

Ghana: Primary Health Care Investment Program (P173168)

Technical Assessment

May 9, 2022

I. Strategic Relevance and Technical Soundness

1. **The Program Development Objective (PDO) is to improve the quality, utilization and equity of primary health care services.** The PDO is aligned to the objectives of the National Health Policy and the Health Sector Medium Term Development Plan for 2022-25 that will operationalize Ghana’s Universal Health Coverage Roadmap. Ghana’s Community-based Health Planning and Services (CHPS) strategy has increased service coverage, particularly for the poor. However, to achieve Universal Health Coverage by the year 2030, additional efforts are needed to improve utilization and quality of primary health care services.

2. **The Program for Result’s (PforR) Results Areas address key bottlenecks affecting utilization, quality and equity of primary health care services in Ghana.** The first Results Area of the PforR, “Development of Networks of Practice and Model Health Centres,” will support the government’s “Network of Practice” strategy aiming at organizing primary health care services at the sub-district level. This will include development and scaling up of Networks of Practice, investments in Model Health Centres, and improvements in technical linkages and quality, community engagement, and human resources and supply chain management for primary health care services. The second Results Area will support key health policy and financing reforms to improve primary health care, notably health financing policy development and supporting measures to improve financing of primary health care services through both the national budget and the National Health Insurance Scheme. The third Results Area will support improvements in the utilization, quality and equity of primary health care services, with a focus on those that particularly benefit from the network strategy. The technical assistance component will support the achievement of results in the above-mentioned Results Areas, while the CERC will provide a mechanism for rapid reallocation of resources to a public health emergency.

A. Results Area 1. Development of Networks of Practice and Model Health Centres

3. **The Ghana Universal Health Coverage Roadmap identifies Networks of Practice (DLI 1) as a key strategy for achieving Universal Health Coverage in the country.** These networks are intended to “maximize efficiencies in the use of resources towards improving quality and coverage” by connecting primary care service points around a *Model Health Centre*. The Sub-District networks will include public and private service providers and will be nested within a District with strong linkages to a District Hospital. The conception of Networks of Practice stems from a pilot program implemented between 2017 and 2019 in two districts in Volta region. That program included 10 networks covering a total of 42 facilities. Though not formally evaluated, the pilot experience suggests that a Network of Practice in the Ghanaian context will contribute to improving the efficiency and quality of primary care services within the network. Networked facilities in Volta Region shared knowledge and logistical resources, communicated more reliably when referring patients, worked together to solve problems, and created a support system for providers.

4. **The plan to scale the Networks of Practice model in Ghana mirrors a growing global interest in addressing poor service quality and improving health outcomes by improving health system design and**

organization. Roberts *et al.* identified health system organization as one of five control knobs to “adjust” when improving performance¹ and The *Lancet Global Health Commission on High Quality Health Systems* called health system design (or redesign) one of four universal actions for improving quality at scale in low-and middle-income countries.² Facility networking as a specific approach to addressing the design of health services at the systems level is also not novel, especially at the primary care level. The Declaration of Alma-Ata acknowledged the importance of linking facilities: “*Primary health care...should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need.*”³

5. Translating these principles into action, district health system strengthening, and vertical integration of care have been on the primary care agenda for decades. Most recently, the term *network of care* was defined and characterized by Carmone *et al.* in a collaborative scoping review published with a series of case studies on facility networks. They defined a network of care 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 prioritizes client-centered, effective, efficient operation and collaborative learning, enabling providers across all levels of care, not excluding the community, to work in teams and share responsibility for health outcomes.*”⁴

6. According to this definition, **effective networks of care must address four primary domains: 1) Agreement and Enabling Environment, 2) Operational Standards, 3) Quality, Efficiency and Responsibility, and 4) Learning and Adaptation.** Though empirical studies are limited and most evidence on facility networking comes from such case studies, effective networks of care are believed to provide continuous care across multiple facilities through multiple mechanisms including shared records and communication. They can facilitate timely and appropriate referral to facilities that have capacity and are prepared to deliver high quality care, and to extend and expand access to more specialized care at the periphery through provider collaboration, knowledge sharing, and digital solutions. System efficiency can be improved by making operations more consistent across facilities, by sharing resources, and by allowing centralization and facility specialization to occur. Several potential risks to facility networking have also been identified, including congestion at “hub” facilities, staff dissatisfaction in peripheral facilities, and access issues also related to facility specialization.^{5,6}

7. This investment will play a critical role not only in financing the scale-up, but also in enabling the Government of Ghana to build on this global experience to create an effective and sustainable primary health care networking model for the country. The government plans to solidify an essential services package and use this as a basis for developing standards, roles, and responsibilities for facilities within the

¹ Roberts, M., Hsiao, W., Berman, P., & Reich, M. (2008). *Getting Health Reform Right: A Guide to Improving Performance and Equity*. : Oxford University Press.

² High-quality health systems in the Sustainable Development Goals era: time for a revolution. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S et al. *The Lancet Global Health*, Volume 6, Issue 11, e1196 - e1252

³ Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978 https://www.who.int/publications/almaata_declaration_en.pdf

⁴ Carmone AE, Kalaris K, Leydon N, Sirivansanti N, Smith JM, Storey A, Malata A. Developing a Common Understanding of Networks of Care through a Scoping Study. *Health Syst Reform*. 2020 Sep 25;6(2):e1810921.

⁵ Iverson KR, Svensson E, Sonderman K, Barthélemy EJ, Citron I, Vaughan KA, Powell BL, Meara JG, Shrimel MG. Decentralization and Regionalization of Surgical Care: A Review of Evidence for the Optimal Distribution of Surgical Services in Low- and Middle-Income Countries. *Int J Health Policy Manag*. 2019 Sep 1;8(9):521-537

⁶ Elrod, James K., and John L. Fortenberry. 2017. “The Hub-and-Spoke Organization Design: An Avenue for Serving Patients Well.” *BMC Health Services Research*.

Networks of Practice. Despite the successes of the Volta pilot, challenges were also documented and are being considered by the government as it creates a scalable model. The pilot networks struggled with the cost of communication, lack of resources for emergency transportation, missing equipment, supplies, and medication, and limited support and outreach from the District level. Network model development is involving several Ministry of Health agencies to avoid “blind spots” in program design. Recognizing the relatively novel nature of their ambitions, the government is also committed to using implementation research to learn from and guide the scale-up.

Table 1. Components of essential health services package⁷

| Primary services | Preventive services | Rehabilitative services |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All out patient care; birth deliveries and attendance; newborn care; acute respiratory tract infection, diarrheal disease, skin disease and ulcers, hypertension, sickle cell, rheumatism, anemia, intestinal worms disorders, fevers; ear, eye, nose and oral health services; diabetes mellitus; mental health, STIs including HIV/AIDS, asthma, cervical and breast cancer treatment; diagnostic and laboratory services; surgeries; fistula management, caesarean sections and management; blood and blood products | Growth monitoring, dietary supplement, immunization; mass residual spraying, chemotherapy and chemoprophylaxis including for helminths and vector borne diseases; screenings for cancers, HIV/AIDS, PMTCT, TB, sickle cell, hypertension and diabetes; family planning, antenatal and post-natal care, IPT for malaria in pregnancy, availability of water, sanitation and hygiene services | Optical aids, hearing aids, orthopedic aids, physiotherapy, dentures, geriatric care, pediatric cardio enablers, speech and language therapy; birth, burns and accidents reconstructive surgery; post-trauma and psychological therapy and counseling |
| Specialized and emergency services | Promotive services | Palliative services |
| Mental health; poisons, injuries, burns and pre-and-in hospital emergencies; incision and drainage of abscesses, and excision of lumps and hemorrhoidectomy; child cardiological and congenital surgeries; fistula management, cervical and prostate cancer case management; caesarean sections and management; blood and blood products | Control of use of alcohol, tobacco and harmful substances; awareness on: regular medical check-ups, mental health, cancers, diabetes, renal disease, safe sex, STIs and family planning, road safety, healthy eating, physical activity and wellbeing, gender-based violence, hygiene and sanitation and environmental safety | Home-based care of the aged; terminal point care |

8. **The Government of Ghana has identified Health Centres, a level of care that falls between first level hospitals and health posts (community-based health planning and services facilities), as the “hubs” for their networks of practice (DLI 1).** This level of care is relatively under-utilized by populations who tend to bypass it for higher-level care in hospitals. In a recent study in Ghana, 19 percent of people bypassed primary care facilities for antenatal care, 33 percent for childbirth and 38 percent for postnatal care. That study also showed that higher education and income were associated with bypassing.⁸ The literature globally is consistent with the findings from the Ghanaian study, showing that health system users bypass lower quality facilities in search of higher quality care. A 2020 analysis indicated that 30 percent of Ghanaians seek services for common primary care conditions such as childhood diarrhea, cough, or fever, at public hospitals, and nearly 50 percent use public hospitals for antenatal care.⁹ This

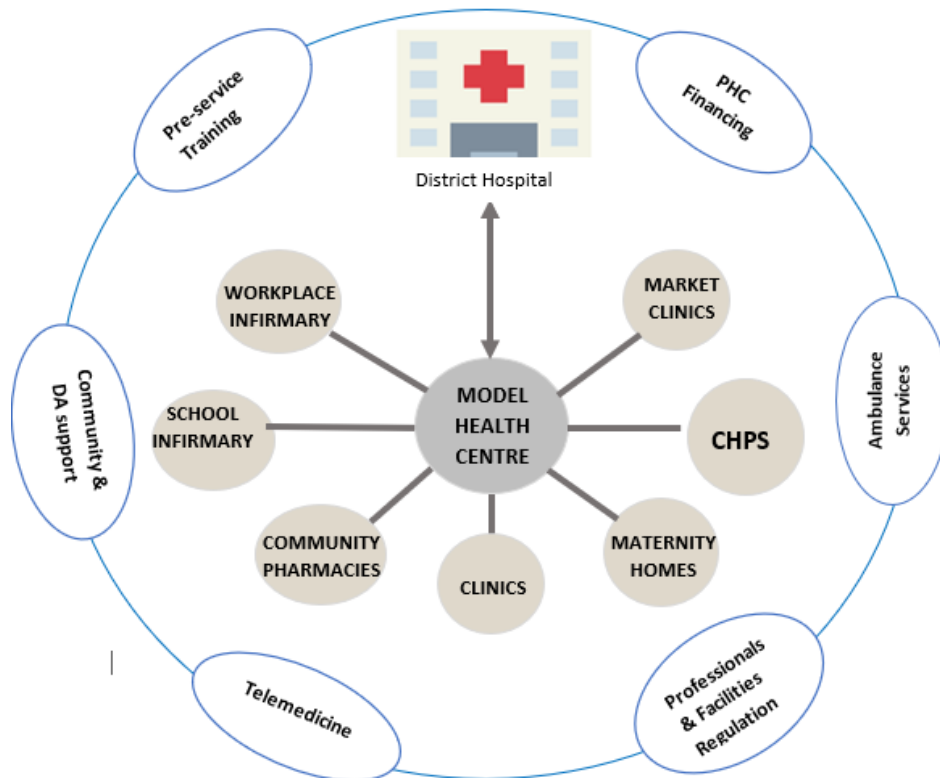
⁷ Republic of Ghana. 2020. Ghana’s Roadmap for Attaining Universal Health Coverage, 2020-2020. Ministry of Health.

⁸ Amoro, V.A., Abiuro, G.A. & Alatinga, K.A. Bypassing primary healthcare facilities for maternal healthcare in North West Ghana: socio-economic correlates and financial implications. *BMC Health Serv Res* **21**, 545 (2021).

⁹ Arsenault C, Kim MK, Aryal A, Faye A, Joseph JP, Kassa M, Degfie TT, Yahya T, Kruk ME. Hospital-provision of essential primary

bypassing is believed to be encouraged by poor quality primary health care. Empirical work supports this; a total of 23,615 Ghanaians died in 2016 from conditions that could have been prevented by high quality care.¹⁰ Looking specifically at the level of the Health Centre, only 11 facilities (4 percent) have met basic primary care obstetric and newborn care functions.¹¹

Figure 1. Network of Practice model



9. **The government hopes to revitalize and rationalize its primary care system through a program to transform mid-level facilities into Model Health Centres. Effective networks of care will hinge on the ability of these health centers to deliver high quality care, and also to function as an organizing node for the networks. The effectiveness of these Model Health Centres, in turn, will depend on the strength of the networks.** The government plans to use a phased approach to strengthen Health Centres to achieve Model Health Centre status. It will ensure that they meet all necessary primary care standards and deliver a full set of critical services, including the Basic Emergency Obstetric and Newborn Care signal functions. These Model Health Centres will then form the “hubs” for Sub-District networks which will be headed by the Sub-District Head at the Model Health Centre. District Health Management Teams will support Sub-District networks through regular supportive supervision. Detailed standards for Model Health Centres are being developed and will cover inputs to care, such as human resources, equipment, medications, and supplies, as well processes of care including correct diagnosis and treatment, respectful care, effective counseling, and continuity of care.

care in 56 countries: determinants and quality. Bull World Health Organ. 2020 Nov 1;98(11):735-746D.

¹⁰ Kruk et al 'Mortality due to low quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries' The Lancet, 2018

¹¹ 2020 Ghana EmONC assessment

10. **Reliable supply of medicines and other consumables is critical to delivery of quality of primary health care services (DLI 2).** Ghana has invested in improved supply chain management, including scaling-up use of an information system (Ghana Integrated Logistics Management Information System), warehousing, transport, and last-mile distribution. The PforR will support improved availability of medicines and other consumables at the Health Centre level as a reflection of improvements in the various parts of the procurement, supply, and delivery chain.
11. **The Networks of Practice and Model Health Centres will require sufficient skilled human resources to adequately deliver the essential services package (DLI 2).** Ghana's 2020 National Human Resource Policy and Strategies for Health recognizes the epidemiological transition in the country and the need for the health workforce to be skilled and resourced to meet the changing burden of disease.¹² The strategy includes six objectives: to train and develop the requisite numbers and mix of health workers; to have a fair recruitment process and equitable distribution; institute mechanisms to retain health workers in deprived areas; ensure optimal performance; operate effective governance and collaborate with the private sector. This strategy is complemented by the 2018 staffing norms for different public facilities, competencies for the different cadres at CHPS, and standards for doctor and nurse preservice training.
12. **Ghana has seen a significant increase in the health workforce numbers in recent years; however, this increase has some imbalance in the cadres of workers available and their distribution between urban and rural populations.** A 2018 analysis estimated that available human resources for health were 68 percent of what would be required for Universal Health Coverage and that the biggest gaps are lab technicians, intensive care nurses, and specialists such as obstetricians and gynaecologists, and paediatricians.¹³ This is born out in a recent study of capacities for emergency obstetric care. A targeted response to meet these gaps would be strategic rather than general human resource expansion.
13. **There has been a significant increase in nursing and midwifery numbers in the last 5-10 years in response to the expansion of the CHPS services.** In 2006 the number of public sector nurses and midwives was 9,940, and by 2016 this had increased fivefold to 59,813.¹⁴ Most Community Health Nurses start work at the CHPS with a two-year qualification and go on to convert their diploma into a bachelor level and/or midwifery qualification. Reflecting this demand, many new training colleges are producing graduates of variable quality and competency. There are many more nurses graduating now than there are public sector positions and so there is concern regarding their maintenance of professional skills. This recent expansion of nursing health workforce has also created a skewing of the age and experience with average age of a nurse being younger and less experienced, with implications for how staff are nurtured and supported.¹⁵ Yet the additional pool of qualified nurses potentially represents an opportunity for task shifting to address other cadre shortages. In another recent paper Asamani did the costing of meeting these human resource gaps and found that there are efficiencies to be realized through addressing the inequities of where the current workforce is compared to population needs.¹⁶ While this is complex to address, it is easier to address a shortage if they are in the country rather than if they were not present at

¹² Ministry of Health, Ghana (2020) National Human Resource Policy and Strategies for Health

¹³ Asamani J & Chebere M et al., (2018) Forecast of health care Facilities and Health Workforce Requirements for the Public Sector in Ghana, 2016-2026 *International Journal of health Policy and Management* 7(11), 1040-1052

¹⁴ Asamani J, Amertil N, et al (2020) The imperative of evidence-based health workforce planning and implementation: lessons from nurses and midwives unemployment in Ghana. *Human Resources for Health* 18:16

¹⁵ Ibid.

¹⁶ Asamani J, Ismaila H, et al., (2021) The cost of health workforce gaps and inequitable distribution in the Ghana Health Service: an analysis towards evidence-based health workforce planning and management *Human Resources for Health*. 19:43

all. The PforR will support improved staffing at the Health Centre level, notably assignment of Physician Assistants, as a tracer for improvements in health human resource allocation more generally.

