

CORE Group
PD/Hearth
Technical Advisory Group (TAG) Meeting Report
February 6, 2009

Introduction

Positive Deviance, a strengths-based approach, is based on the belief that in every community there are a few individuals and families whose particular practices enable them to have better health compared to their similarly impoverished neighbors. Hearth, suggesting a family around a fireplace or kitchen, is an implementation strategy that supports caregivers to learn and practice new health behaviors together in a safe environment (such as a home setting) and to rehabilitate their malnourished children. Trained volunteers assist participating parents or caretakers in preparing meals and snacks for their malnourished children with beneficial, locally available food using the results of a Positive Deviance Inquiry. Participants practice positive child caring and active feeding techniques and feed malnourished children with extra energy-rich/calorie-dense supplemental meals. Two-week participation in a Hearth is common, and often contributes to rapid improvement in nutritional status for children, as well as better long-term feeding practices by caretakers at home.

The program methodology was rapidly disseminated to the NGO community via manuals, studies, trainings, field visits and consultant visits. In 2002, 14 CORE Group members, several multilateral and bilateral agencies and many local NGO partners were implementing PD/Hearth programs in over 35 countries in Africa, Asia, LAC and Eurasia. This number has rapidly expanded as new partners, consortium, and Title II food aid programs have implemented the PD/H approach, often at large scale, around the world in various types of settings.

Overview of PD/H TAG Meeting 6

Hosted by FANTA and CORE convened on February 6, 2009 with these objectives:

1. Review PD/Hearth implementation and results from recent experiences.
2. Explore challenges and modifications in PD/Hearth implementation and make recommendations related to both essential elements and implications for scale.
3. Identify how PD/Hearth has been integrated into overall nutrition programs and with other approaches in order to make programmatic recommendations for the Nutrition Pathways tool.
4. Identify key messages and audiences related to communication for PD/Hearth.

The CORE Group invited three NGO staff whose organizations have a history of implementing PD/Hearth to address the TAG regarding challenges and resulting modifications their staff and partners have developed. These included Adugna Kebede (CRS) via Elluminate on implementation in Malawi, Vanessa Dickey (Mercy Corps) about Indonesia, and Ashley Aakesson (Children's Nutrition Program) about experience in Haiti.

Judiann McNulty (Independent Consultant) shared the results of a recent evaluation exploring CCF's scale up through NGO partners in India. She also presented some key points around the scale-up process in Tajikistan through Save the Children, and modifications to PD/Hearth noted

in Bolivia and Ethiopia. Judiann recently led an evaluation of five NGOs implementing PD/Hearth in Indonesia in coordination, and shared the results with the TAG.

Summaries of these rich presentations focusing specifically on modifications to the PD/Hearth essential elements, populations reached through scale-up, and results achieved, are presented in the next section of this report.

Through the follow-up discussion, facilitated by Lynette Walker (Independent Consultant), TAG participants explored how modifications are affecting results. Identified modifications, recommendations, and comments which could spark innovations or improvements in implementation are included as discussion points organized around the setting for PD/Hearth; the fourteen essential elements; and issues related to integration with other programs and scale-up.

Key recommendations are presented in a Summary concluding this Report, to guide the CORE Group with “next steps” that can help with quality of future PD/Hearth implementation.

Background on Technical Advisory Group Meetings and PD/Hearth Materials

Special meetings and Technical Advisory Groups (TAGs) have been extremely useful for moving Positive Deviance/Hearth (PD/Hearth) forward as a successful home/neighborhood-based nutrition program for children. PD/Hearth has enabled countless communities to reduce their levels of childhood malnutrition and to prevent malnutrition years after the program’s completion.

Hosted by World Relief and supported with BASICS funding, the first TAG (1995) resulted in a BASICS publication on PD/Hearth experiences in four countries. Subsequent TAGs have been funded by the CORE Group. TAG 2 (1999) developed the content for a BASICS-produced video and a pamphlet describing PD/Hearth.

These outputs generated more interest in implementing PD/Hearth. The CORE Group’s Nutrition Working Group convened TAG 3 (April 2000) to follow up a request to create a “how to” guide for field staff. TAG participants identified key concepts and principles of a successful Hearth program, listed key elements critical to expansion, developed recommendations for process and outcome indicators for routine monitoring and evaluation, and listed next steps critical for guidance, use, and expansion. An outline for a PD/Hearth guide was constructed.

