# STRENGTHENING PROMOTION ACTIVITIES WITHIN GMP PROGRAMS

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## BACKGROUND

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**Growth monitoring and promotion (GMP) is a standard global health sector practice during infancy and early childhood.** Governments throughout the world use GMP as an important platform for improving child health and nutrition or for delivering crucial child health and nutrition services.

Tailored, feasible, and understandable individual nutrition and growth counseling by frontline workers during GMP sessions – or the "promotion" component of GMP – is critical for these programs to be effective.

In general, however, counseling and provider-client communication during GMP is either non-existent, or too generic: it is often not tied to the growth outcome, age of the child, community context, or does not provide specific, actionable advice [1–3]. Many frontline workers have difficulty accurately measuring children, plotting growth data, and interpreting the growth trend, thus jeopardizing age-appropriate and targeted counseling efforts [4–6]. Others don't have the time to counsel caregivers, given their volume of clients. Challenges also exist because many providers do not aid caregivers in understanding their children's growth status; therefore the advice they may receive seems to have less urgency and is not put into practice [5,7,8].

This brief draws on available evidence and research on social behavior change communication (SBCC) and GMP service provision to guide readers on actions that can maximize the potential of "promotion" within the provision of GMP services. The recommendations for this brief pull from lessons learned from SBCC nutrition interventions during the first 1,000 days, research conducted with GMP programs, and from supply-side interventions that have supported frontline workers in carrying out nutrition counseling activities. The brief does not cover the known measurement challenges associated with GMP [4,5], which need to be addressed in parallel to the actions we recommend on improving promotion.

# TAILORED, FEASIBLE, AND UNDERSTANDABLE INDIVIDUAL NUTRITION AND GROWTH COUNSELING BY FRONTLINE WORKERS DURING GMP SESSIONS IS CRITICAL FOR THESE PROGRAMS TO BE EFFECTIVE.



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# 2

## WHAT IS MEANT BY "PROMOTION" IN GMP?

Growth monitoring and promotion is usually delivered through health sector programs in health centers or posts, the community, or mobile clinics. In this brief, GMP refers to the session during which the child is measured, and we define "promotion" as "tailored counseling based on the growth monitoring (GM) results and follow-up problem-solving with caregivers" [5]. Problem-solving includes home visits and referral to other health, nutrition, and early childhood development activities offered either at the site of the GMP session or in the context of a community-based program, where caregivers can get the support they need to improve conditions that impact their child's growth and development.

# 3

## HOW TO STRENGTHEN THE "P" IN GMP

### Provide tools that support visualization of growth and problem solving

### Algorithms for decision making

Clear standard guidance for providers and frontline workers on how to prioritize actions based on the outcome of the growth assessment is critical. Knowing how to classify a child guides not only the counseling but also referrals. GMP programs at their highest level (national or for program districts) should develop a context-specific decision guide, or algorithm, for both referrals and for counseling [9]. Algorithms have been used extensively in the integrated management of childhood illnesses (IMCI) to help health providers assess, classify, and treat sick children and counsel mothers on action steps to take [10], but not so much for GMP.

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## Tools to visualize growth

The first step in effective counseling during GMP is for families and community workers to see and understand whether a child is growing normally. An example of an easy-to-use, field friendly tool that helps providers, community leaders, and families visualize growth of young children (<2 years) and promote action, is the Child Length Mat developed by The Manoff Group. The Length Mat can be used for supine measurements, to measure how long children are relative to WHO reference points for the child's age. In doing so, the Length Mat offers an objective standard by which to judge linear growth early in life, which can be an important entry point for a conversation about child growth and development. It is easy to adapt to the country context by tailoring the age groups, colors, graphics, and format to reflect the national stunting profile and local preferences. A review of a pilot in 41 villages in Cambodia found that the mat helped both frontline workers and caregivers visualize linear growth, understand that height *and* weight gains are essential for children's growth, and that poor growth influences children's health and development. Frontline workers reported increased use of health services

and requests from caregivers for weight and length measures during health center visits [11]. Assessments are underway to determine how best to use linear growth outcomes alone and with other measures of growth to spur family action and support community and district pro-growth planning.

Another tool to visualize and communicate child growth is a height chart that caregivers can fix to the walls of their homes. In Zambia, for example, such a chart was developed to compare a child's height to the expected height range for children of the same age and sex. The chart had measurement points for every three months, from 9 to 30 months, to encourage routine measurement at home and included messages on the link between nutrition and children being more successful later in life. A small sample study that looked at the impact of the home-based growth chart found that it reduced stunting among children who were stunted at baseline. Caregivers liked the chart because of its aspirational messages that linked nutrition and growth to children's future success in life, though the impact of these messages was not tested [12].