14. **Accountability and quality of services provided under the Networks of Practice will be fostered by community engagement and technical linkages between levels of care (DLI 2).** The Community Scorecard and Community Health Action Plans are accountability tools to improve quality of care experienced by users. Currently, the Community Scorecard is being implemented at the CHPS level. The PforR will support its adaptation and implementation at the level of the Networks of Practice, centered on the Model Health Centres. There are ongoing efforts to integrate Community Scorecard reporting into DHIMS2 and the scorecard web platform to show real time scoring data and actions taken in response to the quarterly Community Health Action Plans. The nine indicators from the Community Score Card System are: Caring, Respectful & Compassionate care, Waiting time for health service provision, Availability of medicines, diagnostic services and supplies, Availability, accessibility and quality of health services & infrastructure, Cleanness and safety of facility, Network of Practice leadership and management of facilities, Home visits by Community Health Workers, and Assessment of National Health Insurance Scheme services. In addition, the Networks of Practice are designed to foster technical supervision and support between levels of care, notably between the Model Health Centres and CHPS Compounds and other community-level services within the networks, and between District Hospitals and the Networks of Practice centered on the Model Health Centres. Support to the networks by the District Hospital level is critical given the current concentration at the district level of technical expertise, human resources, and other resources

B. Results Area 2. Primary Health Care Policy and Financing

15. **The PforR will support health policy and health financing tools (DLI 3) to operationalize the roadmap toward Universal Health Coverage that is centered around the reorganization of services into Networks of Practice.** The Health Sector Medium Term Development Plan for 2022-2025 depicts the objectives and priority strategies for the health sector, including the networking strategy, and the Revised Common Management Arrangements and Holistic Assessment. These will help articulating stakeholders, including health sector Development Partners, toward the implementation of the government's plan. Specific health financing tools supported by the PforR, such as the regular production of yearly National Health Accounts and approval of guidelines for the use of Internally Generated Funds, will enhance the capacity of more effective and sustainable financial planning in the health system to implement the government vision toward primary-care centered Universal Health Coverage.

16. **The PforR will support a comprehensive strategy to improve financing for primary health care services through both the national budget and the National Health Insurance Scheme (DLIs 3 and 4).** There are two main sources of public funds to the health sector: (i) the national budget, that covers primarily wages and salaries; and (ii) National Health Insurance payments to health facilities (denominated Internally Generated Funds) that is the main source of public financing for goods and services at that level. However, National Health Insurance does not reimburse preventive and community-based primary health services that are not currently included in its benefit package, and payments often reach health facilities late. The PforR will support a comprehensive strategy to expand public financing for primary health services and reduce a financing gap that affects the sustainable provision of primary health services: (i) include in the national budget financing for goods and services at the primary level; (ii) increase National Health Insurance Scheme coverage; (iii) reduce the time in processing claims for primary health care

services reimbursed by National Health Insurance; and (iv) expand the National Health Insurance Scheme benefit package to include preventive services.

17. Expansion of National Health Insurance Scheme coverage will contribute to improving the utilization of health care services (DLI 4). Numerous studies that have shown that enrollment in the National Health Insurance Scheme is positively associated with higher utilization of antenatal and neonatal health care services.¹⁷ Increased insurance coverage will improve financial protection, reduce the risks of impoverishment due to health care costs, and increase financial access to services by the poor. The current level of coverage is 54 percent of the population and the PforR will support further expansion. In addition, the PforR will foster a linkage between National Health Insurance Scheme coverage and Ghana National Household Registry which will allow for coverage expansion among the indigent population, thus improving equity in the utilization of health services.

18. Ghana's Universal Health Coverage Roadmap calls for increased financing of primary health care services by the National Health Insurance Scheme (DLIs 3 and 4). In 2018, 21 percent of National Health Insurance Scheme payments for services were at the primary level. At the same time, claims payments from the National Health Insurance Scheme are the most important source of financial resources managed directly by service providers at the district and sub-district levels. Improved predictability of financing at the primary level will be fostered by more efficient claims processing and payment. Policy development will be needed in various areas to enable the Scheme to sustainably increase support to primary health care services, including actuarial modeling, piloting of a revised provider-payment mechanism, and revision of the benefits package to include selected individually-provided preventive health services that are currently not covered by the Scheme.

19. The PforR will also support public financial management improvements to enhance transparency and timely management of information on the use of public funds at primary health care level (DLI 5).¹⁸ At the central level, the PforR will support improved timeliness of financial reporting, including data disaggregated to the primary health care services level. Financial management reporting and procedures will be reviewed and revised to meet the needs of the new Networks of Practice, and staff at the district and sub-district level will receive the necessary training. Currently, management of Internally Generated Funds received by primary health care services (notably from claims payments by the National Health Insurance Scheme) are managed by sub-district service providers with oversight by

¹⁷ Brugiavini, A. and Pace, N., 2016. Extending health insurance in Ghana: effects of the National Health Insurance Scheme on maternity care. *Health economics review*, 6(1), p.7. Dixon, J., Tenkorang, E.Y., Luginaah, I.N., Kuuire, V.Z. and Boateng, G.O., 2014. National health insurance scheme enrolment and antenatal care among women in Ghana: is there any relationship? *Tropical Medicine & International Health*, 19(1), pp.98-106. 2014. Bosomprah, S., Ragno, P.L., Gros, C. and Banskota, H., 2015. Health insurance and maternal, newborn services utilisation and under-five mortality. *Archives of Public Health*, 73(1), p.51. Fenny, A.P., Asante, F.A., Arhinful, D.K., Kusi, A., Parmar, D. and Williams, G., 2016. Who uses outpatient healthcare services under Ghana's health protection scheme and why? *BMC health services research*, 16(1), p.174. Bagnoli, L., 2017. Does National Health Insurance Improve Children's Health? National and Regional Evidence from Ghana. ECARES Working Papers. Osei Asibey, B. and Agyemang, S., 2017. Analysing the Influence of Health Insurance Status on Peoples' Health Seeking Behaviour in Rural Ghana. *Journal of tropical medicine*, 2017. Gajate-Garrido, G. and Ahiadeke, C., 2015. The effect of insurance enrollment on maternal and child health care utilization: The case of Ghana (Vol. 1495). *Intl Food Policy Res Inst.* Blanchet, N.J., Fink, G. and Osei-Akoto, I., 2012. The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana medical journal*, 46(2), pp.76-84. Gobah, F.K. and Zhang, L., 2011. The National Health Insurance Scheme in Ghana: prospects and challenges: a cross-sectional evidence. *Global Journal of Health Science*, 3(2), p.90.

¹⁸ Cashin, C., Bloom, D., Sparkes, S., Barroy, H., Kutzin, J., O'Dougherty, S. and World Health Organization, 2017. Aligning public financial management and health financing: sustaining progress toward universal health coverage (No. WHO/HIS/HGF/HFWorkingPaper/17.4). World Health Organization.

the District Health Management Team. The PforR will support capacity development to integrate management of Internally Generated Funds into the Ghana Integrated Financial Management Information System (GIFMIS) at the district level, in coordination with the World Bank-financed Public Financial Management for Service Delivery Program (P176445) that is under preparation.

C. Results Area 3. Primary Health Care Service Improvements

20. **Results supported by the PforR will include improvements coverage, quality and equity of primary health care services that will benefit from the networking strategy. This will include maternal and neonatal care, as the PforR will support the service delivery capacities and referral systems for emergency care through the Model Health centers and the Networks of Practice (DLI 6).** There has been significant progress in access to care during pregnancy and childbirth in Ghana with both antenatal care and facility-based births increasing significantly over the last 15 years. This progress has slowed in the last five years, and both neonatal mortality and stillbirth rates have not reduced reflecting a quality gap, particularly in the peripartum and postnatal period.

21. **The 2020 Ghana EmONC Assessment findings confirm this quality gap; just 20 percent of existing EmONC facilities are functional, and of the 72 percent of women who gave birth in a health facility, just a third (26 percent of all mothers) delivered in a facility that is EmONC functional.**¹⁹ There are geographic inequities with low coverage in the north-eastern regions. Shortcomings involve both staffing shortages and deficits in drugs, supplies and equipment, with the equipment shortages being a significant determinant of non-functioning EmONC facilities. According to the same survey, one in five women required referral from health centers to higher levels of care, yet just 10 percent of health facilities had a functional referral vehicle to transport women and newborns with complications.

22. **Ghana's Ministry of Health has endorsed the Every Newborn Action Plan and the Ending Preventable Maternal Mortality global targets that will inform this project.**²⁰ Specifically, the targets for 2025 include national level and subnational targets. These include 80 percent of districts having over 70 percent of women receiving at least four antenatal visits; 80 percent of districts achieving over 80 percent coverage of facility-based births, with more than half of all women being able to access an EmOC facility within 2 hours of travel time; 80 percent of districts having over 60 percent of women and newborns receiving postnatal care, and 80 percent of districts being able to provide care for the small and sick newborn. Just increasing coverage of services is insufficient, however, and Ghana has placed a priority on quality improvement. The National Health Care Quality Strategy (2017-2021) includes the following goals: to develop a coordinated health care quality system in the areas of quality planning, quality control, and quality improvement, including improved use of data for evidence-based decision-making; and to improve client experience by being responsive to the health needs and aspirations of the patient and the community.

23. The Ministry of Health and Ghana Health Service participate in the Quality of Care Network (which sets as its goal to halve facility based maternal deaths) and with support from Development Partners, have strengthened quality improvement processes in 12 focus learning districts in six regions. In 2021 the

¹⁹ 2020 Ghana EmONC assessment

²⁰ World Health Organization, United National Population Fund (2021). *Ending Preventable Maternal Mortality (EPMM) A renewed focus for improving maternal and newborn health and wellbeing*. Geneva.

Quality of Care Network initiated work expanding the quality standards for the care of small and sick newborns, and paediatric care.

24. The findings in the EmONC survey point to an unfinished agenda for maternal and newborn health. High quality care requires that all women can access the care they need in a timely way, including referrals for complications during birth. The project will support the realization of this goal through ensuring that the Networks of Practice have systems in place that ensure skilled providers are working in an enabling environment that includes the requisite equipment, medicines, and supplies, and which supports health workers to provide respectful maternity care, and evidenced based clinical care including timely referrals where necessary for the health of the mother or newborn.

25. **The PforR will support improvements in family planning services at the primary level (DLI 6).** In 2017, the total fertility rate in Ghana was 3.3, which slowly declined from 4.4 in 2003. Fertility in rural areas, at 4.7, is considerably higher than in urban areas, at 3.3, but there has been little decline in fertility in urban areas since 2003. Socio-economic factors, especially gender roles, are important determinants of fertility. The total fertility rate among the lowest wealth quintile was 5.7, compared to 2.8 among the highest quintile. At the same time, access to family planning is necessary for households to have the means to limit family size. In 2017, 25 percent of women aged 15-49 years were using modern contraceptive methods, a slow increase from 19 percent in 2003. There is little difference in modern contraceptive prevalence between rural and urban areas. There are modest differences between socio-economic groups in utilization of modern contraceptives, as prevalence was 23 percent among the lowest quintile and 21 percent among the highest. Government health care providers are the most important source of family planning. In 2017, among women aged 15-49 years who were non-users of contraceptives, 76 percent know of a government provider as a source of family planning, compared to 21 percent who knew of a private sector provider.²¹ The COVID-19 pandemic caused utilization of family planning services to drop by 10 percent, and utilization levels have not fully recovered.²² Support by the PforR to family planning services at the sub-district level will improve access to contraceptives, bringing services closer to households. It will also provide support for family planning coverage to recover from the impact of the COVID-19 pandemic.

26. **The PforR will support improvements in primary health care services for adolescents (DLI 6).** High adolescent fertility has long been a concern in Ghana. In 2017, 14 percent of women aged 15-19 years had begun childbearing – this proportion reached 32 percent among those aged 19 years. Eighteen percent of women in this age group in rural areas had begun childbearing, compared to 11 percent in urban areas. In this age group, only 7 percent utilize modern family planning methods.²³ Anemia among adolescent girls is an indicator of nutritional status with adverse impacts on the girls themselves as well as on the children of those who become mothers. In 2014, among women aged 15-49 years, the age group 15-19 years had the highest prevalence of anemia, at 48 percent.²⁴ The PforR will support improvements in adolescent health services among the different outlets incorporated into the Networks of Practice, including schools and pharmacies as well as government health services.

²¹ 2017 Ghana Maternal Health Survey.

²² GFF. 2021. Monitoring Essential Health Services in Times of COVID-19, Ghana: November 2021.

²³ 2017 Ghana Maternal Health Survey.

²⁴ 2014 Ghana Demographic and Health Survey.

27. **The PforR will support reaching poor and vulnerable children with basic vaccination (DLI 6).** Ghana has relatively high levels of child vaccination coverage nationally; in 2017-18, 79 percent of children aged 12-23 months were covered with all basic recommended antigens, while 96 percent had received one of the most common vaccinations – the first dose of the Pentavalent vaccine (Penta1). Currently, the national estimate of Penta1 coverage is 97 percent. The three percent of children who have not received Penta1 are considered “zero dose,” with no access to this most basic and widely available of preventive services.²⁵ These children, among the poorest and most vulnerable, are concentrated in a number of districts where Penta1 coverage is significantly lower than the national average, around 85 percent. The PforR will target these districts to support efforts to reach “zero dose” children with Penta1 vaccination, in turn greatly increasing the prospects that they will receive other critical antigens. At the same time, childhood immunization services were among those most affected by the COVID-19 pandemic, with drops in coverage of about six percent.²⁶ The PforR will directly support continued recovery from the impact of the pandemic on child immunization coverage.

28. **The PforR will contribute to development of non-communicable disease services at the primary level (DLI 6).** As part of preparation of the PforR, a rapid assessment of non-communicable disease management best practices was done, including review of policy documents and key informant interviews. The assessment identified a number of challenges. In the area of financing, while Ghana recently adopted a national policy and strategy on non-communicable diseases, there is insufficient budget allocation for scale-up of relevant services. While some care for non-communicable diseases is covered by the National Health Insurance Scheme, there are access challenges. Recent assessments of health facility capacity to deliver non-communicable disease services reveal gaps at the primary care level, including in the availability of essential medicines and services for screening and management of hypertension and diabetes. There is a lack of clinical guidelines and decision support tools to create a standard of care for non-communicable diseases, along with pathways to standardize the continuum of care across levels of the health system. The role of care providers at the community levels is currently limited. There is a lack of standardized indicators on non-communicable disease service delivery or outcomes that are regularly monitored through Ghana’s DHIMS2, and a need for registers to facilitate monitoring and follow-up of patients with key non-communicable diseases (including hypertension and diabetes). The government strategy involves the following elements: (a) reducing exposure to risk factors that contribute to non-communicable diseases; (b) strengthening early detection and management to reduce morbidity and mortality; (c) strengthening the health system for non-communicable disease prevention and control; (d) strengthening multi-sectoral collaboration for prevention and control; and (e) ensuring sustainable funding and other resources. The PforR will support implementation of the strategy with a focus on development of standards and patient pathways to make best use of the Networks of Practice to improve the delivery and quality of non-communicable disease services that require coordination between different levels of care. The PforR will support results in terms of increased numbers of hypertensive patients being diagnosed at the Health Centre level, which require improvements in both service delivery capacity and the reporting system. Hypertension, along with being among the most important risk factors for non-communicable diseases, can act as a tracer condition, reflecting improvements in the provision of services for a range of other conditions.

²⁵ <https://www.gavi.org/vaccineswork/zero-dose-child-explained>

²⁶ GFF. 2021. Monitoring Essential Health Services in Times of COVID-19, Ghana: November 2021.

E. Monitoring and Evaluation

29. **Robust performance monitoring with a focus on data use will play a critical role in the successful implementation of the Network of Practice model.** Monitoring progress against stated objectives linked to the expected impact of the Networks of Practice is comprised of three core elements: (a) The selection of priority indicators that best monitor outputs and outcomes linked to implementation plans; (b) The implementation of or update to a process to routinely collect the priority indicators; and (c) The implementation and institutionalization of a routine review process to ensure a systematized approach to not only the review of progress over time, but to enable course correction and future implementation planning.

30. **Improving the use of data for decision-making will require addressing a number of challenges.** These include: (a) lack of interoperability across data systems so that information is not brought together in a routine way to inform decision making; (b) supportive supervision strategies exist and are well positioned to support quality of care initiatives, however routine collection, validation and use of supervision data is not institutionalized; (c) lack of localized data on community needs as well as patient level data that supports a patient-center approach; and (d) limited capacities and systems for effective use of data for decision-making at the district and sub-district levels.

