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GROWTH MONITORING AND PROMOTION EXPERT CONSULTATION

UPDATES, KNOWLEDGE SHARING, AND LOOKING AHEAD

APRIL 20–21, 2022

SUMMARY REPORT: KEY TAKEAWAYS AND NEXT STEPS

ASSESSING AND/OR MONITORING CHILDREN'S GROWTH

- **DIGITAL TOOLS** can aid in taking weight and length measurements and interpreting growth based on the measurements.



- How can the quality of the growth monitoring data be improved?



- How are ponderal and length measures related?



- Entry into services

GMP EXPERT CONSULTATION 2022

UPDATES, KNOWLEDGE SHARING & LOOKING AHEAD

PROMOTING CHILDREN'S HEALTHY GROWTH

- **FOCUS** on caregiver and family desires



- Counsel for action based on context specific behaviors



- Can growth velocity be integrated into growth cards?

SYSTEM STRENGTHENING FOR GMP

- Data use for health system and community review and resource allocation



- How can identification/treatment wasting be integrated?

About USAID Advancing Nutrition

USAID Advancing Nutrition is the Agency's flagship multi-sectoral nutrition project, led by JSI Research & Training Institute, Inc. (JSI), and a diverse group of experienced partners. Launched in September 2018, USAID Advancing Nutrition implements nutrition interventions across sectors and disciplines for USAID and its partners. The project's multi-sectoral approach draws together global nutrition experience to design, implement, and evaluate programs that address the root causes of malnutrition. Committed to using a systems approach, USAID Advancing Nutrition strives to sustain positive outcomes by building local capacity, supporting behavior change, and strengthening the enabling environment to save lives, improve health, build resilience, increase economic productivity, and advance development.

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Acronyms

ANC	antenatal care
app	digital application
C-IMCI	community-based integrated management of childhood illness
CHW	community health worker
COVID-19	coronavirus disease of 2019
ECD	early child development
GFF	Global Financing Facility
GHS	Ghana Health Service
GM	growth monitoring
GMP	growth monitoring and promotion
ICDS	Integrated Child Development Services
IFPRI	International Food Policy and Research Institute
JSI	John Snow, Inc.
LMICs	low- and middle-income countries
MAM	moderate acute malnutrition
MUAC	mid-upper arm circumference
NIS	nutrition information system
PIP	product innovation projects
SAM	severe acute malnutrition
UNICEF	United Nation Children’s Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

Executive Summary

The U.S. Agency for International Development (USAID) and USAID Advancing Nutrition hosted a technical consultation for global stakeholders in collaboration with the Global Financing Facility (GFF), the United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO) on April 20–21, 2022. This virtual event, occurring over two half-days, picked up where a 2018 global convening on growth monitoring and promotion (GMP) left off. It reunited programmers, researchers, innovators, and policymakers to review and discuss experiences, innovations, research, and advances in GMP since 2018 and identify challenges that continue to affect its quality. The consultation provided a forum to discuss opportunities for strengthening GMP, particularly as an important delivery platform for improving child nutrition, health, and development outcomes, and identifying priorities for future research and programming.

During the consultation, presenters reminded participants why we measure child growth: to identify children at risk for malnutrition. Without measurement, we do not know how infants and young children are growing, as malnutrition is often invisible or unnoticed in communities where poor growth is the norm. The consultation also pointed to the value of the promotion element within the GMP process; it allows health providers to base guidance for actions and practices on an individual child’s growth, along with the age of the child and other information obtained during the counseling session.

Nine country representatives shared the latest information on their GMP programs during the consultation. While GMP in and of itself is primarily a health sector activity or process, it has long been known that preventing and improving malnutrition requires more than what the health sector alone can provide. Presentations from Rwanda, Ghana, Nepal, and Peru showed how long-standing GMP programs are evolving. GMP service delivery in these countries now serves as a platform for offering or linking to a broader range of services (early childhood development [ECD]; immunization; or other social services, such as conditional cash transfers) in addition to child growth, and promotes community actions to address malnutrition.

All countries represented at the consultation acknowledged implementation challenges with GMP—taking measurements, interpreting growth data, identifying growth faltering, and providing counseling/promotion of growth—and highlighted how they are tackling them. Examples from Egypt, India, and Cambodia demonstrated some efforts practitioners are making to address quality improvement and capacity strengthening. In addition, several presentations reviewed progress in developing and using technology to address some of these challenges. While these new tools and applications (apps) show promise, they are not yet ready for broad sharing and use.

GMP programs in low- and middle-income countries have historically measured weight-for-age to track child growth. Despite this, there was little discussion of measurement and interpretation of growth faltering through weight-for-age. The research contributions focused on measurement of stunting and faltering in length/height-for-age and raised questions about the value of going through the measurement process at all for length/height, arguing that the actual length/height measurement may not be actionable at the individual level.

Key takeaways from the meeting include—

- Many countries are deeply committed to GMP as part of their health service platform aimed at addressing malnutrition, although implementation challenges remain.
- GMP is increasingly used as a platform for providing other services and referrals beyond nutrition and the health sector.
- The equipment and tools needed to deliver GMP effectively still require significant innovation and support.

- Making quality counseling and promotion happen as part of GMP remains a significant challenge.
- Efforts to harness the power of technology to support quality GMP measurement and counseling are underway and hold promise.
- Despite country commitment to GMP, many debates continue around the value of measuring children's length/height and how to determine faltering growth.

To continue learning and supporting countries in effective GMP implementation, participants proposed several next steps:

- **Bridge the research and program gap.** Create an operational/program-oriented learning agenda.
- **Focus in on counseling/the “P” in GMP.** Identify a separate agenda of actions, activities, and research needed to address and improve counseling within the context of GMP.
- **Continue to harness the power of technology.** Pull together an updated summary of the technologies in process, including apps in development; identify where additional investments might be helpful; and establish realistic timelines for implementation/dissemination.
- **Continue to discuss and assess how growth is measured in GMP programs as well as the role of length/height measurement.** Consider challenges with and advantages of different measurements from different angles—a technical/scientific perspective, client satisfaction/experience perspective, risk of measurement error, etc.

Background

The U.S. Agency for International Development (USAID) and USAID Advancing Nutrition hosted a technical consultation for global stakeholders in collaboration with the Global Financing Facility (GFF), the United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO) on April 20–21, 2022. This virtual event, held over two half-day sessions, succeeds a global convening on growth monitoring and promotion (GMP) held in Washington, D.C., in October 2018. The [2018 meeting was a turning point for GMP](#), reuniting the research and program communities to take stock of GMP. A post-meeting article summarized five critical areas—tools, models, platforms, human resources, and the promotion component—to consider in rethinking GMP (see box 1; GFF 2019).

Box 1. Critical Points for Rethinking GMP

- **Tools:** Use new and improved tools for child growth measurement, assessment, and decision-making/actions.
- **Models:** Have and draw on a knowledge base of the different modalities of GMP, increasing understanding what type of program works where.
- **Platforms:** Improve cross-sectoral engagement through GMP.
- **Human resources:** Focus on human resource management, training, workload, and performance support.
- **Promotion:** Pay more attention to strengthening the promotion component of GMP for action and accountability.

The 2022 consultation aimed to pick up where the last meeting left off by continuing the discussion of GMP, again uniting programmers, researchers, innovators, and policymakers. It served to review and discuss experiences, innovations, research, and advances in GMP since the 2018 meeting and identify challenges that continue to affect the quality of GMP. The consultation provided a forum to discuss opportunities for strengthening GMP, particularly as an important delivery platform for improving child nutrition and health and development outcomes, as well as identifying priorities for future research and programming.