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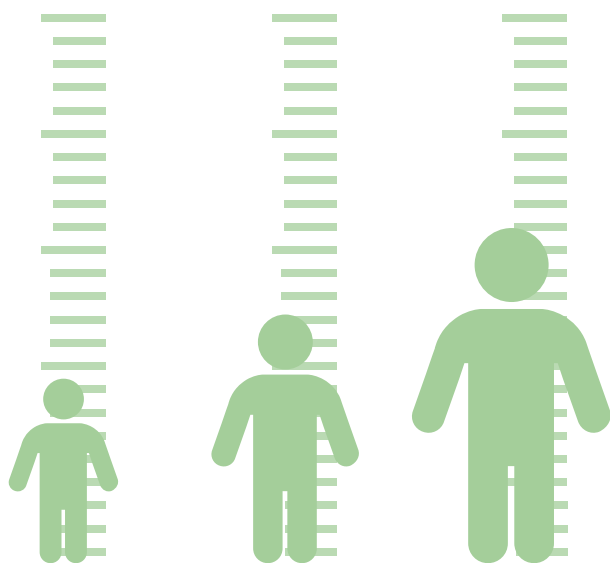# Tools to guide counseling

## *Printed tools*

Numerous global programs or countries have developed job aids, including counseling card sets, pocket-size brochures with age-specific messages and problem-solving strategies, quick reference books, or pictorial tools to help frontline workers during GMP [9,13–15]. For example Alive & Thrive's "Infant and Young Child Feeding" counseling cards for Vietnam include messages to enable frontline workers to counsel mothers about the importance of nutrition during pregnancy and the first two years of a child's life to prevent stunting [16]. Card sets that offer the most support to frontline workers are those where they are able to easily select the key messages appropriate to the health, feeding, and growth context of the child. In Afghanistan, pictorial job aids for assessment and counseling by illiterate community health workers (CHWs) were found to help improve nutritional status among children ages 6-18 months. The GMP intervention was accepted by communities because there was involvement of village clerics and elders before beginning the program, and tools were extensively pretested among CHWs and Family Health Action Groups [15].

## *Mobile applications*

Mobile apps are a promising new approach to provide tailored counseling to caregivers during GMP [17–19]. Research in Indonesia found that CHWs who used a mobile phone were more likely to provide feedback and arrange follow-up GMP counseling sessions/referrals than those without a phone [17]. In Kenya, a mobile app used by community health volunteers to measure growth and development in children facilitated dialogue between them and caregivers and improved using GMP data for decision making [18]. In India, a large-scale roll-out of a mobile phone application for low-literate frontline workers called Anganwadi Workers (AWWs) is currently being implemented to track clients, provide timely service delivery, improve plotting and interpretation of growth monitoring data, and facilitate counseling on maternal and child health and nutrition. For GMP, the app automatically plots the child's data, interprets it, and provides multi-media counseling messaging for the AWW and caregivers. The app has been piloted, is currently being used by over 80,000 AWWs across six states and will be rolled out nationally to 1.4 million AWWs. An external evaluation is underway [19].

Frontline workers seem to like the apps that support GMP implementation. In Indonesia, community health volunteers, or Kaders, wanted to use mobile phones for GMP because they helped them correctly calculate or interpret the growth charts, despite their low levels of education and limited training and supervision. Also, mobile phones reduced their workload by accelerating the plotting of data and providing timely feedback to mothers. Mothers were more likely to trust the mobile phone results and accept counseling based on the phone since they felt that nutritional status calculations by an app rather than a Kader are less judgmental [17].

# Improve the content of the counseling and the enabling environment

## Align GMP counseling advice with existing guidelines

To create an enabling environment for improved practices that promote optimal child growth, counseling advice and materials for GMP should be harmonized across all programs providing nutrition services. Current national nutrition or infant and young child feeding (IYCF) guidelines should define age-appropriate behaviors. These guidelines then may need adapting to local populations and to specific growth situations, current feeding practices and/or health conditions of the child that GMP workers may encounter. Malawi's 1000 Special Days National Nutrition Education and Communication Strategy (NECS) (2012-2017) to reduce stunting among children under two years of age through behavior change and awareness raising was developed to standardize and harmonize key nutrition messages among all sectors working to address malnutrition in Malawi. Although there remain challenges to implementation of the NECS, many stakeholders report that the major success of NECS is that all partners use the same messaging and materials across the country [20].

