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# Growth Monitoring and Promotion in Northern Ghana

A Case Study Narrative



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# Acronyms

C-IYCF	community infant and young child feeding [register]
CWC	child welfare clinic
CHPS	community-based health planning and services
CHN	community health nurse
CHO	community health officer
CHV	community health volunteer
DHIMS2	district health information management system
GHS	Ghana Health Service
GMP	growth monitoring and promotion
IYCF	infant and young child feeding
LEAP	Livelihood Empowerment Against Poverty
MCGL	MOMENTUM Country and Global Leadership
MCHRB	Maternal and Child Health Record Book
MUAC	mid-upper arm circumference
NHIS	national health insurance scheme
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development





## Introduction

Routine growth monitoring and promotion (GMP) of infants and young children provides frequent contacts with caregivers and can serve as an entry point for other essential nutrition and child health and development services. Governments throughout the world use GMP as a platform for delivering child health and nutrition services, however, GMP platforms have achieved varying degrees of quality and success. As a result, participants at a 2018 global convening on GMP led by the Global Financing Facility of the World Bank suggested a paradigm shift to reposition GMP to better integrate child growth and development in the first years of life. They also called for defining diverse GMP models and the contexts in which they can be most effective (Bégin et al. 2020). USAID Advancing Nutrition’s two country case study (northern Ghana and Nepal) contributes to these efforts.

This country narrative highlights findings, challenges, good practices, and innovations from northern Ghana, which the Ghana Health Service (GHS) and stakeholders can use to foster healthy child growth and development—and share with other countries committed to helping children reach their physical and cognitive potential.

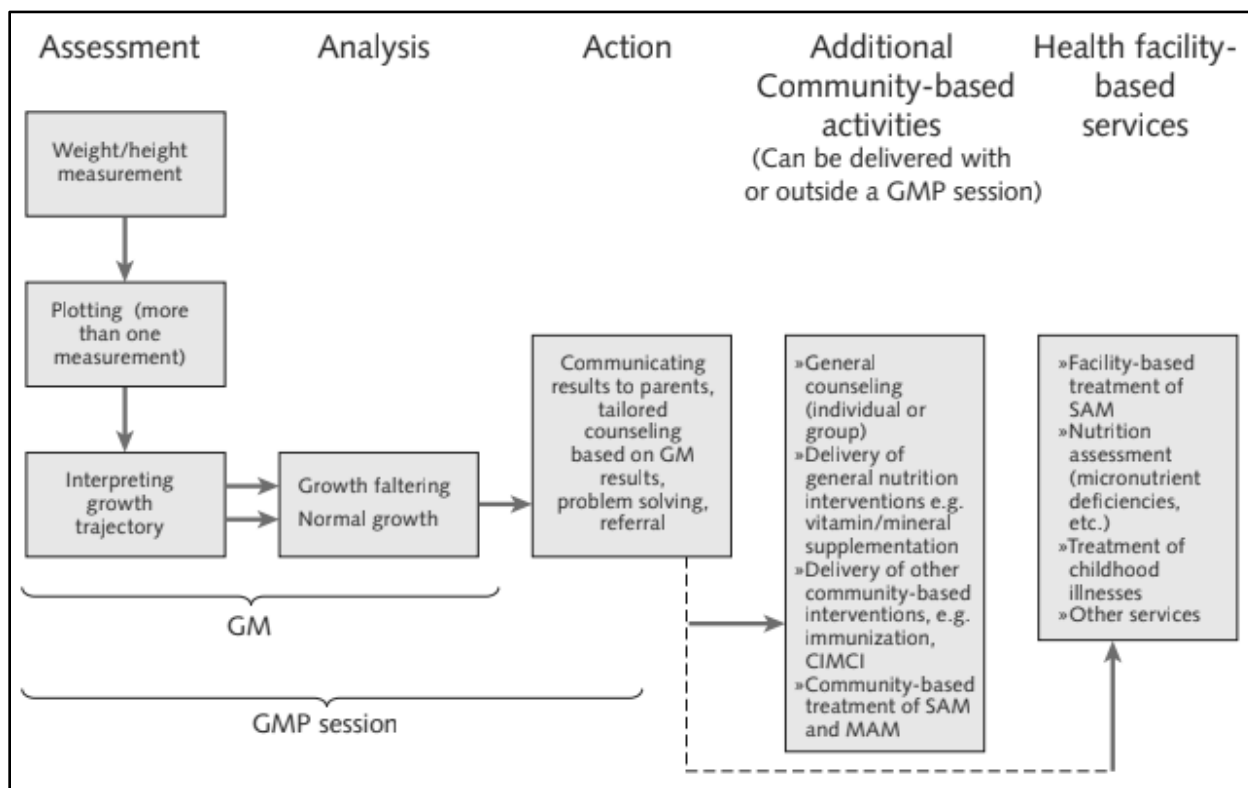
# What is Growth Monitoring and Promotion?

“Growth monitoring and promotion (GMP) is a prevention activity that uses growth monitoring (GM), i.e., measuring and interpreting growth, to facilitate communication and interaction with the caregiver and to generate adequate action to promote [P] child growth through—

- increased caregiver awareness about child growth
- improved caring practices
- increased demand for other services, as needed” (UNICEF 2007).

The GMP framework (Figure 1), adapted from Mangasaryan et al. (2011), identifies the GMP process. The first step is growth monitoring: monthly contact and an assessment of adequate growth. Monitoring occurs regularly and focuses on the growth trend (i.e., pattern of frequent weight or length/height measurements, characterized as inclining, flattening, or declining), not on nutritional status (i.e., underweight, stunted, wasted). The distinction between monitoring a growth trend and classifying nutritional status, which reflects the accumulation of nutrition, health, and genetic influences on growth, is important for GMP. Focusing on a child’s growth trend over time enables the health system to identify growth faltering early—before a child is malnourished. Importantly, GMP links the information gathered over time from monitoring growth trends with an action, where promotion begins. Tailoring promotion to the age of the child and community context enables caregivers to receive specific, actionable advice through counseling aligned with the child’s growth trend and referral, if needed.