This brief report provides an overview of the main topics covered during the consultation and summarizes key takeaways and pending questions. It also offers suggestions for next steps to move forward on helping to realize the potential of GMP to contribute to preventing and alleviating malnutrition. We include the proceedings of the consultation, including the agenda, the list of participants, and summaries of the panels and speakers’ presentations in the annexes.

Growth Monitoring and Promotion

Monitoring the growth of infants and children is standard clinical practice worldwide. The launch of the new WHO Child Growth Standards in 2006 drew national and international attention to child growth and its promotion and the disparity in optimal growth of children across regions and countries. Currently, more than 160 countries have adopted the standards and more than 175 countries implement some form of GMP as a strategy

to improve child health and nutrition. The WHO standards and tools provide the foundation for programs that weigh and measure children to track their growth. These global tools have been translated and adapted for use in different regional and country contexts. WHO continues to provide technical tools (e.g., WHO Anthro Software) to assist countries in embracing the new standards and integrating them into national monitoring systems. It also supports training courses on growth assessment and counseling alongside other multi- and bilateral institutions.

Why Measure Growth

During the consultation, presenters reminded participants of why we measure child growth: to identify children at risk for malnutrition. Without measurement, we do not know how well infants and young

children are growing. GMP programs aim to make child growth visible so that caregivers, families, and communities are compelled to take action to prevent malnutrition. On an individual level, the velocity of growth¹ and change in growth over time, rather than attained growth or nutrition status (an anthropometric measurement at a single point in time), is what health care providers and caregivers need in order to know how well a child is growing. A major challenge for GMP programs has been (and continues to be) having the appropriate tools in place to assess growth and make faltering growth visible, such as growth cards that allow health workers to track growth faltering more easily or digital tools and software that calculate growth velocity. To see growth faltering² in weight or length/height, health workers require multiple measures and not just a single point in time. Tools/algorithms in digital or printed job aid format are necessary to help determine actions to take depending on the child's growth status.

During the consultation, many participants pointed to the promotion element as essential to the GMP process. Counseling within the context of GMP lets the health provider base his/her guidance for actions and practices on a child's growth, along with the age of the child and other information obtained during the counseling session. GMP programs allow for targeting and spending more time with children who are faltering in growth as well as tailoring advice to specific family and community contexts. Knowing which children are experiencing growth faltering can also help the health provider link the caregiver to additional services to help address the underlying causes. In addition, experience shared during the consultation demonstrated the value of compiling aggregated/population-level growth data from GMP programs to make malnutrition visible to the community, raising awareness of the problem, and garnering support for actions.

What to Measure

GMP programs in low- and middle-income countries (LMICs) have historically measured weight-for-age to track child growth. Scales are readily available, although challenges persist with using and maintaining them. Most LMICs continue to measure weight and few universally measure length/height. However, with the advent of stunting (and wasting³) as the preferred global population-level indicators of malnutrition following the 2008 *Lancet Series* on maternal and child undernutrition, attention turned to the measurement of length/height as well. The rise of overweight and obesity, which requires a length/height measurement to determine body mass index, further increased the attention to concerns about measuring length/height.

During the consultation, the discussion of growth measurement focused on stunting and faltering in length/height-for-age. Presenters made the distinction between population and individual uses for measuring stunting. At the population level, practitioners often use stunting as an estimate of the prevalence of malnutrition, although recent evidence suggests that stunting is a marker of an environment deficient in the various needs that allow for a child's healthy growth, including, but not limited to, nutrition (Leroy and Frongillo 2019). Practitioners can use it to [track changes in prevalence as well as to enable targeting populations for interventions](#). The question addressed during the consultation by the research presentations was: what do we know about the use and value of measuring and tracking height-for-age/stunting at the individual level? This discussion stressed two main points.

First, stunting is a reflection of the overall environment in which children live. If all children in a shared environment are doing poorly in length-/height-for-age, what is the value of tracking individual child length/height? Analyses showed that screening for linear growth faltering within a population where most children are stunted is not specific or sensitive enough to allow for diagnosing and determining

¹ Velocity of growth is estimated as a difference between two measurements at different time points divided by the number of days in between the measurements. It can be annualized by multiplying by 365 days (Manohar et al. 2020).

² Growth faltering is "the failure to gain adequate weight for one's age between two serial weighings" (Griffiths, Dickin, and Favin 1996, ix).

³ The measurement and tracking of wasting/severe acute malnutrition (SAM) (low weight-for-height) and low birthweight remain important global indicators of malnutrition. However, they are not generally used in GMP programs, which aim to catch growth faltering before it occurs and begin tracking at birth.

individual actions. This is in contrast to screening for wasting (low weight-for-height), which is an individual clinical condition that calls for immediate treatment. In addition, research evaluating the effects of nutrition-specific and/or livelihood interventions have rarely shown an impact on individual linear growth.

Second, as noted, GMP is not about attained growth but rather about the process of becoming malnourished. A study shared during the consultation, based on a longitudinal data set from Nepal on growth (in length/height) velocity, found that a high proportion of children have low growth velocity in the first two years of life regardless of stunting status. Additionally, linear growth faltering continued beyond two years for about 15 percent of children. This indicates the need to distinguish between low growth velocity or linear growth faltering and stunting (Manohar et al. 2020). Linear growth faltering is measured at the individual level and stunting at the population level. A decrease in stunting at the population level does not necessarily result in preventing linear growth faltering in individual children.

The discussion of what to measure raised many persistent, pending questions:

- Is it worth measuring a child's length/height to bring caregiver attention to the welfare of the child even if the actual length/height measurement may not be useful or actionable?
(Anecdotal/unpublished data mentioned during the consultation suggest that the act of measurement/attendance at GMP in and of itself could have an effect.)
- How accurate are the length/height measurements health workers routinely take as part of GMP given their capacity, equipment challenges, etc.?
- Do we need to know growth status in length/height to provide guidance at the individual level (and/or for the community)?
- Is the measurement of weight useful despite challenges with determining what is adequate growth/what is growth faltering?