31. **The PforR will leverage existing country systems and processes, notably the District Health Information Management System (DHIMS2), which is the backbone of the primary health care performance monitoring system in Ghana.** DHIMS2 receives data collected in the districts from the community and public health services that submit reports to the district hospitals for data entry. DHIMS2 is accessible in all 170 districts in Ghana and contains a list of 90 percent of the health care facilities across the country. Despite strong rates of reporting by the majority of facilities into DHIMS2, opportunities exist to improve the coordination of data collection, including non-communicable diseases services, increase reporting from private facilities, and leverage the system to link to other systems or combine with other data sets. In addition, the Ghana e-Health strategy serves as an important framework from which plans for strengthening information use across the planned service delivery models can be developed and operationalized. The Ghana Health Service E-tracker is currently being scaled up to capture data at service delivery points, with automatic upload into DHIMS2 and the preparation of Monthly Performance Feedback reports that score each region based on its performance. The national framework for quality-of-care improvement harmonizes monitoring tools and processes among various agencies, including a systematic approach for the implementation of the quality improvement through supervision/quality counseling. The Community Scorecard and Community Health Action Plans are accountability tools to improve quality of care experienced by users. There are ongoing efforts to integrate Community Scorecard reporting into DHIMS2 and the scorecard web platform to show real time scoring data and actions taken in response to the quarterly Community Health Action Plans.

32. **The PforR results framework indicators will rely on well-developed government monitoring and reporting systems.** The Ministry of Health has defined monitoring and performance indicators that rely on reporting through the DHIMS2, and are the subject of regular performance reviews, notably the annual Holistic Assessment of the Health Sector.²⁷ The PDO indicators and other key results will be reflected in the results framework of the 2022-25 Health Sector Medium Term Development Plan and subject to the

²⁷ Republic of Ghana. Holistic Assessment of the Health Sector: 2020. Ministry of Health.

Holistic Assessment and other reviews. The PforR DLIs and DLRs will be reported on the basis of data from the DHIMS2 and other administrative reporting mechanisms. Indicators reflecting access to and utilization of health services (for example, family planning) will rely on the DHIMS2. DHIMS2 is a web-based system that receives and processes data on service delivery and health outcomes from all government health facilities and associated faith-based health services. Data are entered at the facility level, and at the sub-district and district levels on behalf of individual facilities when they cannot directly access the system. The DHIMS2 also accommodates administrative reporting that will be used for reporting on service delivery capacities (such as staffing of Networks of Practice). The National Health Insurance Authority manages information systems for data and reporting on enrolment and claims. Reporting on DLRs reflecting more complex service delivery capacities (such as number of Networks of Practice functioning according to standards) will be subject of specific attention, separate from routine reporting. Reporting on process-oriented DLRs (for example, adoption of standards, plans, and budgets) will be straightforward. The Ministry of Health's existing inter-agency coordination structure will receive, review and consolidate reported data on the DLIs and the operation's Results Framework. Finally, implementation research on the Networks of Practice initiative will be supported by the Technical Assistance Component, with technical support by the World Bank and other partners.

F. Institutional Arrangements

33. **The implementation, monitoring and supervision arrangement of the Program follow existing national and sub-national country systems.** The Ministry of Health and its agencies will play the roles of policy, planning, budgeting, service delivery, management, financing, regulation, and administration under the Program at the national, regional, district and sub-district levels. Implementation of the Program will follow the arrangements set out in the Common Management Arrangement of the Health Sector. The Common Management Arrangement sets out arrangements for effective collaboration and coordination within the health sector describing the interrelationships within the sector and ensuring effective achievement of the Health Sector Medium Term Development Plan. Key functions of implementing agencies of the Program include policy and planning; design and delivery of health services, regulation and financing.

34. **The main implementing agencies for the Program are the Ministry of Health, the Ghana Health Service, and the National Health Insurance Authority.** The Ministry of Health is responsible for leadership and oversight of the sector and the development and review of policies. Under the PforR, the Ministry of Health will play its mandated role of providing oversight, facilitating decision-making, and ensuring national cross-agency and cross-sectoral coordination when necessary. The Ministry of Health will coordinate with related agencies, development partners and other relevant stakeholders during Program implementation. The Ghana Health Service operates the government health service delivery system through the decentralized regional, district and sub-districts management teams. The Ghana Health Service will be responsible for the implementation of the technical aspects of the Program such as the creation and operationalization of the networks of practice. The Ghana Health Service will at the implementation level coordinate with other service delivery agencies such as the faith-based and private health service delivery organizations, the Ambulance Service as well as the District the Assembly to ensure coordinated implementation of the network of practice. Regional Health Management Teams will provide technical support, monitoring and supervision. District Health Management Teams are responsible for organizing and managing the local provision of health services. The core activities of creating and making networks functional will occur at the Sub-district level. At the Sub-district level, the provision of health

services within the Networks of Practice will be planned and implemented. At each level, fiduciary management is ensured by Budget Management Centers. The National Health Insurance Authority manages the National Health Insurance Scheme. The National Health Insurance Scheme purchases health services and is responsible for the regulation of private health insurance operations. Under the Program, the National Health Insurance Authority will collaborate with the Ministry of Health, Ghana Health Service and HeFRA on various aspects of the networks' creation and functioning. The National Health Insurance Authority will also collaborate with the National Household Registry to facilitate enrollment of indigents.

35. Other Agencies of the Ministry of Health will contribute to the achievement of Program results. The Health Facilities Regulatory Agency (HeFRA), which is responsible for licensing and regulation of health services will play a key role to ensure that Wellness Centres, Model Health Centres and Networks of Practice are accredited to provide quality health care to the target population. The National Ambulance Service, responsible for referral transport and pre-hospital emergency care; the Medical and Dental, Nurses and Midwifery and the Allied Health Professional Councils, are responsible for training and regulation of health workers. The Ministry of Health, Ghana Health Service and National Health Insurance Authority will collaborate with these agencies and other relevant stakeholders to ensure the achievement of the Program results. This will include engagement with agencies outside the health sector such as the Ghana Education Service, on adolescent and school health issues; and the Ministry of Gender, Children and Social Protection, on issues related to the insurance enrollment of vulnerable groups.

36. The PforR will require creation of a Verification Oversight Committee. The Ministry of Health's existing inter-agency coordination structure will be responsible for regular monitoring of the DLIs and DLRs and coordination on DLI reporting and verification. The Health Sector Working Group and sector review meetings will serve as the platform for sharing information on the progress of the Program's implementation. There will be at least quarterly updates on the Program at the national level. A Verification Oversight Committee will be established to ensure the independence of the verification function. It will be composed of respected figures from academic and the non-governmental sector, and will notably be responsible for reviewing verification reports before they are transmitted to the government by the verification agency. The composition and terms of reference for the Verification Agency and Verification Oversight Committee, acceptable to the World Bank, will be developed. A Operation Manual will describe reporting processes and verification methodologies and plans.

37. The Technical Assistance Component will be implemented by the Ministry of Health, the Ghana Health Service, and the National Health Insurance Authority, following the World Bank's Investment Project Financing procedures, including fiduciary management and Environmental and Social requirements.

38. Program implementation and supervision will be decentralized to the regional District and Sub-District level. Following the regular practices of the health sector; the regional, district and sub-district leadership of the implementing agencies will be responsible for the implementation of the Program at the sub-national levels. At the regional level, the Regional Director of Health Service will be responsible for implementing and monitoring of project activities with the support of the Regional Health Management Team. The Regional Director will collaborate with the other related government agencies at the regional level to ensure stakeholder buy-in. The Regional Directorates of the National Health Insurance Authority will liaise with their national technical officers of the Authority to implement relevant activities. At the regional level, Program-related issues will be discussed and addressed within the framework of the Social

Sector Sub-committee of the Regional Coordinating Council (RCC). The District Director of Health Service will coordinate the planning and implementation of the Program at the district level with support from the District Health Management Team. Depending on the local context of the District, the District Director of Health Service, working with the District Health Management Team, will determine action plans to achieve Program results. The Sub-District Health Team will, in accordance with standards for the Networks of Practice will lead and coordinate facilities under the networks.

II. Program Expenditure Framework

39. **The overall budget for the Ministry of Health for 2022-25 is estimated at US\$6.96 billion. The strategic document outlining the Government of Ghana’s support to the health sector is the four-year Ministry of Health Medium Term Expenditure Framework which is revised annually on the basis of actual budget availability.** The Ministry of Health budget is sourced from multilateral and bilateral development partner funding (loans and grants); retained Internally Generated Funds from health facilities and agencies under the Ministry; and domestic tax and non-tax revenues. The program finances workers’ compensation, capital expenditure and recurrent cost for goods and services. Over 90 percent of the domestic revenue component of the budget is allocated to compensation whereas external funds and Internally Generated Funds (IGF) are used mainly for capital expenditure and provision of goods and services. The Ministry of Health’s Medium Term Expenditure Framework encompasses four programs as indicated in the table below.

40. **The National Health Insurance Scheme is mainly financed from a budget allocation approved by the Parliament of Ghana for the payment of claims, operations and investments.** National Health Insurance Scheme resources consist mainly of taxes and workers’ social security contributions, accounting for over 90 percent of total financing, and other sources including premium payments from the informal sector, accounting for the remaining 10 percent. Claims payments constitute about 60 percent of National Health Insurance Scheme expenditures. The National Health Insurance Scheme nonetheless aligns its operations with the Health Sector Medium-Term Development Plan. The Scheme plays a crucial role in the implementation of the Ministry of Health’s program as the largest purchaser of health services. As one of the key expected outcomes of the PforR is to improve efficiency in claims processing and management, National Health Insurance Scheme investments in e-claims processing and management will be needed.

Table 2. Programs under the Ministry of Health Medium Term Expenditure Framework

| Program | Program Code | Program Description |
|---------|--------------|-------------------------------------------|
| 1 | 02901 | Management and Administration |
| 2 | 02902 | Health Services Delivery |
| 3 | 02903 | Tertiary and Specialized Services |
| 4 | 02904 | Human Resource Development and Management |
| 5 | 02905 | Health Sector Regulation |

41. **The total cost of the PforR Program is US\$374.2 million,** of which Government of Ghana funding is US\$193.2 million, World Bank IDA financing is US\$150.0 million, US\$31.0 million grant funding from the GFF. The following table shows the total Program funding. The Program cost comprises of investments and incremental costs at the primary health care level, particularly on the new health service delivery model - the Network of Practice and Model Health Centres. Expenditures include consultancies to support the development of policies and guidelines; maintenance; rehabilitation; refurbishment and upgrade of

existing assets at the primary care level; construction of health centres; procurement of equipment and information technology hardware; training and other capacity-building activities; monitoring and evaluation; human resources and other operational expenditures required to create and make the Networks of Practice and Model Health Centres functional and achieve the remaining Program results. The Program Expenditure Framework is estimated on the basis of projects from the current national budget for the relevant budget lines. Activities that are deemed to have adverse environmental and social impacts will not be ineligible under the Program and any single high-value contract (exceeds US\$30 million) will be excluded from the program. The Technical Assistance Component will support critical technical work such as contracting a local and international consultant to develop information technology systems, conduct relevant assessments and support capacity building activities to complement the PforR Program. The Technical Assistance Component will also be the source of funding for the Verification Agent for the Program.

Table 3. Program Expenditure Framework (US\$)

| EXPENDITURE | 2022 | 2023 | 2024 | 2025 | Total |
|----------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| 029 - Ministry of Health HQ | 11,037,665 | 11,066,798 | 11,097,388 | 11,129,508 | 44,331,360 |
| <i>Use of goods and services</i> | <i>11,037,665</i> | <i>11,066,798</i> | <i>11,097,388</i> | <i>11,129,508</i> | <i>44,331,360</i> |
| 0290201 - Ghana Health Services HQ | 1,511,981 | 1,512,580 | 1,513,209 | 1,583,215 | 6,120,985 |
| <i>Use of goods and services</i> | <i>1,511,981</i> | <i>1,512,580</i> | <i>1,513,209</i> | <i>1,583,215</i> | <i>6,120,985</i> |
| Regional Health Directorates (0290202, 0290203, 0290205, 0290206) | 2,024,693 | 2,325,928 | 2,327,224 | 2,328,585 | 9,006,429 |
| <i>Use of goods and services</i> | <i>1,524,693</i> | <i>1,525,928</i> | <i>1,527,224</i> | <i>1,528,585</i> | <i>6,106,429</i> |
| <i>Capital</i> | <i>500,000</i> | <i>800,000</i> | <i>800,000</i> | <i>800,000</i> | <i>2,900,000</i> |
| 02908 - District Health Administration | 5,356,170 | 5,373,978 | 5,392,677 | 5,412,311 | 21,535,136 |
| <i>Use of goods and services</i> | <i>3,356,170</i> | <i>3,373,978</i> | <i>3,392,677</i> | <i>3,412,311</i> | <i>13,535,136</i> |
| <i>Capital</i> | <i>2,000,000</i> | <i>2,000,000</i> | <i>2,000,000</i> | <i>2,000,000</i> | <i>8,000,000</i> |
| 02912 - Sub Districts-Health Centres, 02911 - Sub District Clinics & 02913 - Sub Districts-CHPS Compounds | 54,374,844 | 56,216,399 | 58,077,219 | 60,031,080 | 228,699,543 |
| <i>Compensation of employees</i> | <i>35,374,844</i> | <i>37,216,399</i> | <i>39,077,219</i> | <i>41,031,080</i> | <i>152,699,543</i> |
| <i>Use of goods and services</i> | <i>10,000,000</i> | <i>10,000,000</i> | <i>10,000,000</i> | <i>10,000,000</i> | <i>40,000,000</i> |
| <i>Capital</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>36,000,000</i> |
| National Health Insurance Scheme | 13,232,000 | 13,493,000 | 13,767,650 | 14,056,032 | 54,548,683 |
| <i>Claims Processing Centers & E-Claims</i> | <i>13,232,000</i> | <i>13,493,000</i> | <i>13,767,650</i> | <i>14,056,032</i> | <i>54,548,683</i> |
| | | | | | |
| Technical Assistance Component | 2,500,000 | 4,000,000 | 3,000,000 | 500,000 | 2,500,000 |
| CERC | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| Grand Total | | | | | 374,242,136 |

Table 4. IDA/GFF allocations to the Program Expenditure Framework (US\$)

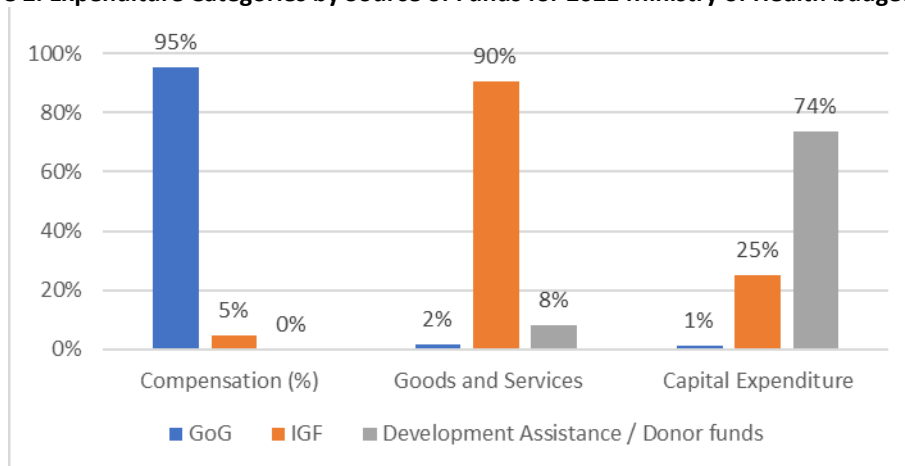
| EXPENDITURE | 2022 | 2023 | 2024 | 2025 | Total |
|------------------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| GRAND TOTAL (US\$) | 45,025,000 | 46,825,000 | 45,825,000 | 43,325,000 | 181,000,000 |
| 02901-Ministry of Health | 9,825,000 | 9,825,000 | 9,825,000 | 9,825,000 | 39,300,000 |
| <i>Use of goods and services</i> | <i>9,825,000</i> | <i>9,825,000</i> | <i>9,825,000</i> | <i>9,825,000</i> | <i>39,300,000</i> |
| <i>Capex</i> | - | - | - | - | - |
| 0290201 Ghana Health Services HQ | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 6,000,000 |
| <i>Use of goods and services</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>6,000,000</i> |
| <i>Capex</i> | - | - | - | - | - |
| Regional Health Directorates | 1,700,000 | 2,000,000 | 2,000,000 | 2,000,000 | 7,700,000 |
| <i>Use of goods and services</i> | <i>1,200,000</i> | <i>1,200,000</i> | <i>1,200,000</i> | <i>1,200,000</i> | <i>4,800,000</i> |
| <i>Capex</i> | <i>500,000</i> | <i>800,000</i> | <i>800,000</i> | <i>800,000</i> | <i>2,900,000</i> |
| 02908 - District Health Administrations | 4,500,000 | 4,500,000 | 4,500,000 | 4,500,000 | 18,000,000 |
| <i>Use of goods and services</i> | <i>3,000,000</i> | <i>3,000,000</i> | <i>3,000,000</i> | <i>3,000,000</i> | <i>12,000,000</i> |
| <i>Capex</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>1,500,000</i> | <i>6,000,000</i> |
| 02912 - Sub Districts/02913-CHP | 17,000,000 | 17,000,000 | 17,000,000 | 17,000,000 | 68,000,000 |
| <i>Use of goods and services</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>9,000,000</i> | <i>36,000,000</i> |
| <i>Capex</i> | <i>8,000,000</i> | <i>8,000,000</i> | <i>8,000,000</i> | <i>8,000,000</i> | <i>32,000,000</i> |
| NHIS (G&S and Capex) | 8,000,000 | 8,000,000 | 8,000,000 | 8,000,000 | 32,000,000 |
| IPF/TA component | 2,500,000 | 4,000,000 | 3,000,000 | 500000 | 10,000,000 |

42. The Program Expenditure Framework for the MoH falls within four of the five MTEF programs. These are: i. Management and administration, ii. Health Service Delivery, iii. Human Resource Development and Management and iv. Health Regulation. The Program boundaries of the PforR are well defined within the above four broad MoH programs. All the required expenditures needed to achieve the Program results are identifiable in the Ministry of Health and NHIS budgets. Meanwhile, the Program expenditures are only a component of the government program expenditure framework and thus, the appropriate proportions of the government program budget lines needed to achieve the Program results have been identified as indicated in the table below.