Figure 1. GMP Process



Adapted from: Mangasaryan, Arabi, and Schultink. 2011, p. 47

# GMP in Ghana

Impressive progress in reducing child malnutrition during the last 20 years puts Ghana on course to meet related Sustainable Development Goals (Global Nutrition Report 2020). Yet significant regional disparities mean improving child nutrition remains a policy and program priority in northern Ghana<sup>1</sup> (Ghana Statistical Service 2018). (See Table 1).

**Table 1. Prevalence of Malnutrition in Northern Ghana, GHS 2018 (%)**

Type of Malnutrition	National	Northern Region*	Upper East Region	Upper West Region
Stunting	17.5%	29%	18%	15%
Underweight	13%	19%	15%	10%
Wasting	7%	9%	7%	6%

\*Includes Northern, North East, and Savannah Regions  
Source: Ghana Statistical Service 2018, p. 18

Ghana’s robust national health system includes a linked network of government hospitals, health centers, and community-based health planning and services (CHPS) compounds, Christian Health Association of Ghana hospitals and clinics, and private facilities (Drislane, Akpalu, and Wegdam 2014; Egan, Devlin, and Pandit-Rajani 2017). Since 2003, the National Health Insurance Scheme (NHIS) has aimed to “assure equitable and universal access for all residents of Ghana to an acceptable quality package of essential healthcare” (Government of Ghana 2004, page 1).

GMP has been a core child health and nutrition-service delivery platform in Ghana since the 1970s. As GMP attendance has been associated with improved child growth (Agbozo et al. 2018), GHS aims to reach all children under 5. From birth to 2 years of age, GHS aims for monthly GMP attendance for at least 9 out of 12 months, and from 2 to 5 years of age they aim for attendance twice a year.

Trained health workers, sometimes complemented by community volunteers, deliver GMP services through routine child welfare clinics (CWC) in facilities and communities (Ministry of Health, Ghana 2008). Per Ghana’s Under 5 Child Health Policy (2008), CWCs are static clinics in health facilities and CHPS compounds and mobile outreach clinics in communities.

National health and nutrition policies and strategies continue to support and prioritize GMP. Integrating GMP with immunization and vitamin A supplementation ensures the delivery of preventive care during CWCs (Ghartey 2010). GHS continues to improve GMP services through initiatives such as the use of integrated *Maternal and Child Health Record Book* (MCHRB). Introduced nationally in 2019, the caregiver-held book combines previously separate record books for pregnant women and children under 5, and adds content on child development. The combination promotes a continuum of care for maternal and child health and nutrition. In 2012, GHS introduced data curation in the electronic district health information management system (DHIMS2) to systematically track growth-monitoring data for decision-making for facilities, districts, regions, and the nation. Documentation of GMP services and lessons supports implementation in Ghana and globally.

<sup>1</sup> Since this survey, a 2018 referendum broke this Northern Region into three: Northern Region, North East Region, and Savannah Region.





## Objectives

This case study aims to—

- increase understanding of how facility-based and community-based GMP is implemented in northern Ghana
- highlight opportunities and recommendations to leverage and strengthen GMP to improve healthy child growth and development in northern Ghana
- identify good practices for sharing with global GMP stakeholders.

# Methodology

This case study, conducted from November 2020 to January 2021, systematically describes the GMP situation in two of U.S. Agency for International Development (USAID) Ghana's 17 priority districts: East Mamprusi Municipal in the North East Region and Garu District in the Upper East Region. We selected districts that were easily accessible in consultation with the Government of Ghana and USAID Ghana; for diversity of context, we included districts in two different regions.

For this study, we used three methods of data collection:

1. **Desk review:** We reviewed policies, protocols, strategies, program reports, and peer-reviewed literature to understand the current state of children's health and nutrition, and the government's role in supporting GMP. We explored how GMP is implemented, challenges faced and overcome, and how data are used for decision-making.
2. **Interviews:** Two researchers and two research assistants trained in qualitative research collected data using pretested semi-structured in-depth interview guides translated to local languages (Dagbani, Kusal, Kusasi, Mampruli, or Twi) as needed. We interviewed GHS staff at the national and subnational levels (i.e., the national head of nutrition, regional and district nutrition officers, and regional and district public health nurses), as well as development partners. Interviewers asked about roles, use and understanding of GMP protocols and the MCHRB, data collection and use, and priority areas for GMP. We interviewed community health nurses (CHNs), community health officers (CHOs), field technicians for disease control, a health assistant, and a senior nursing officer at five health centers and six CHPS compounds across the two districts to learn about experiences, challenges, and recommendations. We asked caregivers with children 0–2 years of age about their perceptions of GMP services, recommendations for improving GMP, and its linkages with other services.
3. **Observations:** We observed eight facility, community, and outreach GMP sessions for individual children from registration through counseling over a period of approximately one week. The observation ranged from 7–40 minutes depending on the length of the GMP session and aimed to see when and how staff take, record and use growth measurements. We aimed to understand what guided decisions about whom to counsel, the content and quality of counseling, and feedback provided. Observers also examined how links and referrals to additional services within and beyond the health system occur.

**Table 2. Interviews and Observations**

Methods	National	East Mamprusi	Garu	Total
<b>In-depth interviews</b>				
Development partners	5	-	-	5
National government stakeholders	2	-	-	2
Regional & district level GHS staff	-	6	4	10
Health workers	-	8	8	16
Caregivers	-	10	6	16
<b>Total</b>	<b>7</b>	<b>24</b>	<b>18</b>	<b>49</b>
<b>Observations</b>				
Outreach (CHPS staff)	-	3	1	4
Community (CHPS staff)	-	-	1	1
Facility	-	1	2	3
<b>Total</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>8</b>

GHS convened two workshops with national stakeholders: 1) one pre-data collection to solicit input on the study design, and 2) another post-data collection to ensure the study aligned with current GMP practice and priorities. The head of nutrition at GHS facilitated discussions during the validation workshop.