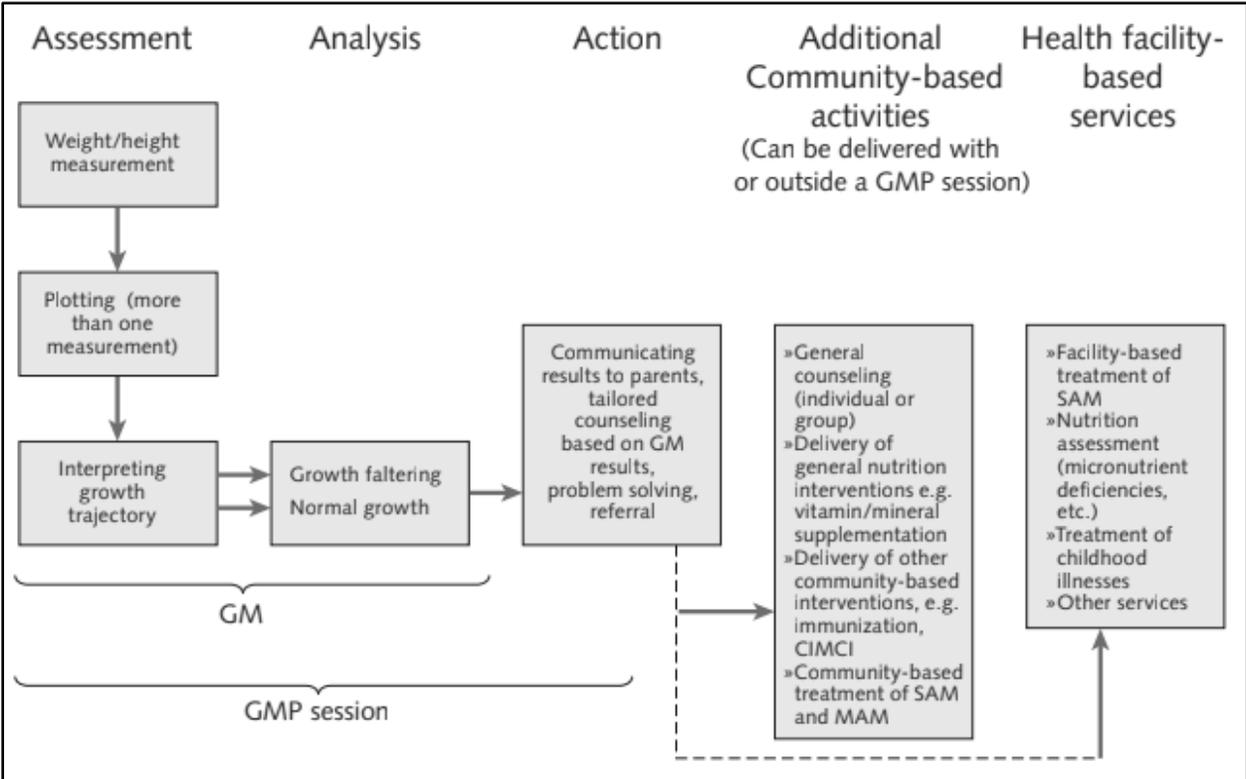
GMP in Practice: Program Progress and Experiences

Nine country representatives shared their experience with GMP during the consultation. These presentations highlighted how programs are tackling operational and implementation challenges. They also showed a move toward broadening the use of GMP to serve as a platform for addressing child health and nutrition holistically (e.g., integrating a focus on child development in addition to growth). Country presentations also discussed the potential challenges of using the data generated by GMP programs for purposes beyond the individual.

GMP as a Platform

GMP in and of itself is primarily a health sector activity or process. It entails regular measurement and assessment of growth, focusing on the growth trend, not nutrition status, and communicating and discussing results of the assessment with caregivers (see figure 1). Yet the development community has long known that impacting growth and preventing and improving malnutrition requires more than what the health sector alone can provide. Rwanda, Ghana, Nepal, and Peru have long-standing GMP programs that are evolving to use GMP as a platform to promote growth beyond what can happen within the family or household to include community actions to address malnutrition, and to offer a broader range of services that focus on child development in addition to growth.

Figure 1. GMP Process



Adapted from Mangasaryan, Arabi, and Schultink 2011, 47. | C-IMCI: community-based integrated management of childhood illness, MAM: moderate acute malnutrition.

For example, GMP in Rwanda is not just about measurement. The measurement result provides the basis for counseling, and the platform offers a launching point for cooking and garden demonstrations,

and a Positive Deviance/Hearth intervention, among other possible actions. National policy support is strong and overall monthly attendance is high (75–85 percent). Rwanda’s commitment to GMP has led the government to identify and implement strategies to improve the delivery, uptake, and effectiveness by decentralizing services, strengthening supervision, incorporating performance-based financing, and using promotion/counseling materials that help to tailor counseling to the individual child. In 2020, the national Rwanda GMP program added the length mat as an additional intervention aimed at raising awareness of stunting in the community. Currently the country is exploring how the GMP program can serve as a platform for integrating nurturing care interventions. Implementation challenges remain—declines in attendance during certain seasons, problems with supply, maintenance, and use of tools and scales, etc.—that require new approaches to capacity strengthening, as well as job aids and innovations for actions and incentives for community health workers (CHW).

In Ghana, similarly, the commitment to GMP is strong. The country is expanding the scope of the program while continuing to address quality issues. At the national level, the Ghana Health Service (GHS) developed a new Maternal and Child Health Record Book to promote the continuity and quality of care—starting with the antenatal care (ANC) platform. New national standard operational guidelines for nutrition counseling are in place, along with training packages and changes to service delivery to support monitoring and supervision, including on-site coaching. The expanded scope and quality improvement measures for GMP include—

- offering new features to estimate weight at birth
- improving communication materials
- including length/height measurements
- promoting the continuum of care by integrating GMP within maternal and child health services
- providing nutrition counseling tables that provide guidance to health workers on individual counseling through an assessment, analysis, and action process.

While GMP has been a priority for Nepal since 1992, the country has renewed its commitment to the activity in its Multi-Sector Nutrition Plan (2018–2022). Challenges persist, particularly related to program reach and participation. Health centers are mobilizing female community health volunteers as a way to use GMP as a platform for delivery of other services such as micronutrient powders and take-home health message cards. At the same time, quality assurance checklists and tailored, age-specific counseling are addressing the quality of services. A GMP module is also available as part of the quality improvement effort across the continuum of care. These tools and processes are in the development phase; the Ministry of Health and Population anticipates providing orientation on the new module in 2022. To engage the community in the effort to address malnutrition, Nepal is exploring adding the measurement of length/height to GMP. Nepal’s strategy recognizes the importance of local leadership to promote GMP, the need to integrate with nutrition-sensitive interventions, and the value of using digital platforms for promotion/counseling.

GMP was at the core of Peru’s well-documented success in reducing stunting. Now the country is changing the way that it addresses child growth by making a broader focus on child development central to service provision. Using the Nurturing Care Framework for Early Childhood Development (ECD), Peru is redesigning health centers and modifying the way that health workers interact with caregivers and children, including how they assess, diagnose, and counsel them based on the growth and the development of the child. In addition to infrastructure adjustments, the approach requires capacity strengthening/training of service providers. Peru is in the process of scaling up the model and integrating specific developmental screening assessments for children.

Quality Improvement and Capacity Strengthening

All the countries represented at the consultation acknowledged their implementation challenges with GMP—taking measurements, interpreting growth data, and providing counseling/promotion of growth. Examples from Egypt, India, and Cambodia demonstrated some of the efforts policymakers and practitioners are making to address quality improvement and capacity strengthening.

Egypt has developed new guidelines and a training package (with UNICEF assistance) to strengthen the delivery of GMP. The training includes both theory and practice sessions; the latter is hands-on and aimed at identifying skill gaps in measurement of both weight and length/height. Program implementers learned that they need highly skilled trainers and sufficient resources for initial training as well as refresher training, good monitoring and supervision systems, quality tools, and adequate time built into the GMP process to allow for individual counseling.

GMP is a central element of the Integrated Child Development Services (ICDS) program in India. A recent assessment of the status and quality of implementation focused on the measurement and use of the growth monitoring data documenting many of the typical challenges—using scales and height boards and interpreting growth information correctly. In response, India is using technology (an application [app]) in some areas to automatically generate individual growth charts. The use of the technology is also helping with data aggregation and reporting.

Following the 2018 global meeting on GMP, Cambodia began to take steps to scale up and link GMP to the country's national quality enhancement processes. In December 2021, the Ministry of Health released new interim guidelines for GMP as part of routine primary health care, including community outreach, for piloting and subsequent adaptation. Policymakers are now developing GMP-specific quality assessment tools, including structured checklists, competency tests, and client feedback measures linked to immunization. The next steps are training and coaching, updating job aids/tools, and implementing a GMP pilot to assess effectiveness of integration of health and GMP services.