## Use formative research to tailor messages about improved behaviors and particularly how to motivate behavior change within the counseling guidance

With existing guidelines as the base, GMP counseling materials should be tailored to local contexts and cultures. Counseling messages are more effective if they appeal to the target audiences and address their beliefs and values, perceived barriers and norms, and self-efficacy to carry out specific behaviors. A study in Ethiopia, for example, found that thinness among children was believed to be a natural phenomenon, and mothers did not see any direct benefit of taking their children to get weighed and monitored during GMP sessions [7]. In Peru, as in many other countries, before the implementation of a nationwide 10-year program to reduce its stunting crisis, parents thought that children's short stature was simply hereditary [21].

## Develop counseling guidance that supports the worker to tailor advice easily for the individual child

Individualized GMP counseling should be tailored to the age, growth status and health of each child, as well as local contexts and norms [22]. The counseling that follows measurement and charting growth ideally reinforces caregivers' current actions or reminds them of important changes needed as the child gets older when growth is normal. When growth faltering occurs, it can lead to a discussion to find out where the improvement in caring and feeding practices is most essential and encourages caregivers to seek additional health care and other services, based on the severity and/or duration of faltering [8]. In Rwanda, for example, CHWs conduct monthly GMP for children under five. Children who are identified as malnourished and "at-risk" at the community level are referred to health centers for treatment and receive extra support through home visits by CHWs, health care providers, or community volunteers to share findings with parents and assess the root cause of the poor growth. Based on either the CHWs' and facility's assessment of child growth, parents, early childhood development workers, and community leaders are informed about which families are at risk or who have malnourished children and these families are offered assistance based on the identified causes or are encouraged to participate in on-going activities (e.g., kitchen gardens, cooking demonstrations, parenting classes, and efforts to improve sanitation) [19].

## Reinforce priority behaviors through multiple communication channels and activities

Studies have shown that the intensity of participation in GMP programs increases impact [2]. Similarly, it is more effective when other SBCC activities and channels are aligned on messaging and reinforce the counseling provided during GMP [5,23]. Various GMP and SBCC studies have found that the more caregivers hear the same messaging about healthy child growth, nutrition, and development, the better the behavior change outcomes. For example, recent studies on the effect of SBCC on IYCF found that the intensity of behavior change programs, the number of contacts, and the number of channels supporting priority behaviors tended to increase the impact of the interventions [24–27]. A large scale program evaluation in Bangladesh, for example, showed a dose-response relationship with exposure to more than one SBCC platform: The more mothers were exposed to repeated strategic messaging, the greater their odds of implementing and adopting complementary feeding practices [28].

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# Improve frontline worker performance for the promotion activities of GMP

## Provide practice-oriented or competency-based training

Many frontline workers in health centers or communities are not sufficiently trained on how to provide high-quality counseling during GMP. Research has shown that training works: in-service training of frontline workers in nutrition and interpersonal communication enhances their nutrition knowledge, ability to counsel clients, and child nutrition management practices, and in turn, improves nutrition behaviors of caregivers and child growth outcomes [29,30]. The impact of GMP training depends on its length and type, the topics covered, and the quality of the training materials [23,31]. A 2008 review of GMP programs found that more intensive practice-oriented training, coupled with supervision, results in better GMP outcomes [4].

## Build in mentoring and supportive supervision

Training, however, is generally not enough to build frontline worker capacity, and there can be variations in quality and fidelity of delivery over time without reminders and support. Regular supervision of frontline workers is critical for GMP program quality [5]. Supportive supervision means not just checking if a frontline worker measured a child and entered data, but also includes checking on whether they provided counseling related to growth, the quality of counseling, and which follow-up actions were taken based on the advice of the frontline worker. Mentoring and supportive supervision implies problem-solving with the worker, providing leadership and support to empower workers to monitor and improve their performance, facilitating teamwork, using job aids and tools to support better counseling, and mentoring health staff [32]. Research in Vietnam and Bangladesh found that frontline workers who received specialized IYCF training, job aids, and regular supervision had improved service delivery due to enhanced knowledge and motivation than those who received standard government training with irregular supervision [33].

Some programs are using mobile phones to improve supervision. In Ghana, for example, the Northern Regional Health Directorate of the Ghana Health Service with funding from USAID/ Resiliency in Northern Ghana project is piloting a mobile application to digitize supervision checklists at specific contact points where nutrition services are critical (e.g., GMP, antenatal and postnatal care), incorporates real-time feedback to frontline workers on their strengths and weaknesses, and provides targeted multimedia content/refresher training to improve their performance. The feedback messages ensure that supervisory visits include high quality mentoring and coaching of the frontline worker and reinforce their training. The mobile app also makes a subjective process more objective. The plan is to have the data from the mobile checklists feed into a dashboard in the district health information system that provides Ghana Health Service with an overview of frontline worker performance in each health facility [34].