To analyze results, we first translated interview notes into English. We prepared a codebook using deductive (pre-determined) codes and inductive codes based on emerging themes. Using ATLAS.ti 9, we coded the interviews and analyzed the data by thematic area for each research question. Then we triangulated data from the desk review, interviews, observations, and workshops to validate and refine the findings.

This country narrative provides a high level overview of GMP in northern Ghana. It aims to tell the story of how GMP is implemented at the study locations, to contribute to a combined case study of GMP in two countries. As such, it is limited in scope. It also has a number of methodological limitations. The study, and observation sessions in particular, are not representative of the entire district nor all sessions in the district. The sites for observation were selected opportunistically, based on where health staff conducted GMP on the days they were interviewed. Though there was only one observation at a CHPS compound, the same staff conduct GMP at outreach and generally follow the same protocol. Nevertheless, similarities across the various study sites indicate trends in implementation, which are described in the following sections. Interviews and observations provide a glimpse of how GMP may be implemented at various sites.

# Findings

## Implementation of GMP in Northern Ghana

Many respondents from across groups described GMP as an important platform for delivering nutrition services and promoting child growth and development in northern Ghana. Respondents believe the integration of GMP into routine primary care services and primary care service points makes coverage nearly universal. Respondents from both districts shared that CWCs in facilities and at CHPS compounds offer GMP daily. For outreach CWCs, GMP takes place at the same location in a community on a regular schedule (e.g., the first Monday of every month). A given location could offer services once a week to once a month, depending on the population density.

Generally, across study districts, health workers at facilities and outreach implement GMP the same way because processes are standardized and components (Figure 1) are the same. Variations in implementation occur when facilities have limited physical space, available resources, or equipment including transport for health workers to get to outreach locations. Respondents from across groups described that all children 0–5 years in the community (including those with disabilities as noted by several caregivers) receive GMP and monthly attendance is high for children 0–2 years<sup>2</sup>. Both health workers and caregivers shared that mothers bring children for GMP; fathers have a range of engagement—some do not come because they are too busy or not interested, others drop off and pick up the mother and child, and some attend GMP to support their child’s health and growth.

In facilities, at CHPS compounds, and at outreach, CHNs and CHOs (CHNs who have received two weeks of intensive CHPS training) are primarily responsible for GMP services (including weight and height measurements, plotting, counseling, etc.) (see Figure 2), with support from community health volunteers (CHVs) and sometimes other health staff (e.g., enrolled nurses, field technicians). At the sessions they attended, researchers found 2–6 staff conducting GMP services. In locations with limited staff, the same health worker (CHN or CHO) may be responsible for all service components of GMP, and therefore have limited or no time for counseling. When they had help, health workers frequently gave the responsibility of weighing to new staff or students on clinical attachment (still in school) or rotation (recently left school but without a permanent posting) who did not have adequate training. One national stakeholder noted that they are also training midwives and other health staff on measuring height/length since it is a relatively new measurement for GMP in Ghana. CHVs are often available at outreach clinics and may help with translation to/from local languages and weighing; however one health worker noted that if the CHN thinks something is wrong with the weighing they may reweigh the child. CHVs also support home visits to follow up on counseling agreements with caregivers of children who are growth faltering (see [Defining and Addressing Promotion](#)).

Health workers receive at least some pre-service and in-service training on aspects of GMP including weighing, measuring length and mid-upper arm circumference (MUAC), plotting, interpreting growth trends based on the growth chart, using growth measurements to determine counseling, and infant and young child feeding. According to a national stakeholder, training for counseling focuses on delivering messages, recognizing which insight to provide at which stage of development, gauging how much

I will say yes we have a universal coverage for GMP now because we [are] able to reach about 90% of our target children in the region. This has been made possible because of the use of both static and outreach services for GMP, which enables us to [reach] those who have access to health facilities and to reach out to [those] who do not have access to health facilities. Especially children under one year, almost all are covered because they still have immunizations to take [so] they are regular at GMP...

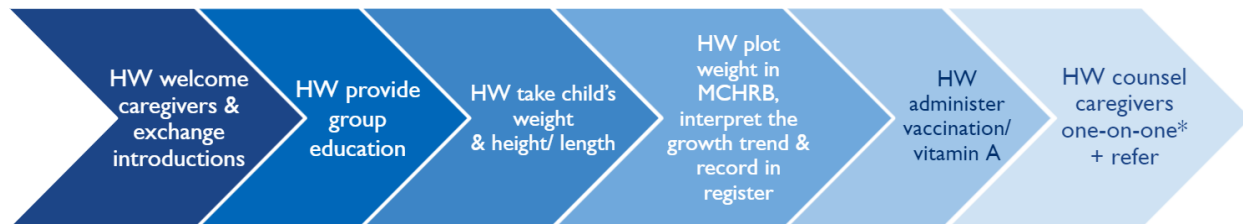
— Regional nutrition officer, North East

<sup>2</sup> This study did not collect primary quantitative data nor have access to DHIMS2 data to confirm this.

information to share, and requesting feedback from caregivers. Development partners such as the United Nations Children’s Fund (UNICEF) and USAID often support training. The head of nutrition at GHS oversees curriculum, and the regional nutrition officers are generally responsible for delivering trainings. Districts and facilities also plan training sessions based on their needs. Health workers indicated that district nutrition officers or other subnational staff conduct supervisory visits on a monthly or quarterly basis, though these are not necessarily specific to GMP activities. Supervisors observing CHNs during static or outreach services focus on weighing, measuring height/length, measuring MUAC, recording, plotting, interpreting, counseling, providing vitamin A supplementation, checking stocks, and administering immunizations. They work with health workers to identify and correct issues as needed.

