B, Razafinjato B, Loyd T, Ihantamalala F, Garchitorea A, Bonds MH, Finnegan KE. Networks of Care in Rural Madagascar for Achieving Universal Health Coverage in Ifanadiana District. *Health Syst Reform.* 2020 Sep 1;6(2):e1841437. doi: 10.1080/23288604.2020.1841437. PMID: 33314984.
14. Debie, A., Khatri, R. B., & Assefa, Y. (2022). Successes and challenges of health systems governance towards universal health coverage and global health security: A narrative review and synthesis of the literature. *Health Research Policy and Systems*, 20. <https://doi.org/10.1186/s12961-022-00858-7>
15. Declaration of Alma-Ata (1978). International Conference on Primary Health Care, Al ma-Ata, USSR, 6–12 September 1978.[http://www.euro.who.int/\\_data/assets/pdf\\_file/0009/113877/E93944.pdf](http://www.euro.who.int/_data/assets/pdf_file/0009/113877/E93944.pdf).
16. Dodgson R, Lee K, and Drager N (2017). *Global Health Governance, a conceptual review.* Routledge.
17. Duran A, Dubois HFW, Saltman RB. (2011). The evolving roles of hospitals and recent concepts of public sector governance. In: Saltman RB, Duran A, Dubois HW, eds. *Governing Public Hospitals: Recent Strategies and the Movement Toward Institutional Autonomy.* Brussels: European Observatory on Systems and Policies; 2011:15-34.
18. Dwyer J, and Eagar K. (2008). Options for reform of Commonwealth and State governance responsibilities for the Australian health system. Commissioned paper for the National Health and Hospitals Reform Commission. Canberra.
19. Ergo A, Htoo TS, Badiani-Magnusson R, Royono R. (2019). A new hope: from neglect of the health sector to aspirations for Universal Health Coverage in Myanmar. *Health Policy Plan*: 34(Supplement\_1):i38–i46. doi: 10.1093/heapol/czy110

20. Fasawe, O., Adekeye, O., Carmone, A. E., Dahunsi, O., Kalaris, K., Storey, A., et al. (2020). Applying a Client-centered Approach to Maternal and Neonatal Networks of Care: Case Studies from Urban and Rural Nigeria. *Health Systems and Reform*, 2020; 6(2), e1841450. <https://doi.org/10.1080/23288604.2020.1841450>.
21. Flynn, R. (2002), "Clinical governance and governmentality", *Health, Risk and Society*, Vol. 4 No. 2, pp. 155-173.
22. Ghana Health Service, (2024). Implementation Guidelines for Networks of Practice. Available at: [https://p4h.world/en/documents/implementation-guidelines-for-networks-of-practice/#:~:text=The%20Networks%20of%20Practice%20\(NoP,and%20inadequate%20provider-payment%20mechanisms](https://p4h.world/en/documents/implementation-guidelines-for-networks-of-practice/#:~:text=The%20Networks%20of%20Practice%20(NoP,and%20inadequate%20provider-payment%20mechanisms).
23. Ghana, MOH. (2020). National Health Policy: Ensuring healthy lives for all (revised edition), P.23. URL, [https://www.moh.gov.gh/wp-content/uploads/2020/07/NHP\\_12.07.2020.pdf-13072020-FINAL.pdf](https://www.moh.gov.gh/wp-content/uploads/2020/07/NHP_12.07.2020.pdf-13072020-FINAL.pdf).
24. Ghana, MOH EHSP (2022). 2022-2030 National Essential Health Service Package Ghana, not available online, p. 11
25. Ghana, MOH (2011). Health Sector Medium Term Development Plan, 2022-2025, p. 11. URL, [https://www.globalfinancingfacility.org/sites/gff\\_new/files/Ghana-GFF-Investment-Case.pdf](https://www.globalfinancingfacility.org/sites/gff_new/files/Ghana-GFF-Investment-Case.pdf)
26. Ghiasipour M, Mosadeghrad AM, Arab M, Jaafaripooyan E. Leadership challenges in health care organizations: The case of Iranian hospitals. *Med J Islam Repub Iran*. 2017 Dec 17;31:96. doi: 10.14196/mjiri.31.96.