The Value and Use of GMP Data

GMP data has potential value beyond the individual level. WHO shared the results of an assessment of nutrition surveillance systems in 11 sub-Saharan African countries conducted in 2013–2016, showing the need for improved training on anthropometric measurement and quality control/checks if data are used for nutrition information systems (NIS). The WHO Anthro Survey Analyser can identify data quality issues, and countries are requesting assistance in using the growth monitoring data for epidemiological/NIS purposes. At the consultation, the Seychelles offered a country perspective. Presenters reviewed nutrition information collected through various systems, including routine GMP data, to see whether it could serve to estimate the prevalence of malnutrition. Policymakers found many data quality issues and other challenges, including a lack of standardized equipment and common systems for collection and reporting.

Indonesia is using GMP data as part of their national multi-sectoral convergence strategy to reduce stunting. The data from GMP is helping to raise awareness and inspire community action and accountability. At the community level, health workers use monthly anthropometric data (weight and length/height) to assess trends, address collective challenges, and hold systems accountable for children's growth. Sharing the growth trends of children with the different administrative levels has been important for tracking progress and allocating resources. The Ministry of Health also developed a digital tool to assist with data collection and use.

The Promise of Technology to Facilitate Measurement and Action

Many GMP implementation challenges relate to measuring, plotting, and interpreting growth trends as well as using these trends to provide tailored, effective counseling and support. As noted at the 2018 meeting, using technology to address some of these challenges is showing some promise.

Results from a USAID landscape analysis shared during the consultation found many digital technologies in development to improve accuracy, speed, and cost, and minimize the intrusiveness of anthropometric data collection. Many are nearing proof of concept for scale-up. UNICEF has made progress in its efforts to improve the quality of anthropometric data by supporting innovation in portable length/height measurement devices through a product innovation project (PIP). A new wooden height board with a digital output based on a laser is in the field validation phase in Eswatini. Preliminary findings found that this new height board performed as well as the standard height board currently in use and has some advantages based on qualitative data. Health workers involved in testing saw it as user-friendly, and it required less positioning of children, maintained a good battery life, and allowed for seamless data transfer from device to tablet. Researchers expect to finish the field validation this year, and pending the results of the trial, anticipate procurement and distribution.

The [Child Growth Monitor](#), a digital tool/app being developed by a private, nonprofit company, Welthungerhilfe, is designed to scan a child's body and based on the scan, plot the child's growth status on a digitally generated growth chart. The company initiated the product concept in 2018 and it is ready for scientific validation in India. It aims to provide quick and accurate anthropometric measurements to reduce human error and ensure data protection and privacy.

A new, small-scale, privately funded GMP program, [Heights & Minds](#), operating through local governmental and non-governmental partners in several countries (e.g., Indonesia, Senegal, and Uganda) is experimenting with a different modality of GMP—reaching mothers in the prenatal period—and harnessing technology. It includes a digital platform for recording and monitoring anthropometric data, uses video and games/edutainment as part of counseling, and connects programs across countries through a global network.

Key Takeaways and Remaining Questions

Many countries are deeply committed to GMP as part of their health service platform aimed at addressing malnutrition, although implementation challenges remain.

The demand for GMP within the health sector focuses on identifying child growth faltering and providing support and services to help prevent or address faltering. GMP programs vary across regions and countries, which complicates communicating and learning about them. Different modalities for GMP are used depending on the geographic, cultural, and country/region context. GMP at the health facility is part of clinical assessment, while outreach and community-based GMP programs increase coverage and aim to leverage community resources to address malnutrition.

Key Questions

- Can creating a better understanding of the different approaches to delivering GMP help us address implementation challenges and work toward more effective programs?
- How might we develop and share an enhanced understanding of ongoing GMP programs/service delivery to better document the current landscape of GMP?

GMP is increasingly used as a platform for providing other services and referrals beyond the health sector.

GMP programs have evolved to serve as platforms for delivering other services beyond the health sector as well as for promoting community actions to help address child growth faltering. GMP as a platform also provides the foundation for broadening the scope of services to include early child development through implementation of the Nurturing Care Framework; integrating immunization services; or linking to other social services, such as conditional cash transfers.

Key Questions

- What do we know about the efficacy and effectiveness of using GMP as a platform to deliver other services and to better alleviate malnutrition?
- How does the effectiveness of using GMP as a platform for providing other services vary across the different modalities of GMP [as noted above]?

The equipment and tools needed to deliver GMP effectively still require significant improvement and innovation.

Long-standing issues with the costs and maintenance of equipment for GMP persist. Remarkably, a durable, affordable, easy-to-use, accurate weighing scale for program/community use is still lacking. Similarly, agreement on tools for health/community workers to easily and accurately determine growth faltering (not nutrition status—an anthropometric measurement at a single point in time) are not readily available. Some previously developed, potentially useful ways to assess adequate growth via innovative growth charts and other tools exist, but are not in use or need further validation. Tools and technologies for easy-to-use accurate length/height measurement are also needed. Technological approaches are under development to help fill some of these gaps.

Key Questions

- Where are the major gaps in the equipment and tools for delivering GMP and what can be done to fill them?

- How should investments in equipment and tools be prioritized to realize the most benefit to GMP efficacy and effectiveness?

Making quality counseling/promotion happen as part of GMP remains a significant challenge.

Despite an abundance of guidelines and tools, challenges persist in improving the quality of the critical promotion/counseling element of GMP, including capacity of health providers and lack of time. Quality improvement measures are in place in some countries to identify and address issues associated with counseling. However, on the whole, other than noting that counseling is weak and often missing for various reasons, the consultation did not offer suggestions on how to improve this component other than using technology.

Key Questions

- How do we prioritize investing in efforts to improve counseling?
- What should these look like given the many elements that need to be in place to enable effective counseling—skilled, motivated health providers, and effective social and behavior change strategies, etc.?

Efforts to harness the power of technology to support quality GMP measurement and counseling are underway and hold promise.

Many efforts are underway at various stages of development and testing to use technology to support GMP. Beyond the technologies to support measurement of height (primarily), apps are under development to facilitate the assessment of growth and counseling. Technologies bring their own challenges, such as internet connectivity, cost of equipment (e.g., smartphones), maintenance of equipment, interoperability and privacy of data, and technological skills. Furthermore, most of these tools are not designed or ready for broad use.

Key Questions

- How feasible is the use of technology for the delivery of GMP services, given the providers who provide such services and the complexity of promotion?
- Which components of GMP—growth measurement, monitoring, assessment, counseling, or supervision—might benefit most from a digital tool? Which components can be improved by using technology?
- How can GMP technology align or integrate with existing digital tools to ensure it is most efficient and effective?
- What can we expect in the short term from technological solutions to GMP challenges?

Despite country commitment to GMP, many debates continue around the value of measuring children and how to determine faltering growth.

Worldwide, most governments and health sectors use GMP to support child health and nutrition. Research shared during the consultation did not address ongoing challenges related to GMP weight velocity measurement, interpretation, and use at the individual level despite weight-for-age being the predominant measurement used in GMP programs. In addition, the research community questioned the value and use of measuring length/height-for-age as part of GMP; at the same time, strategies are in place

to make measuring length/height more feasible/doable in various contexts given that the nutrition community has focused on stunting as the key indicator of malnutrition in the past decade. There may be a disconnect between the focus of research on some of these questions and the needs of the program community to improve the quality of ongoing services. More clarity is needed on the implications of how children grow in relation to the effectiveness of GMP. GMP services and programs may also support early detection (screening using mid-upper arm circumference [MUAC]) and referral for wasting treatment, as well as identification of children who need therapeutic care. Recent evidence shows that MUAC and weight-for-age z-score can identify children at most risk of near-term mortality (Thurstans et al. 2022).

