Analytical Factsheet

July 2023

Health Systems Functionality Northeast Region in Ghana

Rationale

The WHO AFRO Region has developed tools to assess the functionality of district health systems. These tools were generally developed for member countries who adapt them to assess the functionality or operationality of their health systems. The Assessment Tool provides a systematic approach to assessing the operationality of the district’s capacity to achieve its expected objectives.

This tool was used in conducting self-assessments in the six districts of the North East region to accelerate the attainment of UHC and other SDG health-related goals, to guide medium-term investments and engagement processes towards UHC and health-related SDGs at the district level and to institutional mechanisms, organisational structures, managerial processes, health service delivery, partnerships, resource mobilisation & management capacities at the district level.

The assessment consists of two tools; tool one covers Universal Health Coverage (UHC), Primary Health Care (PHC), Determinants of Health and Health security of the districts in the region. Tool two covers health system capacity, management capacity and oversight capacity of health service delivery. The assessment took place in all the six M/DHDs in the region, and twelve health facilities (four hospitals, eight health centres and two CHPS compounds) were assessed.

| Total Population | 686,912 |
| Number of Districts | 6 |
| Number of Sub-districts | 29 |
| Number of Hospitals | 5 |
| Number of Health Centres | 20 |
| Number of Clinics | 9 |
| Demarcated CHPS zones | 146 |
| Functional CHPS Zones | 19 |
| CHPS reporting in DHIMS | 97 |
| Doctor population ratio | 1: 42,049 |
| Nurse Population ratio | 1: 314 |

Key messages

- Interpretation of scores guide; 75% & Above – Good score & need to sustain, 55% – 74% - Scaling-up intervention and 0% - 54% - need to introduce new intervention.
- On Health Service coverage, the region scored 67%; the region hopes to improve before the 2030 UHC target through collaborative efforts from all stakeholders and partners.
- UHC coverage score was 55%. There is a need to improve human resources in health care delivery in the region and the availability of medical equipment and medical supplies for service delivery.
- The region is faced with challenges in financial risk (43%), technology (47%) and knowledge capacity sharing (36%) for health service delivery. Substantial inputs are required in these areas to accelerate healthcare provision to the people within the region.
- Instability in health determinants such as social, environmental, and economic factors greatly affect health delivery. In particular, the unavailability of potable water, poor road network and transport systems and unavailability of a regional hospital, which increase the distance travelled to referral points, undermine health care delivery in the region.
1. Regional Overview: Health Service Outcomes

Summarize regional outlook in reference to Tool 1 results

<table>
<thead>
<tr>
<th>Determinants of Health</th>
<th>Maximize Health Security</th>
<th>Maximize Universal Health</th>
<th>Essential Services</th>
<th>Financial Risk Protection</th>
<th>PHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic/Comme...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determinants of Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection of Health...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization and...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage of...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential Services...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Risk...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Security...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholders...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.1 Universal Health Coverage

The regional overall average UHC score is 55% out of 100. The availability of essential service is 62%, while coverage is 67% and financial risk protection stands at 43%. This means more efforts must be made towards sustaining and sharing of lesson learnt in order to maintain performance.

![Figure 1: North East region UHC scores within six districts (source: WHO)](image)

- The absence of hospitals in two Districts (Mamprugu Moagduri and Yunyoo Nasuan) affects universal health coverage. These two districts had low scores on UHC.
- Construction of hospitals in the above district has started.
- West Mamprusi has two hospitals (Walewale Hospital and Janga Hospital), hence its high performance.
- The region still relies on the Northern Region Medical Store to supply medicines, which affects health service delivery.

1.2 Health Security

For the selected districts, the overall average health security score is 66%. This is composed of the multiple factors, which are group under prevention (61%), detection (63%), response (70%), and organization and leadership (70%). For health security, overall regional performance is good, but detection needs scaling up of new interventions to improve performance in that aspect.

![Figure 2: North East region Health Security scores within six districts (source: WHO)](image)

- Chereponi scored 93%, and its primary facilities scored the lowest (60%) in detecting health threats.
- Both Mamprugu Moagduri and Yunyoo Nasuan rely only on their primary health care as the majority of their referred cases are managed in Sandema Hospital in Biilsa North District of Upper East Region and Binde Hospital in Bunkpurugu Nakpanduri District in North East Region.
- Response to health threats is 100% in Chereponi in hospitals and primary health care facilities.
- Prevention of health threats in Bunkurugu Nakpanduri District is the lowest among all the districts (33%).
1.3 Determinants of Health

The regional overall average determinants of health score is 64%. The social determinants of health stand at 72%, environmental determinants at 65%, economic determinants at 48% and political determinants at 65%.

Even though, health determinants is generally doing well, economic determinants need scaling up of new interventions.

- Bunkpurugu Nakpanduri had a low score in economic and commercial determinants of health (33%) despite achieving an average of 61% in the total health determinants.
- Determinants such as access to potable water in communities are currently poor, especially in districts like Yunyoo Nasuan, Mamprugu Moagduri and Bunkpurugu Nakpanduri. This is affecting the health of the community members.
- Economic determinants score is low in Mamprugu Moagduri and Yunyoo Nasuan Districts. There is a need to create motorable roads to enhance health, agriculture, education, and commercial activities.

1.4 Primary Health Care

The regional average score for PHC is 55%. This is computed from the six PHC elements based on the Alma Atta Declaration. The PHC approach for human resources is 49% with community empowerment at 72%, capacity for knowledge production and use at 36%, alignment of stakeholders with national priorities 68%, financing at 62% and technology transfer standing at 47%. For PHC, more interventions need to be scaled up to improve on healthcare delivery.