The service flow in northern Ghana (Figure 2) generally follows national policy and global best practices. Health workers frequently start sessions with group education (maximum 10 minutes) on a specific topic (e.g., breastfeeding, complementary feeding, hygiene and sanitation, preventing COVID-19).

**Figure 2. GMP Service Flow**



\* Whether or not a caregiver receives one-on-one counseling depends on the needs of the child and availability of staff and space.

At all the clinics visited (facility and outreach), hanging scales were used for weighing children. Despite recommendations that health workers set the hanging scale with empty weighing pants to zero before weighing a child, this rarely occurred. Mothers undress the child, put the weighing pants on, and hang them on the scale. Health workers read the weight when the scale stabilizes and record it in the MCHRB. Only a few health workers mentioned measuring height or length using the height board or infantometer every three months. This occurs infrequently due to insufficient time and equipment. In Garu, health workers and a district GHS staff member indicated CHNs take MUAC during GMP every three months. In East Mamprusi, health workers did not mention MUAC even though they received MUAC training; one regional GHS staff member reported that health workers take the measurement if a child is persistently underweight.

At the study sites in both districts, after health workers take measurements, they send the caregiver to the registration area where the weight (and height if taken) are plotted in their MCHRB according to age and sex of the child and entered into the Child Health and Nutrition register<sup>3</sup>. Health workers compare the recorded weight to those previously taken. During interviews, they accurately described how to use growth charts and the importance of adequate growth and demonstrated plotting during observations. Caregivers and health workers shared that, workload permitting, health workers flag caregivers for individualized one-on-one counseling by the CHN at the end of the session based on the child’s weight and growth trajectory—whether their weight has a positive upward trend, negative downward trend, or is flat when connected to the previous months’ measurements. The health worker also checks the register to see whether the child needs any immunizations or vitamin A supplementation, and documents if they administer either.

<sup>3</sup> The Community Health and Nutrition Register documents growth and immunization data of children under 5 years of age.



## Defining and Addressing Promotion

Health workers did not distinguish “promotion” from “growth monitoring,” however they demonstrated a good understanding of the former (e.g., counseling, home visits, referral, etc.). Counseling was less common at outreach points than facilities due to limited staff and space. However, at study sites in both districts, health workers regularly conducted home visits for individualized counseling based on the child’s growth and specific contextual challenges (e.g., sickness, availability of food, home environment). The *Community Health Officer Training Manual* outlines the protocol for home visits (Population Council, Ministry of Health, and Ghana Health Service 2009).

Researchers observed a couple of tailored counseling sessions and noted a range of caregiver engagement during counseling. At one session for a child in Garu who had not gained weight in the last 30 days, the health worker tailored the counseling according to the child’s age, weight, and growth trajectory. She asked the mother about the child’s diet and used the MCHRB as a reference when

To know if a child has gained adequate weight or not, the weight of the child is plotted on the growth chart and the current weight joined to the previous weight. If the line joining the two weights goes up, it means the child has gained weight. The mother of such a child is commended and encouraged to continue with her good feeding practices for the child to continue to grow well. If the line joining the two weights flattens, it means the child has not gained weight. The mother of such a child is counseled to help her adopt good feeding practices to help the child to grow well. If the line joining the two weights goes down, it means the child has lost weight. The mother of such a child is counseled to help her adopt good feeding practices to help the child to grow well.

— Health worker at a facility, East Mamprusi

counseling the mother on the importance of a varied diet. The mother actively participated by explaining what she had been feeding the child and that the child had not been feeding well. The health worker and caregiver then came to a specific agreement—the caregiver would try to increase the frequency of feeding and prepare the child’s food using a variety of food groups at home. The tailored session took about 40 minutes—twice as long as generalized sessions without tailored counseling.

A couple of health workers described showing the caregiver their child’s plotted growth chart and interpreting the trend (i.e., inclining, flattening, or declining); some tailored counseling recommendations accordingly.

If children are growing well (with positive weight or length trends), health workers praise and encourage caregivers. Some health workers ask caregivers to provide support to their peers by sharing good practices. When children are not growing well (with a stagnating or negative weight or length trend), and/or their weight is in

the yellow section of the growth chart, health workers ask caregivers about recent illnesses and talk to them about how and what they feed the child. Children whose weight falls in the red portion of the growth chart are severely malnourished. For these children, they ask caregivers about illness and the home environment, counsel them on feeding practices, and refer them to a higher-level facility. Health workers also refer children with no weight improvement after 2–3 months to a higher-level facility and those who are sick to clinical services.

They ensure completion of referrals by calling the officer overseeing the referral facility, giving the caregiver their phone number to call when they go, or making home visits. Health workers believe many caregivers do not complete referrals because of anxiety, financial constraints, the distance to the referral facility, or the anticipated length of the stay. Respondents from all groups recognized the importance of family support for caregivers to attend GMP and carry out the recommended actions, including referrals.

Health workers described the MCHRB as the primary guiding document for GMP. They also use counseling cards, laminated charts, and leaflets. Health workers providing tailored counseling typically focus on breastfeeding (e.g., position, attachment, responsiveness) and complementary feeding, depending on the age of the child. Complementary feeding discussions may include hygienic food

preparation, feeding pattern, responsive feeding, feeding family foods, food consistency, and diversity. Some health workers focus their recommendations on foods available in the home or community and sometimes provide cooking demonstrations. Health workers may also cover developmental milestones (e.g., when to expect sitting, standing, or walking), hygiene and protection from infections, or management of diarrhea or fevers, but these topics were not covered in the observed sessions. Respondents generally agreed that child development could be more strongly integrated into GMP.