Key Questions

- How can the research community contribute to the ongoing needs of GMP programs related to weight-for-age measurement and interpretation?
- In which contexts and for what purposes is measurement of length/height appropriate or problematic/limited?
- How can GMP programs support early detection (screening) and referral for wasting?

Next Steps

This consultation succeeded in providing the forum for a useful discussion on GMP. The broad representation of countries offered a rich discussion of their direct experiences, successes, and challenges with GMP. Researchers, donors, innovators, and others brought different perspectives to the table. Consider these next steps (among others) in moving forward in supporting and advancing GMP:

- **Bridge the research and program gap.** Research should serve programs and policies, and evidence from programs should inform implementation and policies. Research shared during the consultation, specifically the discussion on anthropometric measurements primarily related to length/height, and the realities of GMP programs on the ground—the use of weight-for-age to monitor and promote growth—suggest a disconnect between research and programs. A suggested next step is to create an operational/program-oriented research or learning agenda and conduct more research on programs.
 - What research do program implementers and policymakers see as most valuable/needed?
 - What questions do program implementers and policymakers want/need answered?
 - What are evidence gaps related to GMP that need to be filled for more effective GMP program design and implementation?
- **Focus in on counseling/the “P” in GMP.** The importance of counseling/promotion as part of the GMP process is well known. However, this consultation and the earlier World Bank-sponsored convening highlighted that many challenges to providing quality counseling during GMP still exist. To name two, a high volume of clients seeking GMP relative to health providers can lead to inadequate time for counseling, and despite repeated training programs, health providers still lack adequate counseling skills. A next step to make headway on this issue might be to identify a separate agenda of actions, activities, and research needed to address and improve counseling within the context of GMP and ensure we are meeting the needs of caregivers.
- **Continue to harness the power of technology.** Technology holds promise for addressing GMP implementation and operational challenges in many ways. We should continue to support and invest in improved equipment to advance the use of technology for GMP. The needs of programs should inform innovations in technology. Next steps here would be to pull together an

update on technologies in process, including apps in development; identify where additional investments might be helpful; and establish realistic timelines for scale-up and implementation/dissemination.

- **Continue to discuss and assess how growth is measured in GMP programs as well as the role of length/height measurement.** Participants acknowledged anecdotally that the act of attending GMP and getting a child's growth measured in and of itself could be beneficial to bring the caregiver's attention to the welfare of the child, even if the actual length/height measurement may not be accurate, useful, or actionable. Next steps could be to better understand if this is the case and if growth status in length/height is necessary in order to provide guidance at the individual and/or community levels. Additionally, it would be beneficial to assess the accuracy of the actual length/height measurements taken as part of GMP given health worker capacity, equipment challenges, etc. Given the widespread use of weight measurements during GMP, programmers would also benefit from a better definition of what adequate growth is and what growth faltering is.

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Annex I. Agenda

GROWTH MONITORING & PROMOTION EXPERT CONSULTATION

UPDATES, KNOWLEDGE SHARING, AND LOOKING
AHEAD

APRIL 20–21, 2022

USAID and USAID Advancing Nutrition, in collaboration with the Global Financing Facility, UNICEF, and WHO, invite you to join a technical consultation to hear from experts on technical advances in growth monitoring and promotion (GMP) and updates in innovations and implementation since the 2018 convening. Share your research or implementation learning with global stakeholders, and work together with colleagues to explore opportunities to address enduring challenges related to GMP to support healthy growth and development for all children.

CONSULTATION OBJECTIVES

- Review and discuss experiences, innovations, research, and advances in GMP implementation since the global convening in 2018, especially in the context of the coronavirus disease of 2019 (COVID-19) pandemic.
- Identify challenges that continue to impact quality GMP.
- Discuss opportunities for strengthening GMP as an important delivery platform for improving child nutrition, health, and development outcomes by sharing examples of improved GMP approaches and innovations.
- Identify common interests and priorities for future research and programming resources to strengthen growth monitoring and promotion.

AGENDA

DAY 1: REFLECTING ON THE 2018 GMP CONVENING AND SHARING EXPERIENCES	
8:00 AM–8:20 AM ET	WELCOME AND INTRODUCTIONS
	<ul style="list-style-type: none"> • Kellie Stewart, USAID Bureau for Global Health • Kelsey Torres, USAID Advancing Nutrition • Julie Ruel-Bergeron, Global Financing Facility Secretariat • Lisa Sherburne, USAID Advancing Nutrition
8:20 AM–9:20 AM ET	EXPERT PANEL DISCUSSION
	<ul style="list-style-type: none"> • Standards on Growth Monitoring and Promotion—Elaine Borghi, WHO • Discourse on Stunting and Linear Growth—Ed Frongillo, University of South Carolina • Measure of Linear Growth Faltering—Swetha Manohar, Johns Hopkins University • State of Tools and Technologies for GMP—Maggie Holmesheoran, USAID Bureau for Humanitarian Assistance
9:20 AM–9:35 AM ET	QUESTION AND ANSWER SESSION
9:35 AM–9:45 AM ET	BREAK
9:45 AM–10:40 AM ET	ACTIONS FOR IMPACT: REAL-WORLD EXPERIENCES SINCE 2018
	<ul style="list-style-type: none"> • Seychelles—Hana Bekele, WHO • Rwanda—Silver Karumba, USAID Rwanda • India—Purnima Menon and Rasmi Avula, International Food Policy Research Institute (IFPRI) • Egypt—Amaal Abdel Hay, Ministry of Health and Population • Ghana—Esi Amoafu, Ghana Health Service • Nepal—Bibek Lal, Ministry of Health and Population
10:40 AM–11:00 AM ET	DISCUSSION AND REVIEW DAY 1
	Grainne Mairead Moloney, UNICEF

DAY 2: SHARING LEARNINGS AND SOLUTIONS TO THORNY CHALLENGES	
8:00 AM–8:10 AM ET	WELCOME BACK AND RECAP OF DAY 1
Lutuf Abdul-Rahman, USAID Ghana	
8:10 AM–8:55 AM ET	SOLVING STICKY ISSUES IN GMP—PART 1
TRACK 1: MEASURING AND TRACKING GROWTH	
<ul style="list-style-type: none"> • Growth Measurement: Data Quality and Use—Elisa Dominguez, WHO • Quality Improvement—Pooja Pandey Rana, Suaahara II, Nepal • Quality Improvement—Mary Chea, National Maternal and Child Health Center, Ministry of Health, Cambodia 	
TRACK 2: PROMOTING GROWTH	
<ul style="list-style-type: none"> • Visualizing and Recording Growth—Marcia Griffiths, The Manoff Group • Community Accountability—Elvina Karyadi, World Bank Indonesia 	
8:55 AM–9:05 AM ET	BREAK
9:05 AM–9:50 AM ET	SOLVING STICKY ISSUES IN GMP—PART 2
TRACK 1: MEASURING AND TRACKING GROWTH	
<ul style="list-style-type: none"> • Digital Solutions for Measurement and Recording Growth—Margit Bach, UNICEF • Digital Technologies for Growth Monitoring—Markus Pohl, Welthungerhilfe • Digital Solutions for the GMP Processes—Sascha Lamstein, USAID Advancing Nutrition 	
TRACK 2: PROMOTING GROWTH	
<ul style="list-style-type: none"> • Quality Counseling—Joy Del Rosso • Early Childhood Development and Nurturing Care—Blanca Távara Campos, Ministry of Health, Peru • Solutions to Common Promotion Challenges—Claudia Rokx, Heights and Minds 	
9:50 AM–10:20 AM ET	PLENARY SHARING AND DISCUSSION
10:20 AM–10:45 AM ET	NEXT STEPS AND CLOSING REMARKS
Elaine Gray, USAID Bureau for Global Health	