43. The Program expenditure framework will incentivize adequate investments and operational expenditure at the primary health care level with much emphasis on investments at the sub-district level. Successful implementation of primary health care reforms such as the Networks of Practice and Model Health Centres will require investment and operational expenditures at the primary level. The domestic source of the government budget is skewed towards payment of workers' compensation as against operational and investment costs. Investment and operational costs are largely financed through external donor funds and internally generated funds at the facilities level (Figure 2). The Program expenditure framework drawing from the Government, IDA and MDTF sources proposes increased investment and operational funding at the primary level, particularly the sub-district level where the majority of actions

needed to achieve the Program results will take place.

Figure 2. Expenditure Categories by Source of Funds for 2021 Ministry of Health budget



GoG: Government of Ghana; IGF: Internally Generated Funds

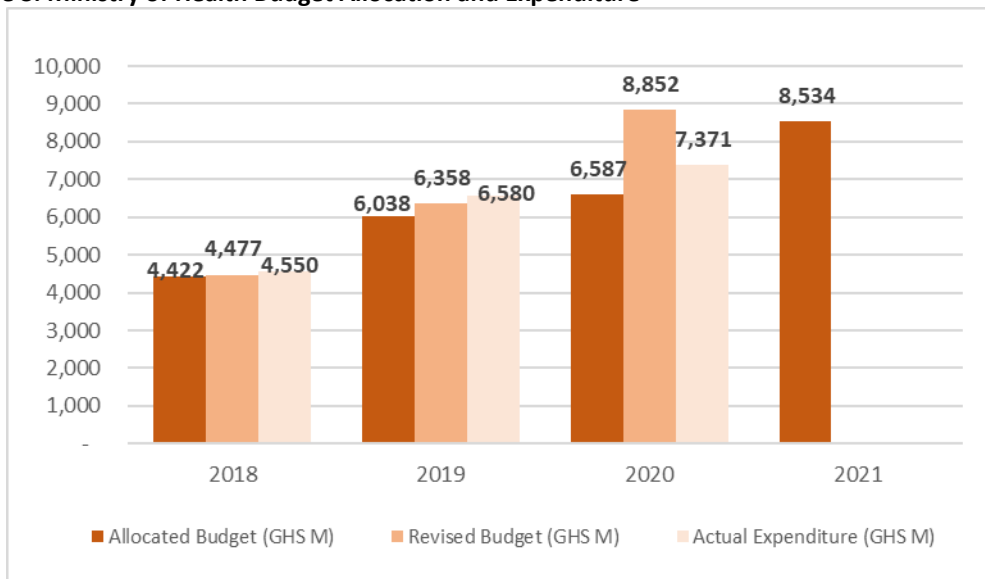
Source: World Bank staff estimates based on Ministry of Finance Budget Statement and Economic Policy, 2021

44. There is a predictable government budget for the Program through the annual budget process. The Ministry of Health receives consistent funding from the Ministry of Finance through the annual planning and budget process despite the insufficient allocation of the government budget for investment and operations at the sub-district level. Using 2021 as the base year, the Program expenditure framework projects a 5% annual increase from the previous year’s budget. Whereas Ghana is facing a tight fiscal space resulting in budget cuts, the expected 5% upward adjustment is moderate considering the historical trend of above 20% annual increment of the Ministry of Health budget.

45. Whereas there is an assured funds flow for compensation from the Government of Ghana, the IDA funds will be programmed for investments and operational funding for the primary care level. The Ministry of Health has a high capacity to execute the Program budget but implementation support will be required to boost the expenditure rate at PHC level. The Ministry of Health’s expenditures in the past three years as shown in Figure 3 below slightly exceeded its budget allocations. This indicates a high capacity of the MOH in executing its annual programs. Meanwhile, there would be the need for implementation support from the regional and national levels to improve the execution rate of the Program. The reason is that majority of the Program expenditures will be concentrated at the primary level where fiduciary capacity is low. The Program Action Plan will support building the public financial management capacity of the BMC heads at the PHC level. For efficiency reasons, and following the regular practice of MoH, procurement support should also be provided at the national level and regional levels where necessary. This may include bulk procurement at the national or regional level instead of duplicated efforts at the district and sub-district levels.

46. **Program expenditures will be budgeted and expended through the government system.** Program expenditures irrespective of source will be implemented through the government system. All Program expenditures will be budgeted both in the Medium Term Expenditure Framework and the annual budgets of the Ministry of Health. Expenditures under the Program will be made subject to the Government of Ghana public financial management guidelines. Expenditures will be reported through the GIFMIS and other relevant Government of Ghana expenditure tracking and reporting mechanisms. An advance not exceeding 25 percent of the total IDA/GFF financing allocated to DLIs will be approved upon request by the Ministry of Health.

Figure 3. Ministry of Health Budget Allocation and Expenditure



GHS M: Ghana Cedis, Millions

Source: World Bank staff estimates

47. **The fiscal sustainability risk is considered low as the PforR Program Expenditure Framework constitutes a small fraction of the expected overall health sector budget of US\$6.9 billion for 2022-25.** The PforR will constitute only 5 percent of total Ministry of Health expenditures within the Program implementation period. The Program budget will be integrated in the national budget, both in the Medium Term Expenditure Framework and the annual budget. This maximizes the prospects that Program expenditures will be maintained as part of the regular government budget after the end of Program implementation.

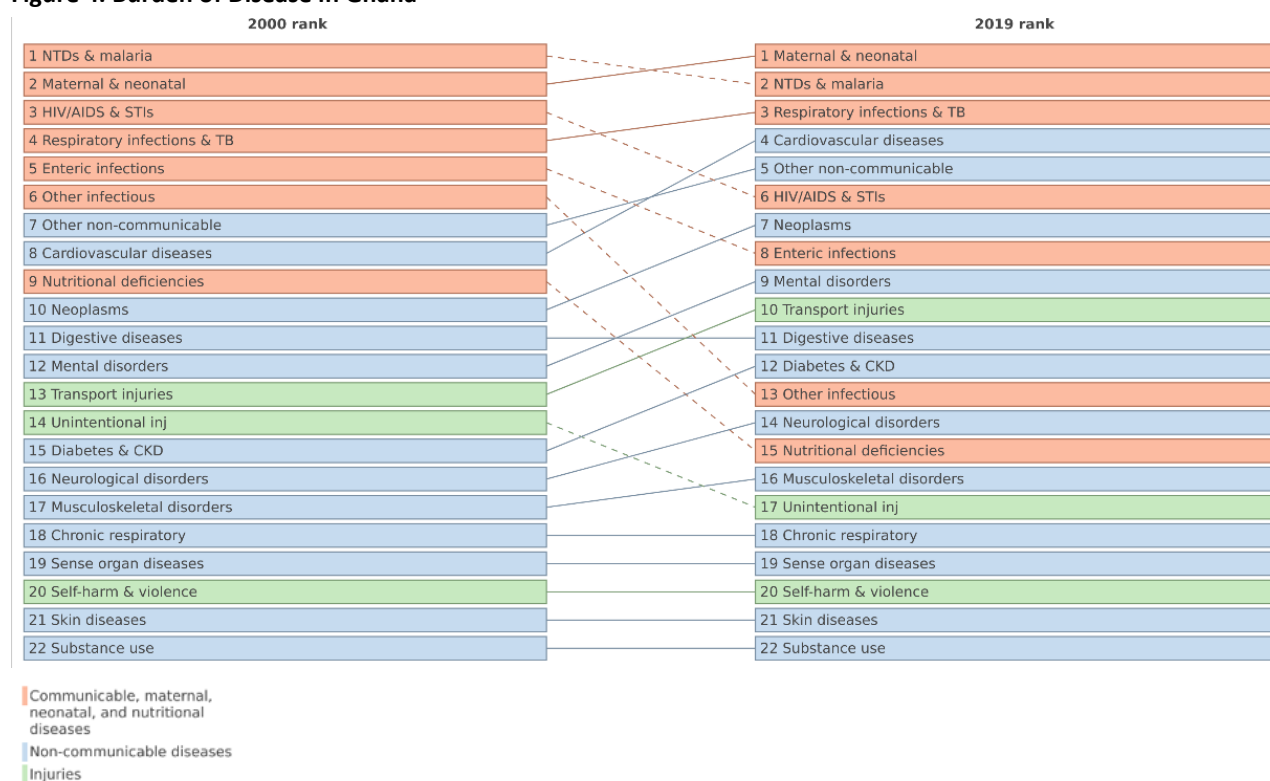
48. **The Program Expenditure Framework is highly likely to be efficient in delivering the Program results.** The economic impact analysis of the Program shows that the interventions proposed by the Program are profitable as they are likely to accrue higher health gains in monetary terms compared to the cost of implementation. The Program focuses on investments that optimize service delivery and close the quality gap at the primary health care level. Improving service delivery at the Health Centre and CHPS level is likely to shift management of low risk maternal and child health and NCD conditions from the overcrowded hospital settings. The Network of Practice reforms is also likely to result in health systems efficiency gains needed to improve health service delivery in general at the PHC level. The per capita cost of the Program is estimated at US\$21 considering a moderate estimate of 50% population coverage within the short-term period between 2022 to 2026. This falls well within the recommended additional US\$ 29 per capital (recurrent and capital) expenditure to add up to the existing average current PHC per capita expenditure of US\$34.

III. Economic Justification

A. Rationale for Public Provision and/or Financing

49. **Health care financing has significantly evolved in Ghana.**²⁸ During the colonial era, curative services in Ghana were on a fee-paying basis. After independence in 1957 user fees were abolished and the Government introduced a public health system funded through general taxes and donor support in which care was provided free-of-charge by the Ministry of Health. Primary health care facilities were developed across the country, and preventive interventions such as immunization and antenatal care were promoted. However, in the mid-1980s, Ghana was under severe macroeconomic difficulties and the government introduced the ‘cash and carry’ system, which consisted in the complete withdrawal of government subsidy with patients paying the full cost of health care. However, the ‘cash and carry’ system led to under-utilization of basic health services. The search for an alternative financing strategy led to Act 650 in 2003, which established the National Health Insurance Scheme aimed at ensuring for the insured population health care free-of-charge at the point of access.

Figure 4. Burden of Disease in Ghana



50. **Ghana’s health sector is currently financed by public funds which are Government of Ghana revenues, private funds from companies and households for both pre-paid voluntary premiums and out-of-pocket payments, and external funds from development partners.** Government of Ghana revenues can be sub-divided into general revenue allocated to the health sector budget and targeted revenues that are earmarked for the National Health Insurance Scheme (i.e. the National Health Insurance Levy which is a 2.5 percent value added tax levied on selected goods and services; and 2.5 percent social security deductions from formal sector wages managed by the Social Security and National Insurance Trust).²⁹ Overall, public funds represent around 39 percent of total health spending, out-of-pocket

²⁸ Adisah-Atta, I., 2017. Financing health care in Ghana: are Ghanaians willing to pay higher taxes for better health care? Findings from Afrobarometer. *Social sciences*, 6(3), p.90.

²⁹ Additionally, the National Insurance Scheme receives accruals from investments of surplus funds held in the National Health

expenditure another 37 percent, other private health funds another 11 percent, and external funding the remaining 12 percent.

B. Economic Impact of the Program

51. **Ghana presents a double burden of non-communicable and communicable, maternal, neonatal and nutritional diseases.** The burden of disease measured by Disability Adjusted Life Years (DALYs) provides a picture of population health.³⁰ Communicable, maternal, neonatal and nutritional diseases (i.e. maternal and neonatal conditions, Neglected Tropical Diseases and malaria, and respiratory infections and tuberculosis) still represent the top three causes of DALYs lost and overall 52.3 percent of total DALYs lost, but they are slowly declining each year by 3.22 percent. On the other hand, non-communicable diseases, that represent 40.66 percent of total DALYs lost, are increasing year by year by 0.064 percent. Specific conditions, such as cardiovascular diseases, have moved among the top causes of DALYs lost (see the figure below).³¹ As a result, by 2026, the total DALYs lost attributable to non-communicable diseases may overcome the share of DALYs lost attributable to communicable, maternal, neonatal and nutritional diseases. The epidemiological transition is not homogenous across Ghana, but it is polarized across socioeconomic groups and geographical areas. While better-off communities living in urban settings experience higher risks of non-communicable diseases, poor and rural communities experience higher risks of infectious diseases and indeed a double burden of infectious and chronic diseases (Agyei-Mensah and Aikins 2010).

52. **The benefits of the Program are estimated by assessing the monetary value of the expected reduction in the burden of diseases attributable to the interventions supported by the Program.** The benefits deriving from project interventions are estimated using the impact on population health status measured in term of DALYs, which represent the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability and have a built-in age-weighting. The baseline DALYs derive from Global Burden of Disease 2019 estimates for Ghana and are adjusted for the population that is estimated to be covered by the Program. The direct benefits of the Program are the forward projections of DALYs averted (that is, healthy life years gained) from 2022 to 2042, because of improved primary health care services. Each DALY saved is valued at per capita income (using the starting value of US\$2,557 for 2022). An upper, but still conservative, estimate values each year of life as two times per capita income, as per accepted guidelines.³² Many studies conducted in Low Middle Income countries cited a threshold between 1-3 as the value for each DALY averted³³ Studies of valuation of life in the United States utilize much higher values for a year of life that would produce more extreme results. It is worth

Insurance Fund by the National Health Insurance Council, grants, gifts and donations made to the Fund, and premiums/contributions paid by National Health Insurance Scheme subscribers.

³⁰ The DALY was developed in the 1990s as a way of comparing the overall health and life expectancy of different countries. DALY includes both the potential years of life lost due to premature death and the equivalent years of 'healthy' life lost by virtue of being in states of poor health or disability. Thus, mortality and morbidity are combined into a single metric. (Vos, Lim, Abbafati, et al, 2020).

³¹ Injuries and external causes represent the remaining category with 7 percent of total DALYs is decreasing by 0.4 percent by year.

³² See: D. Jamison, P. Jha, and D. Bloom, "Copenhagen Consensus 2008 Challenge Paper: Diseases," 2008; <http://www.givewell.org/files/DWDA%202009/Stop%20TB/Copenhagen%20Consensus%20Paper-Diseases.pdf>.

³³ Ashley et al., 2018. Use and Misuse of Cost-Effectiveness Analysis Thresholds in Low- and Middle-Income Countries: Trends in Cost-per-DALY Studies

noting that indirect benefits associated with reduced public health expenditure from avoided adverse health episodes, lower medical expenses paid by the patients and their families, and the indirect benefits associated with productivity gains deriving from improved health, have not been included in the analysis. The assumptions used in the cost-benefit analysis are listed below:

- **Basic discount rate.** Financial costs (Program investments and recurrent costs) and financial savings are discounted at 7.9 percent, to account for future inflation (the average inflation estimated for the 2020-2026 period).³⁴ A higher discount rate of 10 percent is also applied to assess the sensitivity of the results to this assumption.
- **Discount rate of the monetary value of future health benefits.** The monetary value of the annual DALYs saved is discounted at 3 percent per accepted guidelines.³⁵ A higher rate of 5 percent is used for the sensitivity analysis.
- **Period of time considered.** Costs and benefits are estimated over a 20 year period (2022-2042).
- **Population covered.** Even if interventions could be implemented nationwide, we assumed that only 50 percent of the population would directly receive services supported by the Program. Therefore, the interventions will affect around 17.5 million people by 2026. Population growth up to the year 2042 is based on UN population Projections (medium fertility scenario).³⁶

53. **The results of the analysis show that the program is highly cost-effective.** The overall results of the economic analysis are presented in the table below. In the baseline scenario, each DALY saved is valued at per capita income, costs are discounted using a 7.9 percent inflation rate and DALYs are discounted at 3 percent discount rate. The estimated internal rate of return (IRR) for the baseline scenario is 25.3 percent, which ensures that the health interventions proposed by the Program are economically profitable. It is important to note that these results are likely to be conservative. Only the direct health benefits and efficiency gains are estimated, and indirect costs, such as those related to lost productivity, are not included. We also did not include the potential positive effects related to decreased public and private health costs because of strengthening primary care service delivery.