In counseling, you ask open-ended questions that will allow the mother to talk more rather [than] you doing the talking. This will help you explore the feeding practices of the mother and to know if [the] child is sick or not. These will help you identify the problem the caregiver has that is making her child [to] not grow well. After identifying the feeding problem, you further engage the mother on options to address the problem until the two of you agree on what she can do to help address the problem.

— Health worker at a CHPS outreach, East Mamprusi

Health workers felt that they give caregivers clear follow-up actions based on the child’s growth and some described it as an integral part of their training. However, researchers observed minimal health worker-caregiver negotiation for follow-up actions and caregivers did not describe it. This may have been due to limited session time because of high attendance. One municipal nutrition officer noted that some health workers could benefit from additional training to strengthen skills engaging caregivers to agree on actions, but recognized that health workers’ attention to specific circumstances helps them offer tailored solutions.

Caregivers and health workers reported that CHNs (with support from CHVs) conduct targeted home visits for children who are at risk of growth faltering to—

1. see if the caregiver has successfully implemented recommendations from counseling
2. observe and assess the home environment
3. help overcome challenges.

Although every CHPS compound should have staff who conduct home visits per national policy, a development partner observed that urban areas don’t conduct them as frequently, likely due to insufficient community support and earlier school start dates. National and subnational stakeholders emphasized the importance of community awareness about children’s growth and development and shared a variety of ways to engage community members. Examples include involving queen mothers<sup>4</sup> to support caregivers in making informed decisions around appropriate child feeding, sensitizing communities through radio talk shows, entertaining families at community durbars,<sup>5</sup> and engaging fathers at home visits.

## Tracking and Using Data

GHS staff described the systematic way that they track growth-monitoring data. Every month, they compile information from the Child Health and Nutrition register by age group (i.e., 0–11 months, 12–23 months, 24–59 months), sex, and nutritional status (i.e., severe underweight, moderate underweight, normal, overweight, obese) using a tally sheet. Staff transfer information from the tally sheet to a paper-based monthly report to enter in the DHIMS2 and send a copy to the district for validation. If a facility

<sup>4</sup> Queen mothers are traditional female leaders, drawn from the relevant royal lineages, primarily responsible for women and children’s issues in their respective communities (Mistiaen et al. n.d.).

<sup>5</sup> A durbar is a formal community-wide gathering that includes cultural activities such as drumming and dancing; it provides an opportunity for information to be shared with a large number of people simultaneously (Tindana et al. 2011).

or outreach does not have access to a computer or internet, the paper monthly report is sent to the district for entering into DHIMS2 and validation. Regional level GHS staff check the data.

At the facility level, health workers use growth monitoring data to identify useful group counseling topics, determine which geographic areas need special attention, assess whether GMP attendance (and other) targets were met, and lobby for additional resources such as infant and young child feeding (IYCF) training. Beyond the facility level, GHS staff use data to evaluate facility performance, identify areas for improvement, plan supportive supervision and nutrition interventions, and make funding decisions. Nongovernmental organizations and development partners receive growth-monitoring data for planning and programming.

Alternatively, GHS staff did not describe a systematic way to record growth promotion or counseling data. Staff may note information on whether and why a child received counseling in the Community Infant and Young Child Feeding<sup>6</sup> (C-IYCF) Register and the MCHRB. If the caregiver brings their MCHRB, recommendations may be reviewed at the next visit. In the absence of the MCHRB, some health workers document growth promotion data on the old CWC card or an improvised exercise book and review the agreed-upon actions at the next visit. Counseling data are not included in the monthly report or entered in DHIMS2.

At the district and regional levels, data review committees comprise respective health information officers along with other technical officers, such as nutrition officers and disease control officers. Data analysis typically occurs during quarterly, half-year, and end-of-year review meetings to better understand coverage, performance, and trends. During these meetings, stakeholders at sub-district, district, and regional levels receive key health indicator updates. The officer in charge of a health facility represents the facility during review meetings and communicates any relevant decisions made at the review meetings to the health workers of his or her facility.

Actually, what we do is when we use the IYCF registers, whatever she agrees on, we document. But when those registers finished, we designed our own book and we document whatever they promised to do when they get back home and what they promised to come back with, we also documented. But when you come and it doesn't tally with what we asked you or what you promised, we then find out why it is so.

— Health worker at a CHPS compound, Garu

## Linking with Other Services

Because the same health workers provide many services, GMP is linked with immunization, vitamin A supplementation, and deworming. GMP has also served as a platform for social services, such as the provision of birth certificates to infants and enrollment into the NHIS. Ghana's social safety net program, Livelihood Empowerment Against Poverty (LEAP), provides unconditional cash transfers to families most vulnerable to malnutrition and poor health—with the LEAP 1,000 component focusing on pregnant women and households with infants under 15 months (Transfer Project 2020). LEAP and LEAP 1,000 representatives, in turn, encourage recipients to use health care services, including GMP. GHS staff believe caregivers who bring their children for GMP are more likely to access other services, such as family planning. Some health workers assess child developmental milestones during GMP sessions (e.g., confirming whether a child 9–12 months old can hold objects). Similarly, several caregivers acknowledged nurses discuss how children should behave at different ages, leading some caregivers to request additional counseling on child growth and development during GMP sessions. Development partners also use GMP as a platform for their programs. For example, the World Food Programme provided supplemental foods to children 0–23 months at GMP sessions to prevent linear growth faltering.

<sup>6</sup> The Community Infant and Young Child Feeding Register is used to record feeding problems, moderate and severe malnutrition, counseling information, and referrals for children under 2 years of age.





## Challenges

### Coverage and Quality of GMP

GHS aims for monthly attendance for children under 2 years of age and bi-annual attendance for children between 2 to 5 years of age. Health workers observed that coverage is high in the early years but may not reach the target frequency as the child ages and is without routine services (e.g., immunization) integrated with GMP.