Annex 2. Participant List

Name	Organization	Job Title	Country
Amal Abdelhay	Ministry of Health, Maternal and Child Health	General Director	Egypt
Lutuf Abdul Rahman	USAID Ghana	Development Assistance Specialist, Nutrition and Food Security	Ghana
Debendra Adhikari	USAID Nepal	Nutrition Specialist	Nepal
Gihan Ahmad	National Nutrition Institute	Head	Egypt
Ghada Al-Attar	Assiut University and UNICEF	Professor of Public Health and Consultant	Egypt
Amira Amer	UNICEF	Child Health and Nutrition, Child Survival and Early Development consultant	Egypt
Esi Amoaful	Ghana Health Service	Director, Nutrition	Ghana
Naglaa Arafa	UNICEF	Nutrition Officer	Egypt
Rasmi Avula	International Food Policy Research Institute	Research Fellow	United States
Margit Bach	UNICEF	Project Manager, Nutrition Innovation	Denmark
Hana Bekele	WHO	Medical Officer	Zimbabwe
Malia Boggs	USAID Bureau for Global Health	Senior Technical Advisor	United States
Elaine Borghi	WHO	Unit Head, Monitoring Nutrition and Food Safety	Switzerland
Kristen Cashin	JSI Research and Training Institute	Technical Director, Nutrition and Health Systems, USAID Advancing Nutrition	United States
Kirk Dearden	Corus International	Team Lead, Nutrition and Water, Sanitation, and Hygiene, Moving Integrated, Quality Maternal, Newborn, and Child Health and Family Planning and Reproductive Health Services to Scale (MOMENTUM)	United States
Joy Del Rosso	Independent Consultant	Senior Nutrition Advisor	United States
Elisa Dominguez	WHO	Technical Officer	Switzerland
Leslie Elder	World Bank	Senior Nutrition Specialist	United States
Carol Elwin	JSI	Deputy Chief of Party, USAID Advancing Nutrition	Honduras
Lindy Fenlason	USAID Bureau for Global Health	Senior Nutrition and Capacity Strengthening Advisor	United States

Name	Organization	Job Title	Country
Mike Foley	Save the Children	Deputy Project Director, USAID Advancing Nutrition	United States
Edward Frongillo	University of South Carolina	Professor	United States
Mohammad Gamaledeen	UNICEF	Physician (Healthcare Consultant)	Egypt
Elaine Gray	USAID Bureau for Global Health	Nutrition Advisor	United States
Marcia Griffiths	The Manoff Group	President	United States
Andreas Hasman	UNICEF	Nutrition Specialist	United States
Maggie Holmesheoran	USAID Bureau for Humanitarian Assistance	Nutrition Advisor	United States
Nasrin Jahan	FHI 360	Nutrition Advisor	Bangladesh
Joyce Apoasaan Jambeidu	JSI	ECD Specialist, USAID Advancing Nutrition	Ghana
Silver Karumba	USAID Rwanda	Nutrition Specialist	Rwanda
Elvina Karyadi	World Bank Indonesia	Senior Health Consultant	Indonesia
Bibek Lal	Ministry of Health and Population	Director, Family Welfare Division, Department of Health Services	Nepal
Sascha Lamstein	JSI Research and Training Institute	Senior Technical Advisor, USAID Advancing Nutrition	United States
Leila Larson	University of South Carolina	Assistant Professor	United States
Jef Leroy	IFPRI	Senior Research Fellow	United States
Swetha Manohar	Johns Hopkins University	Fellow	United States
Mary Chea	Ministry of Health	National Nutrition Program Manager	Cambodia
Purnima Menon	IFPRI	Senior Research Fellow	India
Antonina Miceli	JSI Research and Training Institute	Technical Director, Capacity Strengthening, USAID Advancing Nutrition	United States
Erin Milner	USAID Bureau for Global Health	Senior Nutrition Monitoring, Evaluation, and Learning Advisor	United States
Grainne Moloney	UNICEF	Senior Nutrition Advisor	United States
Altrena Mukuria-Ashe	Save the Children	Senior Technical Advisor, USAID Advancing Nutrition	United States
Kyoko Okamura	World Bank	Nutrition Specialist	United States
Pooja Pandey Rana	Helen Keller International	Chief of Party, Suaahara II	Nepal
Qian Yi Pang	JSI Research and Training Institute	Project Coordinator, USAID Advancing Nutrition	United States
Markus Pohl	Welthungerhilfe	Head of Project, Child Growth Monitor	Germany

Name	Organization	Job Title	Country
Anne Provo	World Bank	Nutrition Specialist	United States
Luciana Ramos	Trans&Train	Interpreter	Argentina
Heba Ramzy	UNICEF	Field Consultant, Early Child Survival	Egypt
Claudia Rokx	Heights and Minds	Founder, Heights and Minds; Former World Bank Lead Specialist	United States
Marie Ruel	IFPRI	Director, Poverty, Health, and Nutrition Division	United States
Julie Ruel Bergeron	World Bank/GFF	Nutrition Specialist	United States
Najmus Sadiq	FHI360	Chief of Party	Bangladesh
Sovanratnak Sao	World Bank	Health Analyst	Cambodia
Whitley Schamber	Heights and Minds	Consultant	Canada
Lisa Sherburne	The Manoff Group	Technical Director, Social and Behavior Change and Gender, USAID Advancing Nutrition	United States
Zeina Sifri	Bill & Melinda Gates Foundation	Senior Program Officer, Maternal, Newborn, and Child Health	United States
Akriti Singh	Helen Keller International	Nutrition and Health Systems Advisor, USAID Advancing Nutrition	United States
Kellie Stewart	USAID Bureau for Global Health	Division Chief, Nutrition and Environmental Health	United States
Blanca Távara	Ministerio de Salud	Coordinadora Nacional de la Etapa de Vida Niñi	Peru
María Cécica Tripicchio	Cécica Tripicchio	Interpreter	Argentina
Christina Villella	JSI Research and Training Institute	Digital Health Technical Advisor	United States
Amy Weissman	FHI 360	Deputy Regional Director/Technical Director, Asia Pacific	Thailand
Dara Wegemah	USAID Ghana	Project Management Assistant	Ghana

Annex 3. Summary of Presentations

DAY I

Welcome and Introductions

Opening Remarks—Kellie Stewart, USAID Bureau for Global Health

Kellie Stewart opened the consultation with a powerful reminder that GMP is a cornerstone of community-based child health and nutrition interventions. At its best, GMP serves as a platform for preventing and detecting growth faltering, wasting, and other serious health risks and can act as an important entry point for the delivery of other essential health, nutrition, and ECD services. Ms. Stewart recognized the operational and technical challenges that persist in delivering GMP services as well as the diversity of opinions on GMP's role and value. At the same time, she acknowledged the potential opportunity of this long-standing and widespread platform to reach communities with lifesaving interventions and to enhance the well-being of children holistically. She encouraged attendees to coalesce around priorities for learning and other steps to take to work toward optimal implementation, including integrating today's advances in technology and evidence.

Recap of 2018 GMP Convening—Julie Ruel-Bergeron, Global Financing Facility

Dr. Julie-Ruel Bergeron gave a recap of the 2018 GMP convening as important background for this consultation. She summarized key points from that meeting related to GMP implementation and design, innovations and tools, and growth data for decision-making and accountability. She also highlighted [outputs from the 2018 meeting](#) (GFF 2019) and shared three sets of persistent questions for GMP:

- What are the most efficient and impactful delivery approaches?
- What about targeting, cost-effectiveness, and scalability of adjusted GMP models?
- What is the role of length/height measurement within GMP?