Estimated Program Net Benefits, Net Present Value (NPV) and Internal Rate of Return (IRR)

| <i>Using deflator rate of 7.9% and DALY discount rate of 3%</i> | | | | | | |
|-----------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------------------|
| | 1 DALY = annual per capita GDP (in 000s USD) | | | 1 DALY = twice annual capita GDP (in 000s USD) | | |
| | Mean | 95% Uncertainty Interval – Upper | 95% Uncertainty Interval - Lower | Mean | 95% Uncertainty Interval - Upper | 95% Uncertainty Interval - Lower |
| Total Net benefits | \$290,992 | \$517,782 | \$114,402 | \$ 893,483 | \$867,777 | \$294,153 |
| NPV | \$102,895 | \$237,973 | \$26,200 | \$376,606 | \$451,725 | \$135,978 |
| IRR | 25.3% | 39.4% | 12.1% | 59.6% | 70.3% | 31.1% |
| <i>Using deflator of 5% and DALY discount of 5%</i> | | | | | | |

³⁴ Source: IMF. World Economic Outlook, October 2021.

³⁵ See: <http://www.dcp2.org/>.

³⁶ Source: <http://www.un.org/esa/population/>.

| | 1 DALY = 1-time per capita GDP (in 000s USD) | | | 1 DALY = 2-time per capita GDP (in 000s USD) | | |
|--------------------|----------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------------------|-------------------------------------------|-------------------------------------|
| | Mean | 95% Uncertainty Interval – Upper | 95% Uncertainty Interval - Lower | Mean | 95% Uncertainty Interval - Upper | 95% Uncertainty Interval - Lower |
| Total Net benefits | \$147,913 | \$340,954 | \$(2,397) | \$660,746 | \$652,500 | \$157,607 |
| NPV | \$71,591 | \$204,732 | \$(19,028) | \$374,730 | \$428,839 | \$96,068 |
| IRR | 18.1% | 32.9% | -0.6% | 53.2% | 63.5% | 23.7% |

C. World Bank Value Added

54. **The World Bank provides financial and non-financial additionalities to the Program.** First, World Bank financing is key to enable the implementation of the Program at a time of limited fiscal space and fiscal consolidation. Second, co-financing by the GFF (that has the objective of helping fill the funding gap for reproductive, maternal, newborn, child, and adolescent health and nutrition services) allowed to: (i) bring to preparation of the proposed operation global expertise and best practices; (ii) provide technical assistance and Bank executed support project preparation; and (iii) leverage the IDA allocation to the project with additional grant financing.

ANNEX 1. CLIMATE CO-BENEFITS

1. **Climate change has serious direct and indirect impacts on health.** It is now well-recognized that climate change exacerbates existing health challenges, particularly for the poor, and that its health impacts are one of the major channels by which climate change undermines poverty reduction.³⁷ Direct effects of climate change on health include illness and death due to high heat and extreme weather events, health effects of increased water salinity due to sea level rise, and expansion of infectious diseases due to environmental modifications caused by climate change. Indirect effects of climate change on health stem from impacts on water and food security, causing malnutrition and associated increased vulnerability to illnesses. Climate change contributes to conflict and migration, with numerous health impacts. The various effects of climate change, both direct and indirect, also cause stresses on families and households that undermine mental health. Health services themselves are vulnerable to extreme climate events, such as flooding, while the health workforce is exposed to the range of impacts that affect the population overall. Contributors to climate change, especially air pollution from motorized transport, also have significant health impacts. Overall, the poor and other disadvantaged groups are most vulnerable to the health impacts of climate change. The poor are most exposed to extreme weather events including high temperatures and precipitation, as well as to the health effects of water and food insecurity. The elderly and those suffering from chronic non-communicable diseases are particularly vulnerable to extreme heat. Children and pregnant women are most vulnerable to infectious diseases and malnutrition.³⁸

2. **Ghana is highly vulnerable to the full range of health impacts of climate change.** With already high temperatures due to its geographical location, average temperatures in Ghana have risen by approximately 1°C since the 1960s. Mean temperatures are projected to increase by 1.0 to 3.0°C by mid-century, and by 2.3 to 5.3°C by the end of the century, with higher temperatures and greater temperature extremes in the north of the country. Under a high emissions scenario, for heat-related deaths among the elderly in Ghana are projected to increase to 70 deaths per 100,000 annually by 2080 compared to the estimated baseline of approximately 2 deaths per 100,000. More erratic and intense rainfall during the wet season is expected, along with lower precipitation levels during the dry season.³⁹ This will have impacts on agriculture and food security, leading to malnutrition, increased vulnerability to disease, and mental health stresses. It is estimated that 14 percent of the population is exposed to moderate or high risk of floods, while half of Ghana's 540-kilometer coastline is vulnerable to erosion and flooding due to sea level rise.⁴⁰ Climate change will contribute to growth in the prevalence of disease vectors, such as mosquitoes, causing increased vulnerability to infectious diseases, including malaria, which currently causes 10.4 percent of deaths in Ghana, as well as dengue and schistosomiasis. It is estimated that the population at risk of malaria in Ghana will rise from 50 million in 2015 to 58 million by 2070.⁴¹ Both flooding and drought, affecting the supply and quality of water, are expected to increase risks of diarrhea (currently accounting for 3.2 percent of mortality) and cerebral meningitis (currently 1.7 percent of deaths).⁴² Air pollution is growing as Ghana develops and urbanizes, contributing to climate change while also causing an increasing burden of illness and mortality. It is estimated for 2016 that mortality due to household and ambient air pollution in Ghana was 204 per 100,000 population. Even under an optimistic

³⁷ Hallegatte, S. et al. 2016. Shock Waves: Managing the Impacts of Climate Change on Poverty. World Bank.

³⁸ Atwoli L. et al. 2021. Call for emergency action to limit global temperature increases, restore biodiversity, and protect health. *Lancet*. 398: 939-941.

³⁹ World Bank. 2021. Ghana: Climate Risk Country Profile.

⁴⁰ World Bank. 2021. Ghana: County Economic Memorandum. Draft.

⁴¹ World Health Organization. 2015. Ghana: Climate and Health Country Profile.

⁴² Institute for Health Metrics and Evaluation. 2019. Global Burden of Disease.

scenario, World Bank modelling projects that climate change could reduce Ghana’s economy by 9 percent by 2030 and push over a million people back into poverty, with the largest impacts due to increased food prices and worse health outcomes.⁴³

3. **The PforR will support mitigation of climate change through investments in primary health care services.** Mitigation activities to be supported by the PforR will include investments in facilities and equipment according to climate-friendly standards, in electricity backup systems involving solar and battery technology to reduce the use of diesel-fueled generators, and in access to improved services at the primary level to reduce the need for patients to use motorized transport to travel farther and more often to higher-level facilities. (See the below table for details).

Mitigation Activities Supported by the PforR

| DLIs | Mitigation Activities | DLI Allocations (IDA) (US\$ millions) |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| DLI 1 Development of Networks of Practice and Model Health Centres | <p>The Networks of Practice are designed to improve the quality of care for patients at the primary level by establishing linkages between services, including through improved communication and telemedicine. This will help to reduce the country’s greenhouse gas emissions by reducing the need for patients to travel longer distances by motorized transport to higher-level facilities that are further away. Similarly, improved services delivered by Model Health Centres will reduce the need for patients to seek care longer distances from their homes.</p> <p>Standards for and rehabilitation of Model Health Centres will include climate-friendly building designs (thermal insulation and solar reflective roofs against extreme heat) and low Global Warming Potential (GWP) below 125 energy-efficient equipment (i.e. LED lighting and light control measures such as dimming and occupancy sensors).</p> <p>Model Health Centres will be equipped with electricity back-up systems that will include solar energy and battery technology. These will mitigate greenhouse gas emissions by reducing the use of diesel-powered generators.</p> | 56.320 |
| DLI 2 Capacities, accountability and quality of Networks of Practice | Improved supply chain management will lead to efficiencies in motorized transport of medicines and other supplies. Route optimization will be considered for transportation of medicines and other medical supplies by adjusting routes for vehicles depending on weather and road conditions. This will improve fuel mileage and fuel efficiency of the vehicles. | 18.800 |
| DLI 6 Improved primary health care services | <p>Improved maternal and neonatal health care services at the primary level will mitigate greenhouse gas emissions by reducing the need for mothers to travel longer distances by motorized transport to higher-level facilities (although this will be partially offset by improved referral and transport for high-risk and emergency cases).</p> <p>Improved management of chronic non-communicable diseases at the primary level will mitigate greenhouse gas emissions by reducing the need for patients to travel more often and longer distances by motorized transport to higher-level facilities.</p> | 11.010 |

⁴³ World Bank. 2021. Ghana: County Economic Memorandum. Draft.

4. The PforR will also support significant adaptation to the impacts on health of climate change.

The PforR will support improvements to primary health care services for the prevention, diagnosis and treatment of a range of climate-sensitive illnesses and injuries due to extreme weather events, high temperatures, vector- and water-borne infectious diseases (malaria, dengue, cerebro-spinal meningitis, diarrheal diseases, schistosomiasis, and others), respiratory illnesses, non-communicable diseases, mental health conditions, malnutrition, and others. Support to improved maternal and neonatal health care will reduce the risk of maternal mortality due to eclampsia (high blood pressure), which has also been linked to high levels of salinity of groundwater caused by sea level rise.. Support for improved non-communicable disease services will reduce risks of illness and mortality due to extreme temperatures. The support of the PforR to primary health care services will benefit groups that are highly vulnerable to the impacts of climate change, including mothers, children, the poor, the elderly and disabled.

| DLIs | Adaptation Activities | DLI Allocations (US\$ millions) |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <p>DLI 1 Development of Networks of Practice and Model Health Centres</p> | <p>The Essential Services Package to be delivered by health services under the Networks of Practice, by Model Health Centres and other primary health care services, will include prevention, diagnosis and treatment services for a range of climate-sensitive illnesses. These include illnesses and injuries due to extreme weather events, high temperatures, vector- and water-borne infectious diseases (malaria, dengue, cerebro-spinal meningitis, diarrheal diseases, schistosomiasis, and others), respiratory illnesses, non-communicable diseases, mental health conditions, malnutrition, and others.</p> <p>Services provided under the Networks of Practice, by Model Health Centres and other primary health care services, will benefit groups most vulnerable to climate-sensitive illnesses, including mothers, infants and children, the elderly, and the poor.</p> <p>Community-level interventions will include raising awareness of prevention and care-seeking for climate-sensitive illnesses. This will include capacity building of healthcare workers to increase their competency levels on climate change and health promotion/prevention activities to raise awareness among their patients as well as to improve their coping strategies for heat-stress and exhaustion during hotter days.</p> <p>Development of reporting and information management capacities of Networks of Practice will improve surveillance of climate-sensitive diseases to enable health care services to better respond to future climate-related health impacts from extreme weather events. This may include the development and strengthening of early warning systems that are sensitive to extreme weather events as well as health hazards by monitoring climate and other environmental indicators (weather surveillance and forecasting) and population vulnerability factors, which will improve the use of information for detecting, investigating, and responding to public health threats.</p> <p>Development of Networks of Practice will improve capacities of the primary health care system for disaster preparedness and response to climate-related public health emergencies. This will include capacity building of healthcare workers to increase their competency levels on preparedness and response.</p> | <p>56.320</p> |

| DLIs | Adaptation Activities | DII Allocations (US\$ millions) |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <p>DLI 2 Capacities, accountability and quality of Networks of Practice</p> | <p>Health staff training and technical support will improve quality of services for climate-sensitive illnesses and improve capacities for climate resilience, surveillance, and disaster response. Specific modules on climate-related public health emergencies will be included in training.</p> <p>Improvements in the supply of medicines and consumables will improve the delivery and quality of services to address climate-sensitive illnesses.</p> <p>Community engagement will include awareness-raising on climate-sensitive illnesses, climate resilience, and disaster response. This will include capacity building of healthcare workers to increase their competency levels on climate change and health promotion/prevention activities as in DLI 1.</p> <p>Quality interventions and standards will encompass quality of services to address climate-susceptible conditions, and capacities for climate resilience, surveillance, and disaster response. Contingency measures to deal with any unexpected disruptions from climate change and other unexpected disasters will be integrated. For instance, it will assess whether healthcare facilities have solar panels to ensure reliable electricity.</p> | <p>18.800</p> |
| <p>DLI 3 Health policy and financing</p> | <p>The national health plan and budget will encompass climate change mitigation and adaptation activities, notably development of primary health care services to address climate-sensitive illnesses. Contingency measures to help guide healthcare workers and healthcare facilities during climate-related events such as power outages from flooding and extreme heat will also be integrated.</p> | <p>29.950</p> |
| <p>DLI 4 National Health Insurance Scheme coverage and financing</p> | <p>Expanding NHIS coverage among both the population as a whole and targeted vulnerable groups will improve access to health services to diagnose and treat climate-sensitive illnesses that are included in the NHIS benefits package, including malaria, diarrhea, respiratory illnesses, and others. The vulnerability factors will not only look at health indicators and income levels, but the impact of climate change where the person resides will also be assessed.</p> | <p>27.700</p> |

| DLIs | Adaptation Activities | DLI Allocations (US\$ millions) |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| DLI 6 Improved primary health care services | <p>Mothers and neonates are vulnerable to climate-sensitive illnesses, especially infectious diseases including malaria but also malnutrition due to the effects of climate change on agriculture and livelihoods. Sea level rise can lead to increased salinity of sea water with a direct impact on maternal eclampsia (high blood pressure), raising the risk of maternal mortality. Improving emergency maternal and neonatal health care, particularly with more emphasis on behavioral change and communication (which will include information on the impacts of climate change on women and neonatal health), will contribute to adaptation to these risks.</p> <p>Contingency measures to deal with any unexpected disruptions from climate change and other unexpected disasters will also be integrated for health service delivery.</p> <p>Improved family planning will contribute to lower fertility rates with broad socio-economic impacts, including poverty reduction that will reduce vulnerability to climate change impacts on livelihoods and health. Improved adolescent health services will include services to prevent, diagnose and treat climate-sensitive illnesses, as well as to improve the awareness of adolescents about climate-related health issues through behavioral change and communication.</p> <p>Contingency measures to deal with any unexpected disruptions from climate change and other unexpected disasters will also be integrated for health service delivery.</p> <p>People with chronic non-communicable diseases are at increased risk of illness and death from high temperatures. Improved prevention, diagnosis and management of non-communicable diseases will contribute to adaptation to this risk, as well as to improve the awareness among populations with non-communicable diseases about climate-related health issues through behavioral change and communication.</p> <p>Contingency measures to deal with any unexpected disruptions from climate change and other unexpected disasters will also be integrated for health service delivery.</p> | 11.010 |

ANNEX 2. GENDER-BASED ANALYSIS

Context

1. **The national health agenda relies upon a wide array of legal and policy instruments integrating gender concepts into the operational level.**⁴⁴ Ghana has ratified and implemented important international instruments and frameworks in support of gender mainstreaming and women's empowerment, including: the Millennium Development Goals and Sustainable Development Goals; provisions of the Universal Declaration of Human Rights; the International Covenant on Civil and Political Rights; Convention on the Elimination of all forms of Discrimination Against Women and the International Covenant on Economic Social and Cultural Rights; the 1995 Beijing Declaration and Platforms for Action; and the new Protocol to the African Charter on Women's Rights, 2005. At the national level, the country has adopted a series of policies and provisions aligned with its international commitments: Article 17 and Clause 17(4) of the 1992 Constitution to forbid and end all forms of discrimination; the 1994 Amendment Act to the Ghanaian Criminal Code criminalizing female genital mutilation; the 2003 Labor Act on maternity leave for up to 12 weeks and equal pay for all workers; the 2007 Domestic Violence Act 732 and related Ministry of Health action plan with gender-based violence management protocols; the 2009 Health Sector Gender Policy highlighting gender's impact on women's health; the 2014 National Reproductive Health Service Policy and Standards promoting universal access to maternal health care and gender equity and practices for women's health; the 2015 National Gender Policy supporting implementation of principles of gender equality and women's empowerment in the national development process; and the 2015 National Social Protection Policy. The current Ministry of Gender, Children and Social Protection of Ghana that arose from the 1975 National Council on Women and Development coordinates formulation of policies that promote the institutionalization and development of women and children's issues. Despite significant strides toward gender equality, there are remaining gaps in policy and action that need to be addressed. These constraints are associated with competing government priorities, weakness in accountability and monitoring and evaluation mechanisms, lack of funding, capacity gaps within public institutions, need for a stronger intersectoral collaboration and better conceptual clarification.