Challenges related to the quality of GMP are mostly attributable to group sizes impeding opportunities for one-on-one counseling, overburdening staff, and limiting use of space, equipment, and supplies. If there aren't enough seats for attending caregivers, the service flow may become disjointed and caregivers may not opt to wait. Respondents acknowledged a need for consistent availability of locally appropriate equipment (e.g., solar powered scales, bikes for outreach to remote or hard-to-reach areas) and logistics. Too few MCHRB for caregivers may result from a supply shortage or inaccurate forecasting of needs. Supervisors could also benefit from transportation support to travel to all districts and facilities to provide feedback and support, and for health workers conducting home visits.

Health workers at CHPS compounds are also expected to conduct community outreach for GMP. This affects how frequently they can offer GMP at locations—and as a result, the number of caregivers present at any given session. Overburdened health workers may not implement GMP as well (e.g., not measuring a child's height or providing sufficient tailored counseling). At some GMP sessions, limited space and staff mean health workers must weigh all attending children before returning to waiting caregivers flagged for one-on-one counseling. At the end of a counseling session, health workers try to

provide targeted, practical recommendations. Some caregivers have difficulty acting on agreements because they lack decision-making power and support (especially financially) from partners to purchase and feed children appropriate nutrient-rich foods. Caregivers expressed that family support is critical for implementing agreed-upon actions.

High attrition rates result in movement of trained personnel to alternate facilities and a need for training new staff. Growth measurement and assessment (i.e., measuring, plotting), analysis (interpreting growth trends), and counseling (including IYCF) are well-covered in in-service training materials. One national stakeholder recognized that health workers would benefit from retraining and a development partner recommended on-the-job coaching when funding allows. An influx of trained health workers and/or volunteers would lessen the burden placed on the few available.

These findings align with the MOMENTUM County and Global Leadership's (MCGL) landscape analysis on quality of care practices in health facilities in Ghana (2020), which identified challenges related to parallel maternal, newborn, and child health services (e.g., family planning, antenatal care, nutrition, and early childhood development) and health staff availability, posting, and attrition.

## Tracking and Using Data

While growth-monitoring data are used to strengthen the implementation of GMP at various levels (from health facility to national), communication across the levels on how to best use data for decision-making is lacking. Some GHS staff were unaware of uses for data at their level other than for reports, and several were unaware of how data influences decision-making. This may be due to the absence of written guidance on how to share information on data use across levels. Further, GHS staff are not required to enter how growth monitoring data are used at different levels into DHMIS2. Some GHS staff expressed that data reviews don't occur as frequently as they should.

For growth promotion, several tools (e.g., C-IYCF Register, MCHRB, the back of the CWC card) are used, but there is no standard protocol on what or how to document information from counseling sessions. The MCHRB and C-IYCF Register would be ideal places to record counseling information to review at the next visit. However, inadequate supplies of MCHRB and C-IYCF Registers means health workers must decide how best to track growth promotion information with the resources available. During the validation workshop, GHS staff expressed interest in identifying elements of counseling to track.





## Good Practices and Lessons Learned

National and subnational GHS policy makers and officers and health workers shared numerous good practices in GMP:

- Delivering GMP with other services, including birth registration, health insurance, and immunization ensures high coverage for children in the early years. Offering services through both the static health centers and the outreach clinics increases service accessibility and coverage, especially for young children.
- CHPS compounds also increase service accessibility by bringing GMP closer to communities.
- The MCHRB combines maternal and child health records into one comprehensive book that covers the continuum of care from pregnancy through the first five years of the child's life. It includes growth charts (weight-for-age and length-for-age) and covers a variety of nutrition-related topics such as breastfeeding, complementary feeding, and danger signs during pregnancy. Incorporating key child development milestones, it brings nurturing care and early learning into nutrition services—making it convenient and accessible.
- Health workers shared a number of noteworthy practices for conducting quality counseling. During GMP sessions, health workers help mothers to feel comfortable opening up about challenges by listening carefully, praising and encouraging progress, and agreeing on next steps together. Using demonstrations and making efforts to incorporate locally available foods in counseling helps to ensure caregivers feel prepared and understood. Health workers strive to

give clear follow-up actions based on the child's growth trajectory, and one mentioned asking the caregiver to repeat what they discussed to ensure they were on the same page. Despite a heavy workload, GHS staff felt health workers pay attention to concerns raised, offer practical solutions, and are committed to fostering progress. For example, one health worker who ran out of space in the community register to document agreed-upon actions created another book to recall and follow up on the plan.

- Health workers conduct home visits for children most vulnerable to malnutrition or poor health as part of their protocol. Home visits allow caregivers to spend extra time with the health worker for tailored counseling based on the child's growth trend, recent illnesses, and home environment. Such follow-up also allows health workers to encourage caregivers to carry out the recommended actions, engage family members (especially fathers), problem solve, and provide demonstrations. When they see challenges, health workers are able to discuss solutions or show the family how to prepare a meal for the child with locally available resources.

When the woman goes, what we normally do is, (for instance, assuming she is coming for the first time) when you come, we will take your address before you go; the next day, we will trace the woman to ensure that the house address is really the exact place. Then we will ask if she was able to prepare the child feeds and take a look at it. If she is not able to prepare it, we will ask about all those items she said she has at home. We will then know how to talk to her to prepare it. At home we always involve the husband. Sometimes when they come, they don't come with their husband. Through that, when they lack something, you now explain why the child is like that to the husband and the necessary requirements for the child growth.

— Health worker at a facility, Garu

- Growth monitoring data support decision making at the health facility level and beyond. At the facility level, data are used to determine group counseling topics, geographic areas in need of special attention, whether attendance targets were met, and additional resources that may be needed. Regional and district officers use growth monitoring data to assess facility performance, identify areas for improvement, plan supportive supervision, nutrition interventions, and inform funding decisions.