27. Giedion U, Andres Alfonso E, Diaz Y. (2013.) The impact of universal coverage schemes in the developing world: a review of the existing evidence. Washington, DC: World Bank; <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Images/IMPACTofUHC Schemes in Developing Countries-A Review of Existing Evidence.pdf>.
28. Govender, S., Gerwel Proches, C. N., & Kader, A. (2018). Examining leadership as a strategy to enhance health care service delivery in regional hospitals in South Africa. *Journal of multidisciplinary healthcare*, 11, 157–166. <https://doi.org/10.2147/JMDH.S151534>
29. Greer SL, Wismar M, Figueras J, McKee C. (2016). Governance: a framework. In: Greer SL, Wismar M, Figueras J, eds. *Strengthening Health System Governance. Better Policies, Stronger Performance*. International Journal of Health Policy and Management, 2016, 5(8), 507–510. Maidenhead: Open University Press; 2016:27-56.
30. Healthcare Financial Management Association. (2020). *Healthcare finance: A guide to business and financial management*.
31. Hyre A, Caiola N, Amelia D, Gandawidjaja T, Markus S, Baharuddin M. Expanding maternal and neonatal survival in Indonesia: a program overview. *Int J Gynaecol Obstet* 2019;144(Suppl 1):7-12. 10.1002/ijgo.12730
32. Kanste O., Kyngas H., Nikkila J. (2007). The relationship between multidimensional leadership and burnout among nursing staff. *J. Nurs. Manag.* 15:731–739. doi: 10.1111/j.1365-2934.2006.00741.x.
33. Kooiman J. (2000). Societal governance: levels, models, and orders of social-political interaction. In: Pierre J, ed. *Debating Governance: Authority, Steering, and Democracy*. Oxford: Oxford University Press:138-166.
34. Lewis M, and Pettersson G.(2009). *Governance in Health Care Delivery. Raising Performance*. Policy Research Working Paper 5074. Washington: The World Bank.
35. Mackfallen G. Anasel, Ntuli A. Kapologwe, Albino Kalolo (2023). CRC Press 6000 Broken Sound Parkway NW, Suite 300, Boca Raton, FL 33487–2742. Available at: <https://library.oapen.org/bitstream/handle/20.500.12657/61002/9781000859034.pdf?sequence=1&isAllowed=y>
36. Manyazewal, T. (2017). Using the World Health Organization health system building blocks through a survey of healthcare professionals to determine the performance of public healthcare facilities. *Archives of Public Health = Archives Belges De Sante Publique*, 75, 50. <https://doi.org/10.1186/s13690-017-0221-9>
37. Martinez Vergara MT, Angulo de Vera E, Carmone AE. Building trust to save lives in a Metro Manila public-private network of care: a descriptive case study of Quirino recognized partners in Quezon City, Philippines. *Health Syst Reform*. 2020 Sep 1;6(2):e1815473. doi:10.1080/23288604.2020.1815473. PMID: 32966137.

38. Ministry of Health Ghana (2020). UHC Roadmap. <https://www.moh.gov.gh/wp-content/uploads/2021/08/UHC-Roadmap-2020-2030.pdf>
39. Morton, D., Topper, K., Bowers, C., Jardien-Baboo, S., Nyangeni, T. & Mabitja, M., (2020). ‘Job satisfaction of nurses working in public hospitals: Perceptions of nurse unit managers in South Africa’, *British Journal of Nursing* 29(17), 1024–1029. <https://doi.org/10.12968/bjon.2020.29.17.1024>
40. Mossialos E, Permanand G, Baeten R, and Herve T. (2010). Health systems governance in Europe: the role of European Union law and policy. In: *Health Systems Governance in Europe: The Role of EU Law and Policy*. Cambridge University Press; 2010:3. [http://www.euro.who.int/data/assets/pdf\\_file/0007/138148/E94886\\_ch01.pdf?ua=1](http://www.euro.who.int/data/assets/pdf_file/0007/138148/E94886_ch01.pdf?ua=1).