- Limited health equipment across all the districts in the region, especially Bunkpuru Nakpanduri, Mamprugu Moagduri and Yunyoo Nasuan.
- The region has various operational challenges, especially skilled human resources in specific service delivery areas. The region currently lacks IT managers, and only a few facilities use the light wave information management system; hence, the region has a low score in technology.
- Need to improve health care service provision through supply of medical equipment to primary health care especially in Mamprugu Moagduri and Yunyoo Nasuan District to improve on CHPS functionality in the districts.
2. Regional Overview: System Functionality

The system’s functionality includes oversight, management, and the health system capacity. The health system’s capacity had the lowest score (70%), while oversight capacity scored 85%. Considering the average of the three aspects assessed (oversight capacity, management capacity and capacity), Bunkpurugu Nakpanduri scored 61%, the lowest; Chereponi has 88%; East Mamprusi had 74%; Mamprugu Moagduri had the third lowest (66%), West Mamprusi had 94% (highest among all districts), and Yunyoo Nasuan was the second lowest of 62%.

### 2.1 Service Provision Capacity

Service Provision capacity is the ability of the system to deliver healthcare effectively to those who need it when they need it. This includes having access to health facilities, well-trained professionals, and the right equipment efficiently to provide the best care. It also consists of the ability of the health system to plan for and minimise the negative consequences and recover quickly. The regional average service provision capacity is 70%. On specific dimensions of service provision capacity, Access scored 56%, Demand 82%, Quality of care 74% and Resilience 73%.

- Mamprugu Moagduri had the region’s lowest (26%) access, followed by Yunyoo Nasuan District 33%. West Mamprusi recorded the highest Access to service delivery - 80%
- Demand was lowest in Bunkpurugu Nakpanduri (56%), followed by East Mamprusi at 75%, with all the other districts scoring more than 80% in the assessment. Demand was 100% in both Chereponi and West Mamprusi. This indicates more provision should be made to these districts regarding access to care.
- West Mamprusi had the highest assessed score in the quality of health care provided to its people. In contrast, Bunkpurugu Nakpanduri had the lowest, calling for improving the quality through service provision.
- Resilience is high in West Mamprusi (98%), while Bunkpurugu Nakpanduri needs new interventions to improve the current resilience score.
2.2 Oversight Capacity

Oversight capacity includes areas of authority, organizational structure, policy & strategic guidance, technical accountability, social accountability, legal & regulatory mechanisms, stakeholder engagement, and integrity & public confidence. The score in each area shown in Figure 6 below.

- Social Accountability scored lowest among all the sectors in the oversight capacity. The lessons from well-performing districts need to be shared and sustained across all the districts in the region. Similar attention must be extended to integrity and public confidence to improve them.
- Current efforts at organisational structure and technical accountability need to be sustained.

2.3 Management Capacity

Management capacity components include structure, strategy, systems, style, skills, staff, and shared values. From the assessment, staffing recorded the lowest score (61%), followed by systems (65%); hence, the need to scale up interventions in these areas. Strategy (94%) and shared values (88%) need plans for sustainability. Skills (74%), Structure (71%) and Style (76%) are performing moderately well.

- Staffing is a challenge in the region
- Health workers are generally unwilling to accept posting to the region
- Systems: Patients referred for care at next-level facilities are hindered due to lack of transport (ambulance) and distance to referral hospital, especially when referred to Tamale Teaching Hospital
- Health workers posted to the region don’t serve for long before they leave.

The region also lacks specific skills in managing critically ill persons, especially pediatric nurses, neonatal nurses and obstetric and gynecologic specialists.
On average, all the region’s districts are doing well in almost all spheres of healthcare delivery but continuously needs improvement. It is, therefore, important for the region to sustain the gains made in service provision. To improve health care and service provision, the region must keep improving the UHC, PHC, health determinants and health security to enhance capacity in service delivery. Below are some recommendations.

- Provide capacity building for health staff to enable them to carry out essential care.
- Provide equipment to enable essential services at all levels and times.
- Ensure equity and distribution of health facilities and human resources.
- Improve accessibility of health through national health insurance coverage.
- Promote effective resource mobilisation to improve health. Districts engage with stakeholders and partners to assist in basic service provisions such as emergency transport systems provision of potable water and infrastructure.
- Increase in CHPS functionality in the region.
References

• https://aho.afro.who.int/functionality-assessment/af

Sources

Production of the infographic was supported by the Integrated African Health Observatory.

Photography: https://photos.hq.who.int/, https://photos.afro.who.int/

Check out our other Fact Sheets in this IAHO country health profiles series: https://aho.afro.who.int/country-profiles/af

Acknowledgement

This Factsheet was produced by the Ghana Health Service Northeast Regional Health Directorate under the leadership of:

Dr. Abukari Abdulai – Regional Director of Health Service
Mr. Adams Anas – Regional Health Information Officer
Mr. Richard Dzeha – Health Information Officer
Dr. Cornelius Debpuur – Deputy Director, Research and Development Division, Ghana Health Service
Ms. Edith Mansah – Policy Planning Monitoring and Evaluation Division, Ghana Health Service

WHO provided technical support and financial resources. The WHO technical support team included Dominic Kwabena Atweam, Dr. Asrat Sofonias, Dr. Kasolo Francis, Ms. Solyana Ngusbrhan Kidane, Ms. Bertha Kembabazi, Ms. Kristina Tunheim, Dr. Serge Bataliack Marcial, Dr. Humphrey Karamagi

Contact us at: iAHO@who.int
Connect with us on LinkedIn: https://www.linkedin.com/company/iaho/