Yes. It helps in program planning in terms of logistics and human resources needed. [For example] because of data we were able to convince the regional level to train all our staff in IYCF in Garu district. Data was also used to push for support for individual children with nutrition problems in the district.

— Health worker at a facility, Garu

# Opportunities for GMP to Improve Children's Healthy Growth and Development in Northern Ghana

Policy makers, development partners, health workers, and caregivers identified specific opportunities for leveraging GMP services to further drive children's healthy growth and development in northern Ghana:

- 1. Recognize the high capacity and commitment of health workers and support them.** Health workers demonstrated significant knowledge of and skills related to key aspects of GMP (Figure 1). Specifically, they described and were observed assessing (taking measurements), analyzing (interpreting the growth trend), and acting (explaining the child's growth trend to the caregiver, providing tailored counseling, setting up a home visit, and referring as needed). Partners could provide recognition schemes, ongoing supportive supervision, and consistent supplies of equipment and logistics to support health workers. Build on GHS's referral system to test how to streamline service contacts through additional digitized monitoring tools and counseling materials.
- 2. Regularly track and review data to provide timely action around coverage and growth trends.** Build on the good practice of using growth-monitoring data for decision-making at multiple levels.
- 3. Leverage existing data management and review systems to track growth promotion.** Encourage health workers to note details on the provision of counseling (i.e., where, whether and why); which topics (e.g., topics in the Demographic and Health Survey-8) were covered; agreed-upon actions; and related follow-up notes.
- 4. Center counseling on each child's growth trend to identify and address growth faltering early.** Consistent with global best practice, GHS policy and protocols recommend that health workers review a child's growth trend, not just a child's nutritional status. In practice, the focus on the direction of the growth trend line allows the counseling session to be sensitive to the child's current condition, making the assessment more relevant and the guidance more meaningful. With this, health workers could spend less time counseling caregivers of children growing well and more time supporting caregivers of children with faltering growth. Guidance for counseling during home visits could emphasize supporting small and sick newborns, including those with low birthweight, and children without a positive growth trend for three or more months.
- 5. Strengthen existing linkages between GMP and early childhood development services.** Providing counseling on responsive care and early learning with GMP services helps caregivers learn more about their children's development, which many seem eager to do. Adding GMP, including MUAC screening, to existing early childhood development service platforms such as *crèches* (nurseries) and day care centers would provide screening for children over 2 years of age who may not otherwise receive GMP and malnutrition referrals.
- 6. Extend promotion activities beyond contact time at facilities by empowering families and communities.** Since time at facilities and for one-on-one counseling is limited, simple reminders and tools could build motivation and skills for caregivers, including fathers and grandmothers, to track their children's growth and development and act on advice. Faith-based or traditional community groups (i.e., market, savings, and loans associations) and mother-to-mother support groups could reinforce counseling and follow-up actions.

- 7. Engage communities to facilitate ownership and accountability—and mobilize support for GMP.** Regional and district level GHS staff and development partners identified the need for more community support to CHPS compounds (e.g., sharing promotion responsibilities, offering churches and mosques for outreach services) to alleviate overcrowding and improve service quality. Health centers and communities may share child growth trends and/or data on service use. Community review and use of GMP data could drive attendance, motivate family support, and spark collective action on common issues affecting children’s nutrition and development (Bégin et al. 2020). To increase attention to children’s healthy growth and development, involve influential opinion leaders such as queen mothers, and engage communities through radio talk shows and community events or durbars.

Northern Ghana is well positioned to build on their strong GMP platform to further integrate child health and development and scale up good practices. This narrative articulates clear actions that—combined with recommendations from the USAID-funded MCGL landscape analysis in 2020—could increase the potential of GMP activities to prevent malnutrition. Opportunities exist to support health workers (e.g., through supportive supervision and mentorship), strengthen the use of data for decision-making, and tailor approaches to support local implementation and accountability. Such actions could strengthen GMP and help children in northern Ghana achieve healthy growth and development.

### Considerations to Strengthen Nutrition

MOMENTUM Country and Global Leadership’s 2020 landscape assessment on considerations to strengthen nutrition, includes GMP as a core service within the health system:

- provide nutrition as part of quality health services (e.g. standards, assessments, learning districts, quality structures and committees, core indicators, measurement, data visualization)
- focus on district and subdistrict planning, prioritization and integration of nutrition services across the life course and report on progress, priorities in existing coordination mechanisms
- support service providers and public health nurses to develop skills and capacity for using data and monitoring how well nutrition is integrated into child health services
- build leadership and management skills of district public health nurses/district nutrition officers (e.g., coordination, advocacy, prioritization, communications).