TAG 4 (December 2002) reached a consensus on the essential elements of PD/Hearth for program design and implementation, defining what it means to be called “PD/Hearth”. It summarized experiences and lessons learned to ensure program quality. Participants exchanged results related to impact measurement of PD/Hearth programs. Information gaps to prioritize further research and generate knowledge were identified, and next steps defined. Participants agreed on strategies for dissemination of the *Positive Deviance/Hearth Manual* through CORE Group members and translation into multiple languages, as well as web postings and HQ-level training.

In February 2003 the CORE Group published the *Positive Deviance/Hearth Manual*. Since the *Manual’s* publication, the impact on children’s nutritional status through the proliferation of PD/Hearth has been substantial. Effective PD/Hearth programs are being increasingly documented and results disseminated. This TAG also resulted in the production of a paper

entitled “PD/H in the Context of Other Nutrition and Child Survival Interventions” published in 2004.

TAG 5 (December 2004) reviewed current information on PD/Hearth implementation around the world. A survey of CORE Group member organizations on their current Hearth programs provided rich data for discussion, focusing on issues of quality control and adherence to the essential elements and necessary conditions. TAG participants looked into consistent application of the PDI and the role of an effective PDI in mobilizing the community for program sustainability. An update on research since the previous TAG meeting highlighted gaps in the evidence base. Participants discussed the potential for conducting a cost-effectiveness analysis. It was agreed that a uniform set of indicators would allow for greater sharing of lessons and for comparison of programs. Participants considered how to develop a standardized monitoring and evaluation system with minimum standards and suggested indicators for field and headquarters staff attention. A presentation of Indonesia’s experience with a PD network and national level programming focused on important elements in successful country collaboration, scale-up, and maintenance of quality. The TAG made plans for a second publication, *The Positive Deviance/Hearth Essential Elements: A Resource Guide for Sustainably Rehabilitating Malnourished Children (Addendum)* which was authored by Judiann McNulty and published by the CORE Group in June 2005. Based on the TAG recommendation, additional documents (PD/H consultant guide, and a paper on the

The *Addendum* sought to address some misperceptions arising around implementation which could affect results. After an introduction, there is an overview of how PD/Hearth interacts with other nutrition and child health interventions and a description of appropriate settings for establishing PD/Hearth. The heart of the publication discusses fourteen essential elements for implementing an effective program, which experience had repeatedly shown risked seriously diminishing the program’s effectiveness if adapted, modified, or skipped altogether. It concludes with a list of additional resources.

In the intervening nearly four years since publication of the *Addendum*, PD/Hearth is being implemented more and more often as part of integrated, often very successful, approaches. Of concern, it also continues to be established in alternate settings than those recommended in the *Addendum*. Essential elements are often being significantly modified or eliminated, despite the caveats in the *Addendum*.

What impact these changes will have on the essence of the PD/Hearth methodology and its uniformity as an approach is an open question. Today’s TAG focused on this issue: whether PD/Hearth can be done differently than described in the *Positive Deviance/Hearth Manual* and *Addendum*, yet just as effectively infuse a behavior change approach.

Summaries of Presentations

Adugna Kebede (CRS): Malawi

[Powerpoint: Lessons Learned in I-LIFE using PD/Hearth](#)

Background: Malawi has a USAID Title II consortium jointly implementing the Improving Livelihoods through Increasing Food Security (I-LIFE) Project during FY2004-2009. The consortium, led by CRS includes: Africare, CARE, Emmanuel International, Save the Children, The Salvation Army, and World Vision.

PD/Hearth is a key nutrition activity in the Title II project in Malawi. After implementing the project for two years, it was clear that the broader nutritional aspects of the I-LIFE Project were not working well. Children showed positive recuperative progress, and the participation of many mothers was promising as a means for promoting skills transfer in other areas. Still, scale-up proved difficult. However, in using the PD/Hearth guideline developed by CORE, services were limited to mothers whose children were malnourished and who lived in communities with malnutrition rates >30%, yet other aspects of the project had broader targets. Facilitating PD/Hearth needed skilled personnel for growth monitoring (GM) and screening as well as the full range of activities. I-LIFE partners had limited numbers of staff on the ground and most of the activities were done by volunteers making the process very time consuming. There was a high drop-out rate among over-extended volunteers. Those remaining asked for compensation for their time, especially those asked to help with GM, to identify and counsel mothers, or other time-consuming tasks.