## Monitor and improve performance

### Performance-based financing

Several World Bank-financed projects are using performance-based financing (where frontline workers or health facilities are supplied financial incentives based on the degree to which they achieve pre-established performance indicators) to improve the quality of frontline worker performance and their adherence to clinical guidelines, including those for growth promotion. The Cambodia Nutrition Project[1], for example, is using a maternal and child health and nutrition scorecard at the health center level as a component of a national performance-based financing scheme. As part of the scorecard, clinical vignettes[2], competency tests[3], and client interviews are being used to measure health providers' adherence to evidence-based interventions and guidelines across the continuum of care for women and young children, including nutrition counseling during GMP.

The Indonesian government, World Bank-funded, Human Development Workers (HDW) Pilot, implemented since January 2018 in the 31 districts in Indonesia with the highest stunting prevalence, links monthly performance-based HDW salary top-ups to the achievement of key performance indicators. Checklists and scorecards are being used to improve stunting-related indicators, including monthly GMP.

## Monitoring and Evaluation

Few countries monitor and evaluate the quality, coverage, and outcomes of the counseling being implemented during GMP. More attention to the counseling element of GMP is needed and can be stimulated by incorporating counseling-related indicators into GMP and IYCF monitoring and evaluation plans (see Table 1 for examples). A more comprehensive view of IYCF improvement will bring more accountability to the counseling element of GMP and lead to more operational decision making about how to support it.

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**TABLE 1:** SAMPLE INDICATORS TO EVALUATE "PROMOTION" IN GMP

| CAREGIVERS | HEALTH FACILITY/ COMMUNITY BASED GMP | HEALTH WORKERS |
|---|---|---|
| • Satisfaction with nutrition education and counseling services<br><br>• Knowledge related to child growth and feeding/ caring practices<br><br>• Adherence to recommendations measured via assessment of core IYCF practices promoted by the program | • Availability of GMP counseling tools for health and community-based providers<br><br>• Quality of counseling tools' content and alignment of messages with existing guidelines<br><br>• Existence of supportive supervision for GMP<br><br>• GMP coverage and participation rates; percentage of GMP sessions that include counseling | • Numbers trained in GMP and IYCF-related counseling<br><br>• Competency/quality of counseling in GMP/IYCF<br><br>• Appropriate actions taken for childrenwith growth faltering, including referrals |

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1. Financed by the Royal Government of Cambodia, World Bank, Australian DFAT, German Development Bank, GFF, and the Health Equity and Quality Improvement Project partners.

2. Maternal Child Health and Nutrition (MCHN) vignettes – or standardized medical cases where an assessor role plays a mother with a sick child or a woman seeking services and asks the health worker how he/she would manage the patient – are being developed to improve provider counseling on MCHN as well as adherence to evidence-based interventions and guidelines. The MCHN vignettes that are being developed for Year 1 of the project are: Immunization and GMP for 9-month-old child; ANC 36 weeks; Nutrition counseling during ANC; Immediate Newborn Care; and IMCI of sick newborn.

3. Two competency tests are being developed for Year 1 of the project: 1) Breastfeeding counseling during PNC1; and 2) GMP.

# 4

## CONCLUSIONS AND NEXT STEPS

There is a need to improve the "promotion" component of GMP programs if GMP is to serve as an important platform for improving child health, development, and nutrition. To improve the "P" in GMP, we need to consider:

- *Developing tools that support frontline workers and caregivers to visualize child growth and to help them determine what advice they should provide to promote adequate growth and prevent growth faltering.*

- *Strengthening the content of the counseling.* Ensure that the content of the counseling is based on those behaviors included in the national IYCF package, tailored to local contexts and norms, and based on individual children's age, growth status, and health. This means using existing or new formative research to tailor advice based on what caregivers need, can, and want to change and how they can try and continue a positive behavior. Including key points for referral of the caregiver to supporting services or products is also critical content for the counseling. Agreement across programs and delivery platforms on the priority behaviors, how to motivate their practice, and harmonizing messages and materials across

all sectors working to address child feeding and care will offer needed reinforcement to the GMP counseling.

- *Strengthening frontline worker capacity to counsel caretakers* by improving the quality of pre-service and in-service training, inputs (i.e., training manuals and training itself); and providing performance support. This includes clear and consistent guidelines on when and how to conduct counseling; capitalizing on existing technologies (e.g. mobile phones) or tools (e.g., tutorial videos) to enhance counseling, and conducting continuous monitoring and evaluation that promotes data use at the local level to guide corrective actions.

- *Investing in the development of indicators* and monitoring and evaluation frameworks that measure quality and outcomes of growth promotion among individuals, health workers, and communities. Building capacity for data collection and use at all levels for decision-making is needed.

- *Ensuring adequate funding for use and scale-up of the delivery of child growth promotion messages and materials.*

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