# References and Readings

- Agbozo, Faith. 2012. A Comparative Assessment of Community-Based Growth Promotion and the Traditional Growth Monitoring and Promotion Programmes in Two Communities in GA West Municipality. Master of Philosophy in Nutrition Thesis, University of Ghana.
- Agbozo, F., E. Colecraft, A. Jahn, and T. Guetterman. 2018. "Understanding Why Child Welfare Clinic Attendance and Growth of Children in the Nutrition Surveillance Programme is Below Target: Lessons Learnt from a Mixed Methods Study in Ghana." *BMC Nursing*. 17:25. doi.org/10.1186/s12912-018-0294-y.
- Agbozo, F., E. Colecraft, and B. Ellahi. 2015. "Impact of Type of Child Growth Intervention Program on Caregivers' Child Feeding Knowledge and Practices: A Comparative Study in GA West Municipality, Ghana." *Food Science & Nutrition*. 4(4):562–572. <https://doi.org/10.1002/fsn3.318>.
- Bégin, F., L. Elder, M. Griffiths, S. Holschneider, E. Piwoz, J. Ruel-Bergeron, and M. Shekar. 2020. "Promoting Child Growth and Development in the Sustainable Development Goals Era: Is It Time for New Thinking?" *The Journal of Nutrition*. 150(2):192–194. <https://doi.org/10.1093/jn/nxz244>
- Bilal, S.M., A. Moser, R. Blanco, M. Spigt, and G.J. Dinant, 2014, September. "Practices and Challenges of Growth Monitoring and Promotion in Ethiopia: A Qualitative Study." *Journal of Health Population and Nutrition*. 32(3): 441–451. Accessed June 25, 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4221450/>
- Drislane, F. W., A. Akpalu, and H. H. Wegdam. 2014, September 3. "The Medical System in Ghana." *Yale Journal of Biology and Medicine*. 87(3):321–326. Accessed August 13, 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4144286/>
- Egan, Kimberly Farnham, K. Devlin, and T. Pandit-Rajani. 2017. "Community Health Systems Catalog Country Profile: Ghana." Advancing Partners & Communities. Accessed June 22, 2021. [https://www.advancingpartners.org/sites/default/files/catalog/profiles/ghana\\_chs\\_catalog\\_profile\\_0.pdf](https://www.advancingpartners.org/sites/default/files/catalog/profiles/ghana_chs_catalog_profile_0.pdf)
- Ghana Statistical Service. 2018. "Multiple Indicator Cluster Survey (MICS 2017–18), Survey Findings Report." Accessed June 22, 2021. [https://mics-surveys-prod.s3.amazonaws.com/MICS6/West%20and%20Central%20Africa/Ghana/2017-2018/Survey%20findings/Ghana%202017-18%20MICS%20Survey%20Findings%20Report\\_English.pdf](https://mics-surveys-prod.s3.amazonaws.com/MICS6/West%20and%20Central%20Africa/Ghana/2017-2018/Survey%20findings/Ghana%202017-18%20MICS%20Survey%20Findings%20Report_English.pdf)
- Ghartey, A.B. 2010. "Nutrition Policy and Programs in Ghana: The Limitation of a Single Sector Approach." World Bank Group. Accessed June 22, 2021. <http://documents1.worldbank.org/curated/en/540101467990381054/pdf/693700WP0P10400tritionPolicyDPMenno.pdf>
- Global Financing Facility. 2020. "Strengthening Promotion Activities within GMP Programs." World Bank Group. Accessed June 21, 2021. <https://www.globalfinancingfacility.org/strengthening-promotion-activities-within-growth-monitoring-programs>
- Global Nutrition Report. 2020. *Global Nutrition Report: Action on Equity to End Malnutrition*. Bristol, UK: Development Initiatives.
- Government of Ghana. 2004. *National Health Insurance Policy Framework for Ghana, Revised Version*. Accessed June 21, 2021. [https://www.ghanahealthservice.org/downloads/NHI\\_policy%20framework.pdf](https://www.ghanahealthservice.org/downloads/NHI_policy%20framework.pdf).
- Griffiths M., and JD Rosso. 2007. *Growth Monitoring and the Promotion Of Healthy Young Child Growth: Evidence of Effectiveness and Potential to Prevent Malnutrition*. Washington, D.C.: The Manoff Group.
- Mangasaryan, N., M. Arabi, W. Schultink. 2011, March. "Revisiting the Concept of Growth Monitoring and its Possible Role in Community-based Nutrition Programs." *Food and Nutrition Bulletin*. 32(1):42–53. doi.org/10.1177/156482651103200105.
- Ministry of Health, Ghana. 2008. "Under Five's Child Health Policy: 2007–2015." Accessed June 21, 2021. <https://extranet.who.int/nutrition/gina/sites/default/filesstore/GHA%202007%20Under%20Five%27s%20Child%20Health%20Policy%202007%20-%202015.pdf>



- Mistiaen, V., D. Chadwick, N. Quarmyne, A. Mahama. n.d. "The Formidable Queen Mothers of Ghana." European Journalism Centre. Accessed June 21, 2021. <https://innovation.journalismgrants.org/projects/african-queen-mothers-fight-for-africa>
- MOMENTUM Country and Global Leadership (MCGL). 2020. "MCGL Ghana Landscape Analysis: Quality of Care at Health Facilities." Slides from Discussion of Findings with USAID. Washington, DC: MCGL for USAID.
- Population Council, Ministry of Health, and Ghana Health Service. 2009. *Community Health Officer Training Manual (Facilitator's Guide)*. Vol. I. Kumasi, Ghana: Ministry of Health
- Sienso, G., & Lyford, C. 2018. "Assessing the Factors Affecting Malnutrition in Northern Ghana." *Journal of Nutritional Disorders & Therapy*, 8(3): 1–9. doi.org/10.4172/2161-0509.1000235
- Tindana, P.O., L. Rozmovits, R.F. Boulanger, et al. 2011. "Aligning Community Engagement with Traditional Authority Structures in Global Health Research: A Case Study from Northern Ghana." *American Journal of Public Health*. 101(10):1857–1867. doi.org/10.2105/AJPH.2011.300203.
- Transfer Project. 2020. "Ghana LEAP 1000 Impact Evaluation Basic Information Document". Carolina Population Center. Accessed June 30, 2021. [https://data.cpc.unc.edu/docs/Ghana\\_LEAP\\_1000\\_Basic\\_Information\\_and\\_Data\\_Use\\_Instructions.pdf](https://data.cpc.unc.edu/docs/Ghana_LEAP_1000_Basic_Information_and_Data_Use_Instructions.pdf)
- UNICEF. 2007. Revisiting Growth Monitoring and its Evolution to Promoting Growth as a Strategic Program Approach: Building Consensus for Future Program Guidance. Report of a Technical Consultation. New York, New York. September 25–26, 2007.



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