2. **Ghana has achieved notable progress in gender in equity being among the African nations leading the human rights efforts on the continent, however visible challenges remain.** The 2021 Global Gender Gap index⁴⁵ ranked the country 117 globally with the score of 0.67, indicating that females were 33 percent less likely to have the same opportunities as males in the country. This placed Ghana in the position 23rd among 35 nations in Sub-Saharan Africa. Along with Mali, Ghana is the only country in Sub-Saharan Africa where women's income is less than 30% of that of men⁴⁶. COVID-19 has amplified the crisis of gender disparity. Women are at even greater risk to gender-based violence (GBV) as a result of economic insecurity and poverty-related stress, quarantines and social isolation, a break down social infrastructure and changing family dynamics, reduced health service availability and access to first responders.

⁴⁴ USAID Ghana. 2020. Gender Analysis Report.

⁴⁵ Global Gender Gap Report 2021 <https://www.weforum.org/reports/global-gender-gap-report-2021>

⁴⁶ *idem*

3. **There is a wide window of opportunity to address existing gender inequalities in healthcare, particularly among most marginalized women and girls facing unique gaps in services.** These inequalities are frequently associated with harmful socio-cultural norms and practices that limit health seeking behavior and women's ability to improve their own and their children's health status and overall well-being. This would imply a deeper analysis of genesis as well as levels of cohesion between the need to eliminate harmful practices and the wish to preserve traditional values.⁴⁷

4. **Albeit Ghana's sustained commitment to major international human rights instruments, the national laws have demonstrated low efficiency in eliminating practices stemming from conservative religious, social and cultural traditions.** Widowhood rites, widow inheritance, female genital mutilation/cutting (FGM/C), female ritual bondage (trokosi), early marriage⁴⁸ along with other traditional norms create discriminatory attitudes that have wide implications on community and public life resulting in low awareness of reproductive health services among adolescent boys and girls, lacking or limited access to and use of family planning (FP), maternal services and services related to GBV by adolescent girls, unmarried women, most marginalized women and girls, including widows and divorced, LBTQI+, sex workers, migrant or refugee women/girls, women with disabilities, muslim, Kayayei women and girls, Polygynous women, rural and certain minority ethnic groups). This is highly relevant for the North of the country, where women have larger families, tend to work longer hours due to an ample array of household chores, have limited access to resources and are exposed to multiple difficulties posed by climate volatility and lack of infrastructure.

Gender gap overview

5. **Gap and disparities in utilization of family planning leading to high fertility and teenage pregnancy rates:** in 2022,⁴⁹ the total fertility rate in Ghana was 3.7 (4.7 for rural populations), a decline from previous years, but still high for a lower middle-income country. Fertility rates in the Northern Zone are 5.2 and highest for women with lower levels of education (5.7 versus 3.4 for senior secondary school, SHS, and secondary school) as well as the poorest wealth quintile (5.5 versus 3.3 for the richest)⁵⁰. Almost 42 percent of married women are in polygynous unions⁵¹. Rates of teenage pregnancy (age 15-19) have increased in northern Ghana, with the Upper East Region among the highest in Ghana. The proportion of women aged 15 to 19 years who had begun childbearing was 14 percent (18 percent in urban areas and 11 percent in rural areas). In Ghana the level of demand for family planning satisfied by modern methods (DSMM) is 40% for women in not extremely poor households, 38% in extremely poor but not asset poor households, and 36% in extremely poor and asset poor households.⁵²

6. **Early marriage and cohabitation, poverty and high workloads, under-age reporting to benefit from parents' health insurance are among the reasons behind high fertility and teenage pregnancy rates.** High fertility can reflect constraints on economic and social opportunities for women, as well as limits to access to family planning. Teenage pregnancy can both reflect constraints to the status of women,

47 https://prism.ucalgary.ca/bitstream/handle/1880/113368/9781773851839_chapter05.pdf?sequence=8&isAllowed=y

48 https://prism.ucalgary.ca/bitstream/handle/1880/113368/9781773851839_chapter05.pdf?sequence=8&isAllowed=y

49 <https://www.macrotrends.net/countries/GHA/ghana/fertility-rate#:~:text=The%20current%20fertility%20rate%20for,a%201.32%25%20decline%20from%202020>.

50 9 UNICEF, et al. Ghana Multiple Cluster Indicator Survey 2017/18. Snapshots of Key Findings, January 2019

51 GSS, GHS, and ICF. Ghana Demographic and Health Survey 2014, 2015.

52 USAID Regional Disparities in Fertility Preferences and Demand for Family Planning Satisfied by Modern Methods across Levels of Poverty, 2019 <https://dhsprogram.com/pubs/pdf/AS71/AS71.pdf>

and can have a range of negative impacts, including higher risk of maternal mortality, high rates of school drop-out, and limits to economic and employment opportunities. Moreover, women of reproductive age (15-49 years) often face barriers with respect to their sexual and reproductive health and rights.

7. The PforR will support to integration of family planning and adolescent health services into Networks of Practice, and expansion of utilization of adolescent health services. This will include support to interventions to address social and cultural barriers. (DLI 6)

8. **Gap and disparities in access to quality RMNCH care leading to persisting maternal and neonatal mortality:** over the past few decades, the maternal mortality rate in Ghana has seen a steady decline due to several factors and robust systems put in place to ensure safe pregnancy and delivery. According to the Ghana Health Service data show a downward trend: a total number of 875 maternal deaths in 2018 and 838 in 2019. This figure further decreased to 776 in 2020 despite the increase in total deliveries while institutional maternal mortality ratio reduced from 117 in 2019 to 106 in 2020, amidst the COVID-19 pandemic and all its associated impact⁵³. Health facility-based delivery rates have increased because of sustained government's commitment and international support to gender-sensitive interventions.

9. **Nevertheless, income and geographical disparities remain.** There has been progress in access to care during pregnancy and childbirth in Ghana with both antenatal care and facility-based births increasing significantly over the last 15 years. This progress has slowed in the last five years, and both neonatal mortality and stillbirth rates have not reduced reflecting a quality gap, particularly in the peripartum and postnatal period. The proportion of mothers who delivered in a health facility rose from 54 percent in 2007 to 74 percent in 2017, although considerable inequalities persist, as 56 percent of mothers from the poorest quintile delivered in a health facility, compared to 97 percent among the highest quintiles.

10. **There are also important gaps in quality of care,** as reflected not just by the maternal mortality ratio, but also by an only slowly improving neonatal mortality rate (29 per 1,000 live births in 2007, compared to 22.9 in 2020).⁵⁴ The 2020 Ghana EmONC Assessment findings confirm this quality gap; just 20 percent of existing EmONC facilities are functional, and of the 72 percent of women who gave birth in a health facility, just a third (26 percent of all mothers) delivered in a facility that is EmONC functional.⁵⁵ According to the same assessment, one in five women required referral from health centers to higher levels of care, yet just 10 percent of health facilities had a functional referral vehicle to transport women and newborns with complications.

11. **There are geographic inequities with low coverage in the northeastern regions.** Shortcomings involve both staffing shortages and deficits in drugs, supplies and equipment, with the equipment shortages being a significant determinant of non-functioning EmONC facilities. While nearly 79 percent of women aged 15–49 delivered in a health facility nationwide, 92 percent of births in Greater Accra occurred in one while just 59 percent of births in the Northern Region did likewise. Maternal and neonatal mortality

⁵³ <https://www.afro.who.int/news/ghana-holds-conference-maternal-child-health-and-nutrition#:~:text=Over%20the%20past%20few%20decades,2018%20and%20838%20in%202019.>

⁵⁴ 2017 Ghana Maternal Health Survey.

⁵⁵ 2020 Ghana EmONC assessment

here are associated with lack of access to quality facilities and healthcare facilities as well as with unsafe abortions.⁵⁶

12. **Analysis of power dynamics at the household level** demonstrate that in many cases men do not provide support to their partners during delivery and post-delivery stages due to limited hospital infrastructure or money-saving attitudes⁵⁷. As a result of tradition beliefs, pregnant women are not allowed to use latrines leading to open defecation, affecting water, sanitation, and health.

13. **At the community level**, there are a few UNICEF originally supported pregnancy schools for couples run by community health nurses and midwives. There also has been an increase in families seeking antenatal care at facilities and in the number of men accompanying women. One facility stated 85 percent of husbands now come with their wives during deliveries and to pick them up.⁵⁸ While husbands are starting to accompany their wives for the first checkup after each birth, however, they rarely bring in their children for subsequent appointments.⁵⁹

14. **Gaps in coverage and quality of maternal health care can reflect resource-allocation decisions that disadvantage health care for women while raising risks of maternal mortality.** Increasing demand for health services and appeasing this demand with effective policies eliminating the most significant barriers such as cost and perceived quality of healthcare providers will significantly increase access and utilization of life improving health services.⁶⁰

15. Results supported by the PforR will include improvements coverage, quality and equity of primary health care services that will benefit from the networking strategy (DLI 6). This will include maternal and neonatal care, as the PforR will support the service delivery capacities and referral systems for emergency care through the Model Health centers and the Networks of Practice.

16. **Gap in access to GBV services for target groups and in hard-to-reach areas:** violence against women remains widespread in Ghana. Approximately 27%, 62%, and 34% of Ghanaian women in the Northern Region had experienced physical, psychological, and sexual violence respectively.⁶¹ An estimated 72% of women in Ghana have experienced some form of violence in their lifetime. Surveys show that GBV begins at a young 25 age with 37% of women between ages 15-49 reporting the experience of physical violence since age 15. In many communities, GBV is also accepted. The 2014 Ghana Demographic and Health Survey reported that nearly a third of women agreed to at least one reason to beat your wife. Although that percentage declined from the previous survey, GBV is still widespread and accepted by many. A 2014 survey found that 32 percent of women and 16 percent of men believe that a

⁵⁶ Women in Law and Development in Africa, "NGO Shadow Report to 6th & 7th Periodic Report of Ghana on Convention on the Elimination of all forms of Discrimination against Women (CEDAW)" (October 2014), 10.

https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/GHA/INT_CEDAW_NGO_GHA_18396_E.pdf; IPAS Ghana, "Supplementary Information for Ghana, scheduled for review by the CEDAW Committee during its 59th session in October 2014 at 2".

⁵⁷ USAID Ghana Gender Analysis Report 2020, <https://banyanglobal.com/wp-content/uploads/2020/05/USAID-Ghana-Gender-Analysis-Report.pdf>

⁵⁸ KII, Pusiga District Hospital Maternity Ward.

⁵⁹ KIIs, Pusiga District Hospital RCH Facility and Bolgatanga Health Directorate

⁶⁰ <https://blogs.commonsgorgetown.edu/journal-of-health-sciences/issues-2/previous-volumes/vol-5-no-1-april-2008/demand-side-factors-affecting-health-seeking-behavior-in-ghana/>

⁶¹ Preliminary Gender and Inclusion Analysis for Ghana, 2022.

<https://www.americanbar.org/content/dam/aba/directories/roli/wage/wage-ghana-gender-and-inclusion-analysis.pdf>

husband is justified in beating his wife under certain circumstances.⁶² Furthermore, the pressures on households caused by the COVID-19 pandemic have exacerbated gender-based violence worldwide,⁶³ including in Ghana.⁶⁴

17. **Customary unions and witch accusation practices create environment for the rampant gender-based violence (GBV).** GBV cases are higher in polygamous households and where women independently decide to use family-planning methods without the consent of their partner⁶⁵. Women accused of being witches are sent with their children to one of five independently operated camps in the north, where the most uneducated and poor are frequently subject to sexual abuse and forced labor⁶⁶. **Analysis of power dynamics at the community level** reveals polarized approaches. Whilst some local stakeholders advocate for closure and return of women to the communities, albeit potential discrimination and violence risk associated with reintegration, others propose to treat the witches camp as a place of refuge by upgrading the infrastructure and offering ongoing provisions⁶⁷.

18. After a few decades of concerted preventive action, as a result of limited support and funding, **female genital mutilation/cutting (FGM/C)** as another GBV form, reinforced by traditional beliefs, is reemerging in the north of the country among some ethnic groups (such as the Hausa, Bissa, and Chokossi)⁶⁸. The practice is carried out on girls aged 4–17, but there is concern that communities now are targeting younger girls to be cut, including newborns⁶⁹. Currently, 2.4 percent of women 15–49 have undergone FGM/C. Percentages are lower in rural areas (3.6 percent versus 12 in urban areas) and higher among the poorest wealth quintile (7.3 percent versus 1 percent in the richest)⁷⁰. The prevalence is especially high in regions or districts that share a border with another country that practices FGM/C⁷¹. Enforcement of the law banning FGM/C has increased vacation cutting in which parents send their child to other countries to undergo the procedure⁷². While the original law only punished circumcisers, it now also punishes the parents who take their child to other countries to undergo the procedure⁷³. At the community level, stakeholders in the Northern districts organize zero-tolerance events to raise awareness on the importance of ending the FGM/C practice with all the parties involved⁷⁴. At the health facilities, midwives report they have not been trained how to treat women with FGM/C⁷⁵.

⁶² 2014 Ghana Demographic and Health Survey.

⁶³ Chandan JS et al. 2020. COVID-19: a public health approach to manage domestic violence is needed. *Lancet*. [https://doi.org/10.1016/S2468-2667\(20\)30112-2](https://doi.org/10.1016/S2468-2667(20)30112-2)

⁶⁴ United Nations Ghana. 2020. COVID-19 Impact on Gender-Based Violence.

⁶⁵ KII, Pusiga District Hospital RCH Facility.

⁶⁶ Ministry of Chieftaincy and Traditional Affairs, Republic of Ghana. Elimination of Harmful Traditional Practices Project: Project Report on Research into Witch Camps, Female Genital Mutilation and Widowhood Rights Conducted in the Northern, Upper East, and Upper West Regions, 2015.

⁶⁷ KIIs, LAWA and Director of Children, Northern Region; Ministry of Chieftaincy and Traditional Affairs, Republic of Ghana. Elimination of Harmful Traditional Practices Project: Project Report on Research into Witch Camps, Female Genital Mutilation and Widowhood Rights Conducted in the Northern, Upper East, and Upper West Regions, 2015

⁶⁸ 1 KIIs, UNFPA; Pusiga Health Directorate, Healthcare Professionals, Bawku Municipal Office and BEWDA.

⁶⁹ KIIs, Bolgatanga Health Directorate and Bawku Municipal

⁷⁰ UNICEF, et al. Ghana Multiple Cluster Indicator Survey 2017/18. Snapshots of key findings. January 2019.

⁷¹ KII, UNFPA.

⁷² KII, USAID/Ghana-Tamale Office and Director of Gender Upper East.

⁷³ KII, LAWA

⁷⁴ KII, Director of Gender, Upper East.

⁷⁵ KII, Pusiga District Hospital Maternity Ward.

19. Delivery of the essential health services package, to be supported by the PforR, will include services at the primary level for survivors of gender-based violence, including referral to higher levels of care as necessary.

20. **Gap in utilization of services for non-communicable diseases (NCDs):** in 2016, Ghana was among the countries with the highest prevalence of hypertension among women in the continent (38%). Among men with hypertension, 11 percent were aware of their condition and had received treatment, compared to 33 percent among women.⁷⁶ While access to services to prevent, diagnose and manage non-communicable diseases is overall poor, there also seem to be important gender differences in utilization of services for non-communicable diseases. In 2014, prevalence of hypertension, a major risk factor for cardiovascular disease, was measured to be similar, at around 13 percent, among men and women aged 15-49 years. However, 86 percent of men with hypertension were unaware of their condition, compared to 63 percent of women. Among men with hypertension, 11 percent were aware of their condition and had received treatment, compared to 33 percent among women.⁷⁷

21. Childhood stunting is highest in the Northern Region and lowest in Greater Accra region. Large disparities exist between the poorest / least educated on one hand, and the richest / most educated with the former presenting the highest stunted children. Close to one in every five children under 5 years is stunted while one in every ten children under 5 is underweight. Close to one in every ten children experiences wasting while the proportion of overweight children is low at 1 percent⁷⁸.

22. **Demographic changes and economic development** are behind major behavioral risk factors for NCDs, in particular CVDs, diabetes and cancers. They are associated with urbanization, increasing life expectancy and poverty. Other key risk factors that disproportionately affect women include in-door air pollution and well as the negative psychological effects associated with the widespread oppression and violence against women⁷⁹. A comparison of more than 30 countries in Africa found that Ghana had the highest prevalence of physical inactivity for adult women with more than 80% being physically inactive and 68% overweight.

23. The PforR will support development of non-communicable disease services at the primary level, which are currently at a nascent stage, which will help address these gender differences.

| Analysis | Operational Activities | Indicators |
|----------|------------------------|------------|
|----------|------------------------|------------|

⁷⁶ 2014 Ghana Demographic and Health Survey.

⁷⁷ 2014 Ghana Demographic and Health Survey.