The limited number of staff in the field had problems identifying appropriate target groups and how to reach them. GM and PD/Hearths, being center-based, had low coverage, and by extension their health education components did also. Health education was of very poor quality and coverage was low (12,000 households). During the hungry/lean season there were food shortages which impeded the process. On the M&E side, it was difficult to get complete information about the program. There was very poor integration with other activities both within I-LIFE itself and government programs.

Facing these challenges, the I-LIFE partners felt they could not scale PD/Hearth up sufficiently to reach the large population of mothers needing nutrition messages in the relatively small amount of time left in the project. It was decided to change the strategic direction of I-LIFE's nutrition activities to focus on behavior change and prevention rather than rehabilitation, and increase coverage targeting more households. I-LIFE decided to work very closely with local communities to integrate all its activities including a local and national agriculture program.

Needing a strategy to accomplish all this, I-LIFE turned to the Care Group Model being used by World Relief and Food for the Hungry in many African countries including Malawi. Care Groups provide the means to provide health education with nutrition messages to sets of 10-15 households supported by a volunteer "lead mother" in turn supported by trained promoters. GM is used to reach children under age two. Mothers are targeted through behavior change strategies for nutrition counseling, and to bring their children for immunizations, de-worming, vitamin A capsule (VAC) distribution, and community integrated management of childhood illness (C-IMCI). It took about six months to set up the Care Group structure on the ground before starting activities. Local chiefs' participation was emphasized, which proved important for mobilization and increased participation of mothers.

Modifications: Modifications to PD/Hearth itself were extensive. The "discovery" process is seen as integral to PD/Hearth and the TAG explored how this now takes place in Malawi. Initially, some I-LIFE partners tried to do the PDI well and benefit from the slow process of discovery, while others made short-cuts to the process. Implementation was uneven. Eventually the partners bent to pressure to take the project to scale. The PDI is now facilitated by skilled professionals with the participation of Care Group lead mothers/fathers and local leaders. It is conducted in selected areas twice a year, rather than every time a PD/Hearth is conducted.

CRS staff mentioned that people had discovered ways the community could assist people living with HIV/AIDS (PLWHA), through men as caregivers and other means, but that nutrition has not taken on a similar dimension. It may be that communities "own" HIV, but view nutrition as a

household problem: someone in the household has done something wrong. A challenge is to determine how to make nutrition just as much of a community problem as HIV.

Screening for PD/Hearth takes place in routine GM centers run by the government or through the Care Group. Twice a year in all Care Groups—regardless of the malnutrition rate of the community—an average of around 18 mothers are organized in a village to cook together and feed their children high-caloric, high-protein meals for 12 sequential days. Any mother can join the 12-day sessions, although most do have malnourished children. The recipes used during the Hearth are designed for all children and were developed with help from the Bunda College of the University of Malawi using a community-based approach.

The consortium partners promote other components of I-LIFE during the 12-day rehabilitation sessions. Health education includes food demonstrations on processing, preparation and preservation techniques in addition to home-based care, nutrition counseling, planning complementary foods which can be taken to the fields, and other ways to meet nutritional needs. While these activities were externally developed, communities seem to exhibit ownership through their health committees. All mothers observe and are trained in the integrated project activities. Faltering children are reached by the feeding sessions. Care Group Volunteers follow up these children after the 12 days session.

Care Groups have come up with different community-initiated strategies to continuously supply the Hearths, for example, a communal garden of soy, ground nut, yellow sweet potato etc. Food aid exists in some locations through food for work (FFW) safety-nets, though not from direct MCH-oriented feeding. The I-LIFE project has found that once food aid is integrated into PD/Hearth sessions, challenges do follow. While food aid commodities helps ensure everyone has a contribution and can come and participate, some caregivers are not always willing to contribute in the absence of commodities. It is important to sit with the chiefs and help them to understand the involved issues.

I-LIFE largely depends on follow-up by Care Group volunteers for counseling or if parents are absent. PD/Hearth volunteers who have previously been volunteers in other programs catch on easier and work more effectively. The Care Group support system has helped volunteers gain experience and build necessary skills. The social effects and small incentives provide sufficient compensation.

Results/Population Reached: The I-LIFE project has realized its goal for high coverage, with 69,290 parents in 662 Care Groups and 14,850 children enrolled in PD/Hearths. There has been a “huge increase” from 2244 in 2006 and 1109 in mid 2007 to close to 6000 by the end of 2007 and 14850 in 2008(no data provided) in the number of children participated, as the program reaches out to many communities in short time. Mothers are learning skills in food processing, preparation and preservation techniques, and this is not limited to households with a malnourished child. Over 5000 Lead Parents and 21 consortium staff had been trained in improved food processing and preparation methods. Participation in VSL and communal and individual off season gardening, in part to provide foods for PD/Hearth, were very high. Participating partners feel that this approach provides a great deal of collaboration and group learning among the mothers without segregating those whose child/ren are malnourished. The Government of Malawi is interested in scale up.