Expert Panel Discussion

A panel of experts kicked off the consultation by presenting background on GMP, sharing new research and thinking on anthropometric measurements and use, and introducing the new tools and technologies intended to enhance and strengthen GMP.

Standards on Growth Monitoring and Promotion—Elaine Borghi, WHO

Dr. Elaine Borghi reminded participants of the WHO Child Growth Standards launched in 2006, which more than 160 countries have adopted. She shared the technical tools produced by WHO to assist countries in embracing the new standards and integrating them into national monitoring (e.g., WHO Anthro Software) systems. The [Healthy Growth Project](#) (2011–2015) aimed to reduce stunting (low height-for-age) and promote healthy growth and yielded numerous materials, including a research supplement in the journal *Maternal and Child Nutrition* as well as training courses on growth assessment and counseling.

Linear Growth and Stunting: Considerations for Appropriate Use of Measures, Indices, and Indicators of Linear Growth—Ed Frongillo, University of South Carolina

Dr. Ed Frongillo focused his presentation on the measurement of linear growth and stunting distinguishing between population- and individual-level uses. At the population level, he highlighted the usefulness of tracking stunting (low height-for-age) to estimate and monitor population prevalence, target areas for interventions, and assess responses to interventions. He shared historical, global data on the decline in stunting. He confirmed that at the individual level most (70 percent) of stunting occurs by 24 months of age, but it persists beyond the age of two. Dr. Frongillo presented research that looked at

the impact of nutrition and livelihood interventions on stunting. Two interventions (prenatal and microcredit livelihood support) had no impact, while another agriculture livelihood intervention showed a modest effect on linear growth. Dr. Frongillo also shared and discussed research that examined the use of linear growth measurements at the individual level—to identify children with growth faltering. He concluded that measuring linear growth can only tell us whether a child is progressing or getting worse; it is not specific or sensitive enough for diagnosis. In short, Dr. Frongillo suggests that we do not have a theoretical or empirical basis to justify using height-for-age as a measure to screen individual children.

Assessing Population-Level Growth Faltering among Preschool-Aged Children—Swetha Manohar, Johns Hopkins University

Driven by recognition of the need to measure and understand the process of growth faltering prior to children being stunted irrespective of a child's attained height, Dr. Swetha Manohar shared her research on growth rate/velocity in Nepal. Using data from Policy and Science for Health, Agriculture, and Nutrition Community Studies, Dr. Manohar and her team found a high proportion of children with low growth velocities in the first two years of life regardless of attained stunting status. The research team recommended making a distinction between low growth velocity/growth faltering and stunting, as decreasing stunting does not necessarily result in entirely preventing growth faltering in already poorly nourished populations. Additionally, Dr. Manohar proposed extending investments to include a second annual measure of length/height to assess population-level linear growth faltering. She also recognized the opportunity at the individual level to measure height on a more consistent basis to track growth rather than assessing stunting.

State of Tools and Technologies for GMP—Maggie Holmesheoran, USAID Bureau for Humanitarian Assistance

Maggie Holmesheoran presented USAID's landscape analysis of digital anthropometry technologies under development to improve the accuracy, speed, cost, and invasiveness of anthropometric data collection. She briefly mentioned digital height boards; AutoAnthro, which uses 3D imagery; the Child Growth Monitor; and the Severe Acute Malnutrition Photo Diagnosis app. The review found that many technologies are close to ready for large scaled-out proof of concept. Next steps for these technologies focus on performance standards, automation, and data transfer, and the sustainability of the business model.

Actions for Impact: Real-World Experiences Since 2018

Seychelles: Harnessing Routine Real Time Nutrition Data to Estimate Prevalence of Childhood Malnutrition—Hana Bekele, WHO Regional Office for Africa

Dr. Hana Bekele shared the Seychelles review of nutrition information collected through various systems including routine GMP data. The review aimed to identify whether routine data collection could serve as a way to estimate malnutrition/serve as part of a nutrition surveillance system. The review revealed many data quality issues and other challenges, including a lack of standardized equipment and common system for collection and reporting. Two key recommendations from the review were to improve growth measurement and practices with systematic training and updates to the data entry system and align the system with the Global Nutrition Monitoring Framework.

Growth Monitoring and Promotion: Rwanda's Experience—Silver Karumba, USAID Rwanda

Silver Karumba presented Rwanda's successful, long-standing community-based GMP program, built on a community-health worker program established in 2000. GMP in Rwanda goes beyond measurement. It includes interventions—counseling, food/garden demonstrations, and the Positive Deviance/Hearth model. Mr. Karumba discussed the factors that have made the program a success, including policy support at the national level, high (75–85 percent) monthly attendance, decentralized services, a supervisor position, performance-based financing, and tailored materials. In 2020, the program added the

length mat as an additional intervention aimed at raising awareness of stunting in the community. Program staff are currently exploring how Rwanda's GMP can serve as the foundation for the nurturing care hub/interventions. Mr. Karumba acknowledged that challenges remain, including declines in attendance during certain seasons, tools/scales/etc. in need of replacement, and incorrect use of tools. He recommended capacity strengthening as well as new job aids/algorithm for actions and incentives for CHWs.

Growth Monitoring in India: Insights for Practice—Purnima Menon and Rasmi Avula, IFPRI

In India, growth monitoring is a central element of the ICDS program. Dr. Purnima Menon and Dr. Rasmi Avula shared the findings from an assessment of the status and quality of implementation of the measurement (growth monitoring [GM]) element and the use of the GM data. The assessment documented that many of the traditional/typical problems—such as using scales and height boards correctly—persist, suggesting room for improvement. Dr. Avula briefly highlighted some of the job aids in use, and how health workers are using technology (an app) in some areas to automatically generate individual growth charts. The use of the technology is also helping with data aggregation and reporting.

Strengthening Health Care Workers' Performance in Growth Monitoring: Egypt's Experience—Amaal Abdel Hay, Ministry of Health and Population

Dr. Amaal Abdel Hay shared the new guidelines and training package developed with UNICEF's assistance to strengthen the delivery of GMP in Egypt. The training includes both theory and practice sessions; the latter are hands-on and aimed at identifying skill gaps in measurement of both weight and height. Dr. Hay pointed out the need for highly skilled trainers, sufficient resources for initial training, as well as refresher training, good monitoring and supervision systems, quality tools, and adequate time built into the process to allow for individual counseling.

Improving Child Nutrition through Innovation in Counseling, Growth Monitoring, and Promotion—Esi Amoafu, Ghana Health Service

Esi Amoafu shared the long history of GMP in Ghana and current efforts to expand its scope and address quality issues. She shared that the GHS developed a new Maternal and Child Health Record Book to promote the continuity and quality of care—starting with the ANC platform. The GHS also created national standard operational guidelines for nutrition counseling, along with training packages and changes to service delivery to support monitoring and supervision, including on-site coaching for counseling. The expanded scope and quality improvement measures include new ways to assess estimated weight at birth; improved communication materials; introduction of length/height measurement; continuum of care; and nutrition counseling tables that provide guidance to health workers on individual counseling through an assessment, analysis, and action process. Ms. Amoafu emphasized several lessons learned and next steps related to encouraging health-seeking behaviors, effectively supporting counseling, and changes made due to the COVID-19 pandemic.