⁷⁸ MICS. Snapshots of key findings Ghana Multiple Indicator Cluster Survey, 2017/2018. https://mics-surveys-prod.s3.amazonaws.com/MICS6/West%20and%20Central%20Africa/Ghana/2017-2018/Snapshots/Ghana%202017-18%20MICS%20Statistical%20Snapshots_English.pdf

⁷⁹ Women and Noncommunicable Diseases in Africa: Mapping the scale, actors, and extent of rights-based work to address the impact of NCDs on African women. 2020 <https://www.womensfundingnetwork.org/wp-content/uploads/2020/12/Women-and-NCDs-in-Africa.pdf>

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gaps and disparities in utilization of family planning services, contributing to high fertility and adolescent pregnancy rates | Support to integration of family planning services into Networks of Practice (in both urban and rural areas), and expansion of utilization of family planning. (DLIs 1 and 6) | Increase in the annual number of new family planning acceptors utilizing services at the Sub-District and community levels |
| | Support to integration of adolescent health services into Networks of Practice, and expansion of utilization of adolescent health services, with a particular focus on health and nutrition. (DLIs 1 and 6) | Increase in the annual number of adolescents utilizing health services at the Sub-District and community levels (disaggregated by sex) |
| Gaps and disparities in coverage and quality of maternal and neonatal health care services, contributing to risks of maternal and neonatal mortality. | Support to improved linkages, referral systems, and quality of maternal and neonatal health services under Networks of Practice and increase in utilization of these services. (DLIs 1 and 6) | Increase in the annual number of mother/newborn pairs receiving care in facilities providing Quality BEmONC services at the Sub-District level (PDO indicator) |
| Gaps and disparities in access to non-communicable disease services | Support to development of non-communicable disease services at the primary level. (DLIs 1 and 6) | Increase in the annual number of hypertensive patients diagnosed at Health Centres (disaggregated by sex) |
| Gaps in access to gender-based violence services, exacerbated by the COVID-19 pandemic | Support to improved services for survivors of gender-based violence as part of the essential health services package delivered under Networks of Practice, Model Health Centres, and other primary health care services. (DLIs 1, 3 and 6) | Number of Networks of Practice functioning according to approved standards (PDO indicator) |
| | | Number of Model Health Centres functioning according to standards |
| Gaps and disparities in health insurance coverage | Support to improved population-wide health insurance coverage, as well as for indigent groups, which will enhance access to family planning services. (DLI 4) | Increase in the number of people who are active National Health Insurance Scheme members (disaggregated by sex) |
| | Support to improved population-wide health insurance coverage, as well as for indigent groups, which will enhance access to maternal health care services. (DLIs 4 and 6) | Increase in the number of people categorized as indigent who are active National Health Insurance Scheme members (disaggregated by sex) (PDO indicator) |

24. **Gap in insurance coverage:** while the National Health Insurance Scheme (NHIS) of Ghana has over time added more health services and attempts to increase affordability and utilization of drugs and health services in general⁸⁰, and among the poor and most vulnerable populations in particular⁸¹, transport costs, particularly for rural communities where health facilities are lacking, are still a barrier to reaching

⁸⁰ Ghana Maternal Health Survey, 2017 <https://dhsprogram.com/pubs/pdf/FR340/FR340.pdf>

⁸¹ Blanchet NJ, Fink G, Osei-Akoto I., "The effect of Ghana's National Health Insurance Scheme on health care utilisation, » Ghana Med J. 46(2021: 2):76-84.

services⁸². A study in the Upper East Region on access to the NHIS showed that women from lower socioeconomic strata, who had no children or were single or conversely had more than four children, who had no education, and if they practiced traditional religion were less likely to have insurance coverage⁸³.

25. The PforR will support to improved population-wide health insurance coverage, as well as for indigent groups, which will enhance access to family planning services. (DLI 4)

Operational Response

26. **The PforR's support to primary health care services will contribute to improving gender equity.** The PforR will support ongoing efforts to raise awareness of these issues in the communities, strengthen the regulatory and policy framework addressing/modernizing socio-cultural norms, improve related accountability mechanisms and enhance partnerships across sectors. This includes support to improvements in maternal health care, family planning, adolescent health services, services for survivors of gender-based violence, insurance coverage, and services for prevention, diagnosis and management of non-communicable disease services. The below table provides an overview of how the operation addresses different aspects of gender inequality.

⁸² HealthKeepers Network, August 3, 2020: Interview.

⁸³ <https://www.americanbar.org/content/dam/aba/directories/roli/wage/wage-ghana-gender-and-inclusion-analysis.pdf>

ANNEX 3. DISBURSEMENT LINKED INDICATORS (DLIs) AND DISBURSEMENT LINKED RESULTS (DLRs)

| DLIs & DLRs | Disbursement Formulas | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | IDA | GFF (TF084571) | GFF (TF085208) |
| DLI 1. Primary Health Care Networks of Practice and Model Health Centers are Developed (US\$56,320,000 IDA, US\$5,000,000 GFF 1) | | | |
| DLR 1.1 Number of Networks of Practice functioning according to the Standards for Networks of Practice | DLR 1.1 (a) Standards for Networks of Practice adopted as per DLR. 3.1 (b) \$110,000 per Network of Practice functioning according to the Standards for Networks of Practice, up to a limit of \$38,500,000 for Years 1-4. | DLR 1.1 (a) Standards for Networks of Practice adopted as per DLR. 3.1 (b) \$10,000 per Network of Practice functioning according to the Standards for Networks of Practice, up to a limit of \$3,500,000 for Years 1-4. | .. |
| DLR 1.2 Number of Model Health Centers functioning according to the Standards for Model Health Centers | DLR 1.2 (a) Standards for Model Health Centers adopted as per DLR 3.1 (b) \$34,550 per Model Health Center functioning according to the Standards for Model Health Centers, up to a limit of \$13,820,000 for Years 1-4. | DLR 1.2 (a) Standards for Model Health Centers adopted as per DLR 3.1 (b) \$3,750 per Model Health Center functioning according to the Standards for Model Health Centers, up to a limit of \$1,500,000 for Years 1-4. | .. |
| DLR 1.3 Number of Model Health Centers with a solar and/or battery electricity backup system | DLR 1.3 (a) Standards for Model Health Centers adopted as per DLR 3.1 (b) \$40,000 per Model Health Center with a solar and/or battery electricity backup system up to a limit of \$4,000,000 for Years 1-4. | .. | .. |
| DLI 2. Capacities, Accountability and Quality of Networks of Practice are Improved (US\$18,800,000 IDA, US\$2,428,000 GFF 2) | | | |
| DLR 2.1 Annual increase in the number of health centers and Model Health Centers that have available selected Essential Medicines at least six (6) months of the Year | DLR 2.1 Increase in the number of health centers and Model Health Centers that have selected Essential Medicines for at least six (6) months of the Year, in Year 1 from a baseline of 0, and in Years 1-4, in each Year, from the target met the previous Year, \$15,000 per additional health center or Health Center that meets said criteria up to a limit of | .. | DLR 2.1 Increase in the number of health centers and Model Health Centers that have selected Essential Medicines for at least six (6) months of the Year, in Year 1 from a baseline of 0, and in Years 1-4, in each Year from the target met the previous Year, \$2,020 per additional health center or Health Center that meets said criteria up to a limit of \$808,000 |

| DLIs & DLRs | Disbursement Formulas | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | IDA | GFF (TF084571) | GFF (TF085208) |
| | \$6,000,000 for Years 1-4. | | for Years 1-4. |
| DLR 2.2 Increase in the number of Physician Assistants at post in Health Centers and Polyclinics | DLR 2.2 Increase in the number of Physician Assistants at post in Health Centers and Polyclinics, from a baseline of 806, \$10,000 per additional Physician Assistant that meets said criteria, up to a limit of \$6,800,000 for Years 1-4. | .. | DLR 2.2 Increase in the number of Physician Assistants at post in Health Centers and Polyclinics, from a baseline of 806, \$1,500 per additional Physician Assistant that meet the criteria, up to a limit of \$1,020,000. |
| DLR 2.3 Annual increase in the number of Networks of Practice that score Green on the Community Scorecard for at least one quarter | DLR 2.3 Increase in the number of Networks of Practice that score Green on the Community Scorecard for at least one quarter, in Year 1 from a baseline of 0, and in Years 2-4, in each Year, from the target met the previous Year, \$20,000 per additional Network of Practice that meets said criteria, up to a limit of \$3,000,000 for Years 1-4. | .. | DLR 2.3 Increase in the number of Networks of Practice that score Green on the Community Scorecard for at least one quarter, in Year 1 from a baseline of 0, and in Years 2-4, in each Year, from the target met the previous Year, \$2,000 per additional Network of Practice that meets said criteria, up to a limit of \$300,000 for Years 1-4. |
| DLR 2.4 Annual increase in the number of Networks of Practice that have received at least one clinical support visit in each quarter from the District Hospital level | DLR 2.4 Increase in the Number of Networks of Practice that have received at least one clinical support visit in each quarter from the District Hospital, in Year 1 from a baseline of 0, and in Years 2-4, in each Year, from the target met the previous Year, US\$20,000 per additional Network of Practice that meets said criteria, up to a limit of US\$3,000,000 for Years 1-4. | .. | Increase in the number of Networks of Practice that have received at least one clinical support visit in each quarter from the District Hospital, in Year 1 from a baseline of 0, and in Years 2-4, in each Year, from the target met the previous Year, \$2,000 per additional Network of Practice that meets said criteria, up to a limit of \$300,000 for Year 1-4 |
| DLI 3. Health Policies, Standards and Plans are Developed and Financing for Primary Health care is Improved (US\$29,950,000 IDA, US\$2,050,000 GFF 2) | | | |
| DLR 3.1 Health Policies, Plans and Standards are approved | DLR 3.1 \$650,000 per approved Health Policy, Plan or Standard, up to a limit of \$18,850,000 for Years 1-4. | .. | DLR 3.1 \$50,000 per approved Health Policy, Plan or Standard, up to a limit of \$1,450,000 for Years 1-4. |
| DLR 3.2 Annual expenditures from the national budget on capital | DLR 3.2 In each Year, \$18,500 per 100,000 Cedis in expenditures from | .. | DLR 3.2 In each Year, \$1,000 per 100,000 Cedis in expenditures from |

| DLIs & DLRs | Disbursement Formulas | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | IDA | GFF (TF084571) | GFF (TF085208) |
| investments and operational costs of health services at the Sub-District and community levels | the national budget on capital investments and operational costs of health services at the Sub-District and community levels, up to a limit of \$11,100,000 for Years 1-4. | | the national budget on capital investments and operational costs of health services at the Sub-District and community levels, up to a limit of \$600,000 for Years 1-4. |
| DLI 4. National Health Insurance Scheme Coverage is expanded and Financing of Primary Health Care Services is prioritized (US\$27,700,000 IDA, US\$2,990,000 GFF 2) | | | |
| DLR 4.1 Increase in number of people who are active members of the National Health Insurance Scheme | DLR 4.1 Increase in the number of persons who are active members of NHIS, from a baseline of 16,700,000, \$2 per additional person that meets said criteria, up to a limit of \$15,200,000 for Years 1-4. | .. | DLR 4.1 Increase in the number of persons who are active members of NHIS, from a baseline of 16,700,000, \$0.15 per additional person that meets said criteria, up to a limit of \$1,140,000. |
| DLR 4.2 Increase in the number of Indigent Persons who are active members of the National Health Insurance Scheme | DLR 4.2, Increase in the number of Indigent Persons who are active members of NHIS, from a baseline of 1,540,000, \$4 per additional Indigent Person that meets said criteria, up to a limit of \$4,800,000 for Years 1-4. | .. | DLR 4.2 Increase in the number of Indigent Persons who are active members of NHIS, from a baseline of 1,540,000, \$0.90 per Indigent Person that meets said criteria, up to a limit of \$1,080,000. |
| DLR 4.3 Annual increase in the percentage of insurance claims for Primary Health Care Services paid by the National Health Insurance Authority within 90 days of receipt. | DLR 4.3 Increase by one percentage (1 %) in insurance claims for PHCS paid by NHIA, in Year 1 from a baseline of three (3) percent (3%), and in Years 2-4, in each Year, from the target met the previous Year, \$100,000 per percentage (1%) increase in insurance claims that meet said criteria up to a limit of \$7,700,000 for Years 1-4. | .. | DLR 4.3 Increase by one percentage (1 %) in insurance claims for PHCS paid by NHIA, in Year 1 from a baseline of three (3) percent (3%), and in Years 2-4, in each Year, from the target met the previous Year, \$10,000 per percentage (1%) increase in insurance claims paid by NHIA up to a limit of \$770,000 for Years 1-4. |
| DLI 5. Public Financial Management for Primary Health Care Services is improved (US\$6,220,000 IDA, US\$722,000 GFF 2) | | | |
| DLR 5.1 Annual Ministry of Health Financial Reports (AMoHFR) including information on PHCS is completed by the Planned Deadline | DLR 5.1 In each Year, \$250,000 for an AMoHFR that includes information on PHCS and is completed by the Planned Deadline, up to a limit of \$1,000,000 for Years 1-4. | .. | DLR 5.1 In each Year, \$50,000 for an AMoHFR that includes information on PHCS and is completed by the Planned Deadline, up to a limit of \$200,000 for Years 1-4 . |

| DLIs & DLRs | Disbursement Formulas | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | IDA | GFF (TF084571) | GFF (TF085208) |
| DLR 5.2 Number of District Health Administrations (DHAs) with GIFMIS Capacity | DLR 5.2 \$20,000 per DHA with GIFMIS Capacity, up to a limit of \$5,220,000 for Years 1-4. | .. | DLR 5.2 \$2,000 per additional DHA with GIFMIS Capacity, up to a limit of US\$522,000 for Years 1-4. |
| DLI 6. Improved Utilization of Selected Primary Health Care Services (US\$11,010,000 IDA, US\$7,810,000 GFF 2) | | | |
| DLR 6.1 Annual increase in the number of mother/newborn pairs receiving care in facilities providing Quality BEmONC services at the Sub-District level | DLR 6.1 Increase in the number of mother/newborn pairs receiving care in facilities providing Quality BEmONC, in Year 1 from a baseline of 4,250, and in Years 2-4, in each Year from the target met in the previous Year, \$70 per additional mother/newborn pair that meet said criteria up to a limit of \$3,500,000 for Year 1-4. | .. | DLR 6.1 Increase in the number of mother/newborn pairs receiving care in facilities providing Quality BEmONC, in Year 1 from a baseline of 4,250, and in Years 2-4, in each Year from the target met in the previous Year, \$130 per additional mother/newborn pair that meet the criteria up to a limit of \$6,500,000 for Year 1-4. |
| DLR 6.2 Annual increase in the number of new family planning acceptors utilizing services at the Sub-District and community levels | DLR 6.2 Increase in the number of new family planning acceptors utilizing services at the Sub-District and community levels, in Year 1 from a baseline of 844,499, and in Years 2-4, in each Year, from the target met in the previous Year, \$50 per additional family planning acceptor that meets said criteria up to a limit of \$500,000 for Year 1-4. | .. | DLR 6.2 Increase in the number of new family planning acceptors utilizing services at the Sub-District and community levels, in Year 1 from a baseline of 844,499, and in Years 2-4, in each Year, from the target met in the previous Year, \$30 per additional family planning acceptor that meets the criteria up to a limit of \$300,000 for Years 1-4. |
| DLR 6.3 Annual increase in the number of adolescents utilizing health services at the Sub-District and community levels | DLR 6.3 Increase in the number of adolescents utilizing health services at the Sub-District and community levels, in Year 1 from a baseline of 244,658, and in Years 2-4, in each Year, from the target met the previous Year, \$30 per additional adolescent that meets said criteria, up to a limit of \$510,000 for Years 1-4. | .. | DLR 6.3 Increase in the number of adolescents utilizing health services at the Sub-District and community levels, in Year 1 from a baseline of 244,658, and in Years 2-4, in each Year, from the target met the previous Year, \$30 per additional adolescent that meets said criteria, up to a limit of \$510,000 for Years 1-4. |
| DLR 6.4 Annual increase in the | DLR 6.4 Increase in the number of | .. | DLR 6.4 Increase in the number of |

| DLIs & DLRs | Disbursement Formulas | | |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | IDA | GFF (TF084571) | GFF (TF085208) |
| number of children aged 0-23 months in Selected Districts who received Penta1 Vaccination | children aged 0-23 months in Selected Districts who received Penta1 Vaccination, in Year 1 from a baseline of 270,764, and in Years 2-4, in each Year, from the target met the previous Year, \$20 per additional child that meets said criteria, up to a limit of \$500,000 for Years 1-4. | | children aged 0-23 months in Selected Districts who received Penta1 Vaccination, in Year 1 from a baseline of 270,764, and in Years 2-4, in each Year, from the target met the previous Year, \$20 per additional child that meets said criteria, up to a limit of \$500,000 for Years 1-4. |
| DLR 6.5 Annual increase in the number of hypertensive patients diagnosed at health services at the Sub-District and community levels | DLR 6.5 Increase in the number of hypertensive patients diagnosed at Health Centers, in Year 1 from a baseline of 50,000 and in Years 2-4, in each Year, from the target met the previous Year, \$50 for each additional hypertensive patient that meets said criteria, up to a limit of \$6,000,000 for Years 1-4. | .. | .. |
| Totals | US\$150,000,000 | US\$5,000,000 | US\$16,000,000 |