41. Ntuli A. Kapologwe, Idda Lyatonga Swai, Anosisye Mwandulusya Kesale and James Kengia. (2023). Leadership and Governance, in *Leadership and Governance in Primary Healthcare*.
42. Oleribe, O. O., Momoh, J., Uzochukwu, B. S., Mbofana, F., Adebisi, A., Barbera, T., Williams, R., & Taylor-Robinson, S. D. (2019). Identifying Key Challenges Facing Healthcare Systems In Africa And Potential Solutions. *International journal of general medicine*, 12, 395–403. <https://doi.org/10.2147/IJGM.S223882>
43. Payne, A., Koen, L., Niehaus, D.J.H. & Smit, I.M., (2020). ‘Burnout and job satisfaction of nursing staff in a South African acute mental health setting’, *South African Journal of Psychiatry* 26, 1454. <https://doi.org/10.4102/sajpsychiatry.v26i0.1454>
44. Piña, I. L., Cohen, P. D., Larson, D. B., Marion, L. N., Sills, M. R., Solberg, L. I., & Zerzan, J. (2015). A framework for describing health care delivery organizations and systems. *American journal of public health*, 105(4), 670–679. <https://doi.org/10.2105/AJPH.2014.301926>
45. Porter, M. E., & Teisberg, E. O. (2006). Redefining health care: Creating value-based competition on results. *Harvard Business Review*, 84(7-8), 64-76. DOI: 10.1225/BR0707
46. Rajamani, Santhosh Kumar & Iyer, Radha. (2023). Methods of Complex Network Analysis to Screen for Cyberbullying. 10.1201/9781003393061-16.
47. Rawls J. (1971). *A Theory of Justice*. Cambridge, MA: Belknap Press.
48. Saltman RB, and Duran A. (2015). Governance, Government, and the Search for New Provider Models. *Int J Health Policy Manag*. 2015;4:1–10. doi: 10.15171/ijhpm.2015.198.
49. Savedoff, W. D. (2011). Governance in the health sector: A strategy for measuring determinants and performance. *World Bank Policy Research Working Paper*, 5655. World Bank.
50. Schreuder J., Roelen C., van Zweeden N., Jongsma D., van der Klink J., Groothoff J. (2011). Leadership styles of nurse managers and registered sickness absence among their nursing staff. *Healthc. Manag. Rev*. 36:58–66. doi: 10.1097/HMR.0b013e3181edd96b
51. Sequeira D’Mello B, Bwile P, Carmone AE, et al.. Averting maternal death and disability in an urban network of care in Dar es Salaam, Tanzania: a descriptive case study. *Health Syst Reform* 2020;6:e1834303. 10.1080/23288604.2020.1834303
52. Sfantou, D. F., Laliotis, A., Patelarou, A. E., Sifaki-Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of Leadership Style towards Quality-of-Care Measures in Healthcare Settings: A Systematic Review. *Healthcare (Basel, Switzerland)*, 5(4), 73. <https://doi.org/10.3390/healthcare5040073>.
53. Shi, L., & Singh, D. A. (2020). *Delivering health care in America: A systems approach* (7th ed.). Jones & Bartlett Learning. DOI: 978-1-284-13357-6
54. Smith, P. C., Anell, A., Busse, R., Crivelli, L., Healy, J., Lindahl, A. K., Westert, G., & Kene, T. (2012). Leadership and governance in seven developed health systems. *Health Policy*, 106(1), 37–49.
55. Tao W, Zeng Z, Dang H, Lu B, Chuong L, Yue D, Wen J, Zhao R, Li W, Kominski GF. (2019). Towards universal health coverage: lessons from 10 years of healthcare reform in China. *BMJ Glob Health*. 2020;5(3):e002086. doi: 10.1136/bmjgh-2019-002086.
56. UNICEF (2023). Health Budget Brief. <https://www.unicef.org/ghana/media/5001/file/2023%20Health%20Budget%20Brief.pdf>
57. United Nations (2012). Report of the United Nations Conference on Sustainable Development. New York: United Nations; <http://www.uncsd2012.org/content/documents/814UNCSDREPORTfinalrevs.pdf>.