Growth Monitoring and Promotion: Nepal Experience—Bibek Lal, Ministry of Health and Population

GMP has been a priority for Nepal since the program started in 1992. Dr. Bibek Lal shared recent experience, reinforced by a renewed commitment to GMP in Nepal's Multi-Sectoral Nutrition Plan (2018–2022). While sharing an update on recent progress, he acknowledged that challenges persist, particularly related to program reach and participation. Specifically, the Ministry of Health and Population is working to mobilize female community health volunteers for GMP and exploring adding length/height measurement. In addition, Nepal is using GMP as a platform for delivery of other services—micronutrient powders, take-home message cards—while also addressing the quality of services through use of a quality assurance checklist and a focus on tailored, age-specific counseling. Dr. Lal offered these lessons for global learning: the importance of local leadership to promote GMP, the

need to integrate with nutrition-sensitive interventions, and the use of digital platforms for promotion/counseling, among others.

DAY 2

Solving Sticky Issues in GMP

Track I: Measuring and Tracking Growth

Growth Measurement: Data Quality and Use—Elisa Dominguez, WHO

Elisa Dominguez shared WHO's perspective on the question: can GM data be used for routine nutrition information systems? She presented the results of an assessment of nutrition surveillance systems in 11 sub-Saharan Africa countries conducted in 2013–2016. The assessment showed the need for improved training on anthropometric measurement and quality control/checks if health centers enter data into NIS. Ms. Dominguez shared the WHO Anthro Survey Analyser, which can identify data quality issues, and pointed out that countries are requesting assistance in using GM data for epidemiological/routine NIS system purposes. Finally, she suggested a road map toward better quality nutrition data and use in addressing typical challenges seen in GMP: ensuring measurement equipment availability and maintenance, proper data entry systems, and appropriate data interpretation and use, as well as making available regular and refresher training.

Growth Monitoring and Promotion: System Strengthening through Quality Improvement—Pooja Pandey Rana, Suaahara II, Nepal

Pooja Pandey Rana shared additional information on the quality improvement processes ongoing in Nepal to address nutrition service quality across the continuum of care. GMP is one of a set of modules designed specifically to assess and act on quality of care issues. These tools and processes are in the development phase; the Ministry of Health and Population anticipates providing orientation on the new module in 2022.

Cambodia's Experience with Enhancing the Quality of Growth Monitoring and Promotion—Mary Chea, National Maternal and Child Health Center, Ministry of Health

Dr. Mary Chea presented Cambodia's experience with quality improvement for GMP. Following the 2018 global meeting on GMP, Cambodia began to scale up GMP and link it to the country's national quality enhancement processes. In December 2021, the Ministry of Health released new interim GMP guidelines for piloting and subsequent adaptation as part of routine primary health care, including community outreach. Dr. Chea shared GMP-specific quality assessment tools in development, including structured checklists, competency tests, and client feedback measures linked to immunization. The next steps are training and coaching, updating job aids/tools, and implementing GMP pilots to assess effectiveness.

Digital Solutions for Measurement and Recording Growth: The UNICEF Digi-Board Experience—Margit Bach, UNICEF

Margit Bach updated the group on UNICEF's progress in its efforts to improve the quality of anthropometric data by supporting innovation in portable length/height measurement devices through a PIP. A wooden height board with a digital output based on laser is in a field validation phase after the COVID-19 pandemic and civil unrest delayed progress. Preliminary findings showed that this new height board performed as well as the old board currently in use and has some advantages based on qualitative data. Researchers expect to finish the field validation to finish in 2022, and pending the results of the trial, anticipate procurement and distribution.

Child Growth Monitor: A Game-Changing App to Detect Malnutrition—Markus Pohl, Welthungerhilfe

Markus Pohl introduced the Child Growth Monitor, a digital tool/app being developed by a private, nonprofit company. The Monitor is designed to scan a child's body and, based on the scan, plot the

child's growth status on a digitally generated growth chart. The company initiated the product concept in 2018. The product is ready for scientific validation in India.

Advancing the Use of Digital Tools for Growth Monitoring and Promotion—Sascha Lamstein, USAID Advancing Nutrition

Dr. Sascha Lamstein presented an update on USAID's Advancing Nutrition's efforts to support the rollout of digital tracking and decision support tools—job aids that assist workers in using health information to make diagnosis and treatment decisions. These guidance packages take guidelines and protocols and incorporate them into the digital tool to increase their uptake. In 2021, USAID Advancing Nutrition drafted a guidance package for developing a digital tool for GMP services to facilitate the development of digital applications for the delivery and supervision of GMP according to national guidelines and global guidance. Teams in two countries are currently reviewing the guidance package. The next step is to engage an informatics consultant to work on the tool.

Track 2: Promoting Growth

Visualizing Growth to Motivate Action for Healthy Growth—Marcia Griffiths, The Manoff Group

Marcia Griffiths clarified why we weigh and measure children. She emphasized that the aim of GMP is not to measure attained growth but rather individual velocity and changes in growth velocity. Ms. Griffiths shared the broad GMP framework that includes both individual and community inputs needed to achieve improved nutrition status. She presented the characteristics of a well-designed growth record (for weight-for-age) that allows for showing minimum growth velocity (e.g., the bubble chart). She also discussed the community tool—the length mat—that allows for visualization of linear growth. Ms. Griffiths stressed the need for tools to assist health workers in determining actions based on the growth outcome from weighing children.

Community Accountability—Elvina Karyadi, World Bank Indonesia

Dr. Elvina Karyadi shared the Indonesia experience with GMP, focusing on community action and accountability. Indonesia is using GMP data as part of its national multi-sectoral convergence strategy to reduce stunting. At the community level, health centers use growth data to assess trends, address collective challenges, and hold systems accountable for children. Dr. Karyadi pointed out that sharing the growth trends of children with the different administrative levels has been important for tracking progress, mobilizing collective action, and allocating resources. The Ministry of Health has also developed a digital tool to assist with data collection and use.

Quality Counseling—Joy Del Rosso

Joy Del Rosso discussed quality counseling—what it looks like, how to achieve it—and offered some initial thoughts on some actions to take to move toward strengthening the promotion/counseling component of GMP. Ms. Del Rosso presented the unique element of the GMP process that should allow for quality counseling—linking counseling/advice to the growth trend of the child. She offered some of the skills health and community workers need to engage in quality counseling. Key considerations and challenges facing countries in implementing quality counseling include health worker/volunteer capacity and time; a quality social and behavior change communication strategy grounding the counseling tools and materials; and an awareness of the health system readiness to implement quality counseling.

Early Childhood Development and Nurturing Care—Blanca Távara Campos, Ministry of Health Peru

Blanca Távara Campos shared the experience of Peru's efforts to use the nurturing care framework as the guide to early child development (including GMP) services. This effort has led to the redesign of health centers and changes in the way that health workers interact with caregivers and children, including how they assess, diagnose, and counsel caregivers based on the growth and development of the child. In addition to infrastructure adjustments, service providers require capacity

strengthening/training. Peru is in the process of scaling up this approach and integrating specific developmental screening tests for children.

Solutions to Common Promotion Challenges—Claudia Rokx, Heights and Minds

Dr. Claudia Rokx presented a new, small-scale GMP program operating in four countries (Cambodia, Indonesia, Senegal, and Uganda) that is experimenting with a different modality of GMP—starting in the prenatal period. Dr. Rokx explained that the intention of the program is to address four specific practical challenges to GMP: regular participation, visualizing growth in height, quality training and counseling, and time spent on recording and reporting. Dr. Rokx emphasized that the program aimed to make child development more accessible, individual, and fun. She shared some of the program innovations, including offering GMP services daily, creating a digital platform for recording and monitoring, using video and games/edutainment as part of counseling, and connecting programs across countries through a global network.



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Web: advancingnutrition.org

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