ANNEX 2. DEFINITIONS OF DLRs

| <i>DLRs</i> | <i>Definition/Description of Achievement</i> |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DLI 1. Primary Health Care Networks of Practice and Model Health Centers are Developed | |
| DLR 1.1 Number of Networks of Practice functioning according to the Standards for Networks of Practice | <p>The “Standards for Networks of Practice” are referenced by DLR 3.1.</p> <p>Networks of Practice will be assessed and categorized into 5 maturity levels according to the maturity model specified as part of Standards for Networks of Practice. Networks of Practice meeting at least maturity level 3 will be considered functioning according to standards.</p> <p>To be eligible, Networks of Practice will have been established and officially designated as such by the Ghana Health Service/Ministry of Health as per the “Standards for Networks of Practice” referenced by DLR 3.1.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 1.2 Number of Model Health Centers functioning according to the Standards for Model Health Centers | <p>The “Standards for Model Health Centres” are referenced by DLR 3.1.</p> <p>Model Health Centres will be assessed and categorized into 5 maturity levels according to the maturity model specified as part of Standards for Model Health Centres. Model Health Centres meeting at least maturity level 3 will be considered functioning according to standards.</p> <p>To be eligible, Model Health Centres will have been established and officially designated as such by the Ghana Health Service/Ministry of Health in line with the “Standards for Model Health Centres” referenced by DLR 3.1.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 1.3 Number of Model Health Centers with a solar and/or battery electricity backup system | <p>On the basis of a needs assessment, appropriate electricity back-up systems will be installed to ensure 24-hour electricity supply for Health Centres (including solar energy and battery systems, but excluding diesel/petrol generators).</p> <p>To be eligible, Model Health Centres will have been established and officially designated as such by the Ghana Health Service/Ministry of Health in line with the “Standards for Model Health Centres” referenced by DLR 3.1.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLI 2. Capacities, Accountability and Quality of Networks of Practice are Improved | |
| DLR 2.1 Annual increase in the number of health centers and Model Health Centers that have available selected | <p>Each year, this is the increase from the previous year in the annual number of Health Centers/Model Health Centres for which monthly reporting does not show any stock-out of essential tracer medicines in at least six months of the previous year. The list of essential tracer medicines will be documented in the Operation Manual. The 2021 baseline is 0 Health Centres/Model Health Centers.</p> |

| DLRs | Definition/Description of Achievement |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Essential Medicines at least six (6) months of the Year | Results will be achieved annually and disbursements are scalable. |
| DLR 2.2 Increase in the number of Physician Assistants at post in Health Centers and Polyclinics | <p>This is the increase (from the 2021 baseline of 806) in the number of Physician Assistants at post in Health Centres and Polyclinics.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 2.3 Annual increase in the number of Networks of Practice that score Green on the Community Scorecard for at least one quarter | <p>Each year, this is the increase from the previous year in the number of Networks of Practice that have an overall score of Green for at least one quarter. Each quarter, Community Scorecards will grade the performance of Networks of Practice on a 3-level scale (Red, Yellow, Green) across different dimensions of performance, from which an overall grading (of Red, Yellow or Green) will be calculated. The 2021 baseline is 0 Networks of Practice. Implementation of Community Scorecards by the Networks of Practice will be in accordance with the “Guidelines for the Community Scorecard/Action Plans initiative adapted for use by the Networks of Practice” referenced by DLR 3.1.</p> <p>To be eligible, Networks of Practice will have been established and officially designated as such by the Ghana Health Service/Ministry of Health in line with “Standards for Networks of Practice” referenced by DLR 3.1.</p> <p>Results will be achieved annually and disbursements are scalable.</p> |
| DLR 2.4 Annual increase in the number of Networks of Practice that have received at least one clinical support visit in each quarter from the District Hospital level | <p>Each year, this is the increase from the previous year in the number of Networks of Practice receiving at least one clinical support visit at least once every quarter by staff of a District Hospital or of a facility at the level of the District Hospital. The 2021 baseline is 0 Networks of Practice.</p> <p>To be eligible, Networks of Practice will have been established and officially designated as such by the Ghana Health Service/Ministry of Health in line with the “Standards for Networks of Practice” referenced by DLR 3.1..</p> <p>Results will be achieved annually and disbursements are scalable.</p> |
| DLI 3. Health Policies, Standards and Plans are Developed and Financing for Primary Health care is Improved | |
| DLR 3.1 Health Policies, Plans and Standards are approved | <p>Policies, Plans and Standards to improve primary health care services are:</p> <ol style="list-style-type: none"> 1. Essential health services package, to be approved by the Minister of Health. This will include types of services and levels of care. The service package will include preventive, diagnostic and treatment services for: reproductive, maternal, neonatal, child, and adolescent health and nutrition; infectious diseases (including malaria, tuberculosis, and HIV); and non-communicable diseases and injuries. These will include services delivered by the Ministry of Health to address climate-sensitive diseases, as well as relevant health services for survivors of gender-based violence. |

| <i>DLRs</i> | <i>Definition/Description of Achievement</i> |
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| | <p>2. Mapping of Networks of Practice and Model Health Centres, to be approved by the Ghana Health Service Director General. This mapping will describe the geographical locations and coverage areas of Networks of Practice and Model Health Centres.</p> <p>3. Standards for Networks of Practice, to be approved by the Ghana Health Service Director General. The standards will describe the concept and design of the Networks of Practice and will include operational guidelines. The standards will specify the following: geographic and health facility configurations; the essential health services package for delivery by facilities within networks; human resource and equipment standards for facilities under the Networks; essential medicines and consumables for facilities under the Networks; information system and reporting arrangements; referral and transport systems; modalities for engagement with the private sector (including Christian Health Association of Ghana facilities, private health facilities, maternity homes, pharmacies and laboratories); procedures for oversight and management of the Networks, as well as for community engagement. The standards will specify a 5-level maturity model for the Networks. The guidelines will describe the requirements and procedure for designating a group of health services as a Network of Practice.</p> <p>4. Guidelines for HeFRA accreditation of Networks of Practice are approved by the Minister of Health.</p> <p>5. Standards for Model Health Centres, to be approved by the Minister of Health. The standards will specify the following: concept and design of the Model Health Centres; facility configuration(s) and infrastructure standards; water, sanitation, and electricity system standards; services to be delivered by Model Health Centres; standards for staffing, equipment, and essential medicines/consumables; information system and reporting requirements; and management and supervision modalities. The standards will specify a 5-level maturity model for the Model Health Centres. The guidelines will describe the requirements and procedure for designating a facility as a Model Health Centre.</p> <p>6. Costed plan for development for Networks of Practice, to be approved by the Minister of Health. This will include plans, timeframes, quantities, locations, actions, investments, and estimated costs for development of the Networks of Practice.</p> <p>7. Costed plan for development of Model Health Centres, to be approved by the Minister of Health. This will include plans, timeframes, quantities, actions, investments, and estimated costs for development of the Model Health Centres.</p> <p>8. Budgets for development of Networks of Practice and Model Health Centres included in the Health Sector Medium Term Expenditure Framework, to be approved by the Minister of Health. Investments and resource allocation necessary for development of the Networks of Practice and Model Health Centres will be included in the annual revision of the Health Sector Medium Term Expenditure Framework for 2022-25.</p> |

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| | <p>9. The 2nd Edition Supply Chain Master Plan, including costed implementation plan, is finalized, approved by the Minister of Health, and disseminated in all regions.</p> <p>10. Guidelines for the Community Scorecard/Action Plans initiative are adapted for use by the Networks of Practice and approved by the Ghana Health Service Director General.</p> <p>11. Health Sector Medium Term Development Plan 2022-25, to be approved by the Minister of Health as part of the Government of Ghana’s programmatic budgeting procedures.</p> <p>12. Revised Common Management Arrangements 2022-25, to be approved by the Chief Director of the Ministry of Health.</p> <p>13. Holistic Assessment Tool 2022-25, to be approved by the Chief Director of the Ministry of Health.</p> <p>14. Guidelines on the use of Internally Generated Funds, to be approved by the Minister of Health. These will specify procedures for the collection and use of Internally Generated Funds by agencies of the Ministry of Health.</p> <p>15. National Health Accounts for 2017-20, to be approved by the Chief Director of the Ministry of Health. The National Health Accounts will follow the Ministry of Health’s standard methodology.</p> <p>16. The Health Financing Strategy is revised and approved by the Minister of Health.</p> <p>17. The Ministry of Health Accounting Treasury and Financial Reporting Manual is revised, and approved by the Minister of Health, to identify the Networks of Practice and specify policies and procedures for their management of funds.</p> <p>18. The National Health Insurance Authority and the Social Protection Directorate of the Ministry of Gender, Children and Social Protection will sign a Memorandum of Understanding to enable data sharing between the National Health Insurance Scheme and the National Household Registry database to facilitate National Health Insurance Scheme enrolment of indigents.</p> <p>19. Actuarial modeling of the potential cost of National Health Insurance Scheme coverage of selected individually-provided preventive health services is approved by the Chief Executive Officer of the National Health Insurance Authority. The preventive health services in question will be specified in the Operation Manual.</p> |

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| | <p>20. Assessment of a pilot of a provider-payment mechanism for National Health Insurance Scheme financing of selected individually-provided preventive health services is approved by the Chief Executive Officer of the National Health Insurance Authority. The preventive health services in question will be specified in the Operation Manual.</p> <p>21. Revision of National Health Insurance Scheme benefits package to included selected individually-provided preventive health services is approved by the Chief Executive Officer of the National Health Insurance Authority. The preventive health services in question will be specified in the Operation Manual.</p> <p>22. Mapping of EmONC facilities and referral pathways, to be approved by the Ghana Health Service Director General. This will describe optimal geographic locations and referral pathways for BEmONC and Comprehensive Emergency Obstetric and Neotnatal Care (CEmONC) services.</p> <p>23. Standards, pathways and protocols for quality BEmONC services at the sub-district level, including referral and transport, to be approved by the Ghana Health Service Director General. These will specify: standards for infrastructure, human resource, equipment, and medicines/consumables; standards for quality of care; patient pathways and protocols; and referral pathways and standards for access to transport.</p> <p>24. Costed plan for improving BEmONC services, to be approved by the Ghana Health Service Director General. Based on the mapping and standards, a costed plan will include quantities, locations, activities, timeframes, and estimated costs.</p> <p>25. Budget for improving BEmONC services included in the Health Sector Medium Term Expenditure Framework, to be approved by the Minister of Health. Investments and resource allocation necessary for improving BEmONC will be included in the annual revision of the Health Sector Medium Term Expenditure Framework for 2022-25.</p> <p>26. Standards, pathways and protocols at the primary health care level for family planning services, to be approved by the Ghana Health Service Director General. This will include, for each level of primary health care services, service delivery and quality standards, patient and referral pathways, and service delivery protocols. For each level of care, standards for human resources, equipment, and family planning commodities, will be specified. Information system and reporting requirements will be described.</p> <p>27. Standards, pathways and protocols at the primary health care level for adolescent health and nutrition services, including family planning, to be approved by the Ghana Health Service Director General. This will include, for each level of primary health care services, service delivery and quality standards, patient and referral pathways, and diagnosis and treatment protocols. For each level of care, standards for human resources, equipment, and medicines/consumables, will be specified. Information system and reporting requirements will be described.</p> |

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| | <p>28. Costed implementation plan for the Strategic Plan for the Prevention and Control of Non-Communicable Diseases in Ghana, approved by the Ghana Health Service Director General. Costing will be done for the existing approved Strategic Plan, and the Plan will be officially launched and disseminated.</p> <p>29. Standards, pathways and protocols for managing hypertension at the primary health care level, to be approved by the Ghana Health Service Director General. This will include, for each level of primary health care services, service delivery and quality standards, patient and referral pathways, and diagnosis and treatment protocols. For each level of care, standards for human resources, equipment, and medicines/consumables, will be specified. Information system and reporting requirements will be described.</p> <p>Provided they have the required content, each of the above may be separate documents or embedded in or joined with other documents. Each will be presented at the Health Sector Working Group and made publicly available on the Ministry of Health website.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 3.2 Annual expenditures from the national budget on capital investments and operational costs of health services at the Sub-District and community levels | <p>The annual Financial Report of the Ghana Health Service will provide expenditures from the national budget on capital investments and operational costs made at the Sub-District and community levels (denominated in GHS millions).</p> <p>Results will be achieved annually and disbursements are scalable.</p> |
| DLI 4. National Health Insurance Scheme Coverage is expanded and Financing of Primary Health Care Services is prioritized | |
| DLR 4.1 Increase in number of people who are active members of the National Health Insurance Scheme | <p>This is the increase (from the 2021 baseline of 16,700,000) in the number of people who are active National Health Insurance Scheme members</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 4.2 Increase in the number of Indigent Persons who are active members of the National Health Insurance Scheme | <p>This is the increase (from the 2021 baseline of 1,540,000) in the number of people categorized as indigent by the government who are active National Health Insurance Scheme members.</p> <p>Results may be achieved anytime during the PforR implementation period and disbursements are scalable.</p> |
| DLR 4.3 Annual increase in the percentage of insurance claims for Primary Health Care Services paid by the National Health Insurance Authority within 90 days of receipt | <p>Each year, this is the increase from the previous year in the percentage of insurance claims submitted by providers at the Sub-District and community levels that are paid within 90 days of receipt by the National Health Insurance Authority. The 2021 baseline is 3 percent.</p> <p>Results will be achieved annually and disbursements are scalable.</p> |

| DLRs | Definition/Description of Achievement |
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| DLI 5. Public Financial Management for Primary Health Care Services is improved | |
| DLR 5.1 Annual Ministry of Health Financial Reports (AMoHFR) including information on PHCS is completed by the Planned Deadline | The consolidated, unaudited Ministry of Health Financial Report for the previous Government of Ghana FY, disaggregated to the Sub-District level, is published online annually by the Planned Deadline: June 2022 for FY21, April 2023 for FY22, February 2024 for FY23, February 2025 for FY24. Results will be achieved annually and disbursements are time-bound. |
| DLR 5.2 Number of District Health Administrations (DHAs) with GIFMIS Capacity | This is the number of District Health Administrations with the required human resources, training, equipment, software, and procedures, to make use of GIFMIS for public financial management, including for primary health care services at the Sub-District level. Detailed requirements for readiness to implement GIFMIS will be documented in the Operation Manual. Results may be achieved anytime during the PforR implementation period and disbursements are scalable. |
| DLI 6. Improved Utilization of Selected Primary Health Care Services | |
| DLR 6.1 Annual increase in the number of mother/newborn pairs receiving care in facilities providing Quality BEmONC services at the Sub-District level | Each year, this is the increase from the previous year in the number of mother/newborn pairs that are cared for in facilities that meet the standards referenced by DLR 3.1 for quality BEmONC (designated by the Ghana Health Service as BEmONC-ready), including assessment, stabilization, referral and transport for mother/newborn pairs with complications. The 2021 baseline is 30,000. Results will be achieved annually and disbursements are scalable. |
| DLR 6.2 Annual increase in the number of new family planning acceptors utilizing services at the Sub-District and community levels | Each year, this is the increase from the previous year in the number of new family planning acceptors utilizing family planning services (modern methods) at the Sub-District and community levels (not including District Hospitals). The 2021 baseline is 844,499. Results will be achieved annually and disbursements are scalable. |
| DLR 6.3 Annual increase in the number of adolescents utilizing health services at the Sub-District and community levels | Each year, this is the increase from the previous year in the number of adolescents (ages 15-19 years) utilizing health services at the Sub-District and community levels (not including District Hospitals). The 2021 baseline is 246,658. Results will be achieved annually and disbursements are scalable. |
| DLR 6.4 Annual increase in the number of children aged 0-23 months in Selected Districts who received Penta1 Vaccination | Each year, this is the increase from the previous year in the annual number of children aged 0-23 months who received Penta1 vaccination in Selected Districts. The Selected Districts will be specified in the Operation Manual. The 2021 baseline is 270,764. Results will be achieved annually and disbursements are scalable. |

| <i>DLRs</i> | <i>Definition/Description of Achievement</i> |
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| DLR 6.5 Annual increase in the number of hypertensive patients diagnosed and referred at the Sub-District and community levels | <p>Each year, this is the increase from the previous year in the number of hypertensive patients diagnosed and referred at the Sub-District and community levels. The 2021 baseline is 50,000.</p> <p>Results will be achieved annually and disbursements are scalable.</p> |

Note: Years are calendar years.