58. UN General Assembly (2015). Seventieth Session. Agenda item 15 and 116. A/RES/70/1. The resolution was adopted by the General Assembly on 25th September 2015. *Transforming our world: the*

- 2030 Agenda for sustainable development. Page 7. <http://www.ipu.org/splz-e/unga16/2030-e.pdf>
59. van Olmen J, Criel B, Van Damme W, Marchal B, Van Belle S, Van Dormael M, Hoérée T, Pirard M, Kegels G. (2010). Analyzing health systems to make them stronger. In.: ITGPress.
60. Vickers NJ (2017). Animal communication: when I'm calling you, will you answer too? *Curr Biol.* 2017;**27**(14):R713–R715. doi: 10.1016/j.cub.2017.05.064
61. White F (2015). "[Primary health care and public health: foundations of universal health systems](#)". *Med Princ Pract.* **24** (2): 103– 16. doi:10.1159/000370197
62. World Health Organization. (2000). The World Health Report 2000: Health systems: Improving performance. Retrieved from [https://cdn.who.int/media/docs/default-source/health-financing/whr-2000.pdf?sfvrsn=95d8b803\\_1&download=true](https://cdn.who.int/media/docs/default-source/health-financing/whr-2000.pdf?sfvrsn=95d8b803_1&download=true)
63. World Health Organization (WHO) (2007) Everybody's Business. Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action. [http://www.who.int/healthsystems/strategy/everybodys\\_business.pdf](http://www.who.int/healthsystems/strategy/everybodys_business.pdf)
64. World Health Organization (WHO), (May 2010). Key components of a well-functioning health system. Available at: <https://www.paho.org/derechoalaSSR/wp-content/uploads/Documentos/Bloques-Basicos-de-un-Sistema-de-Salud-OMS.pdf>
65. World Health Organization,(2019). Health for all—why is universal health coverage important? Available at: [http://www.who.int/health\\_financing/universal\\_coverage\\_definition/en/](http://www.who.int/health_financing/universal_coverage_definition/en/).
66. World Health Organization. (2019). Global strategy on human resources for health: Workforce 2030. World Health Organization. ISBN: 978-92-4-151113-6
67. World Health Organization (2015). Report of the Ebola interim assessment panel. Geneva, Switzerland: World Health Organization.
68. World Health Organization. (2014) Health systems governance for universal health coverage action plan: Department of Health Systems Governance and Financing. In.; 2018.
69. World Health Organization (2005). Revision of the International Health Regulations. Resolution WHA58.3. Geneva, World Health Organization, 2005 (<http://www.who.int/csr/ihr/en>).
70. World Health Organization (2010). Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. World Health Organization. <https://apps.who.int/iris/handle/10665/258734>
71. World Health Organization (2024). Health Systems Governance. Available at [https://www.who.int/health-topics/health-systems-governance#tab=tab\\_1](https://www.who.int/health-topics/health-systems-governance#tab=tab_1)
72. World Health Organization (WHO), (2010). Leadership and governance. Available at: [https://cdn.who.int/media/docs/default-source/service-availability-and-readinessassessment\(sara\)/related-links-\(sara\)/who\\_mbhss\\_2010\\_section6\\_web.pdf?](https://cdn.who.int/media/docs/default-source/service-availability-and-readinessassessment(sara)/related-links-(sara)/who_mbhss_2010_section6_web.pdf?)
73. World Health Organization (2014). Health Systems Governance for Universal Health Coverage. Draft Action plan for the Department of Health Systems Governance and Financing. Available at: <file:///C:/Users/HP/Downloads/WHO-HSS-HSF-2014.01-eng.pdf>
74. World Health Organization (WHO). (2010). the world health report: health systems financing: the path to universal coverage. Geneva (Switzerland): WHO; [accessed 2014 Dec 4]. [http://whqlibdoc.who.int/whr/2010/9789241564021\\_eng.pdf?ua=1](http://whqlibdoc.who.int/whr/2010/9789241564021_eng.pdf?ua=1) [PMC free article] [PubMed] [Google Scholar]
75. WHO (1948). Constitution of the World Health Organization. Geneva: World Health Organisation.
76. Wright, J. (2015). Health Finance & Governance Project. Essential Package of Health Services Country Snapshot: Ghana. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.