I-LIFE would like to refine the current approach and develop a community-led complementary feeding and learning program operations guideline. It sees a need for developing complementary

feeding recipes for different seasons. There needs to be a linkage both for referral to and for follow-up from the government-run community-based therapeutic care (CTC) and nutrition rehabilitation units (NRU) where children are stabilized. I-LIFE anticipates assisting the Government of Malawi in its effort to adopt some of these practices in its community nutrition program.

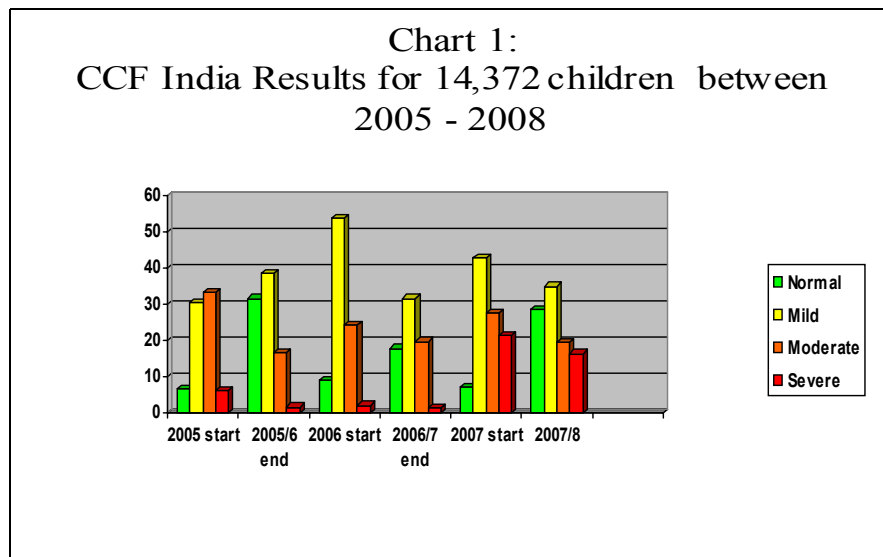
In summary, key points highlighted by Dr. Kebede include:

1. The MCHN program is implemented within the food security context which has helped to link the program with:
 - a. Agriculture and Irrigation extension activities, thereby promoting the cultivation of high nutrient value crops by the Care Groups; and
 - b. Village Saving and Loan scheme which has strengthened the Care Groups group dynamic in working and learning together while at the same time helping earn additional income to support PD/Hearth sessions (to buy oil etc).
2. Using the Care Groups strategy in the program made it easier to:
 - a. Foster communities involvement for resource mobilization such as securing land for communal farms to grow soy, groundnuts, sweet potato etc, thereby enhancing communities ownership of the program;
 - b. Scale up the PD/Hearth program in reaching many communities within a short time; and
 - c. Facilitate follow-up for malnourished children rehabilitated in the 12 day Hearth session.

Judiann McNulty (Independent Consultant): CCF India, SC Tajikistan, and programs in Ethiopia and Bolivia

[Powerpoint: TAG mini-presentations](#)

India. Background: Christian Children’s Fund (CCF) India works in a large target area of West Bengal, India with significant levels of malnutrition. Chart 1 below shows how very few children with normal weight are in the community. Since 2005 CCF India has coordinated with 76 local NGOs to implement a substantial scale-up of PD/Hearth, which is making a significant impact on malnutrition in India.



Modifications: In this scale-up, CCF has introduced some important modifications to the PD/Hearth design. There is only one Hearth session per year per community. A volunteer is selected from her community where she initially works. She adds a new neighboring community each month for a year, for a total of twelve. These communities are close-by and can easily be reached by walking. The volunteers gain significant expertise with the repetition, to where they can solve problems. They receive a stipend. Due to the target area's compactness, supervisors are able to use a bicycle for transportation. They do not necessarily have a health background.

Volunteers conduct the one and only PDI in their own community as part of their training. The assumption is that communities are sufficiently homogenous that more PDI would be superfluous, and that PD behaviors discovered apply equally to neighboring areas. Because the volunteers had the chance to "discover" PD practices, they continue to transmit them to the other communities as they expand.

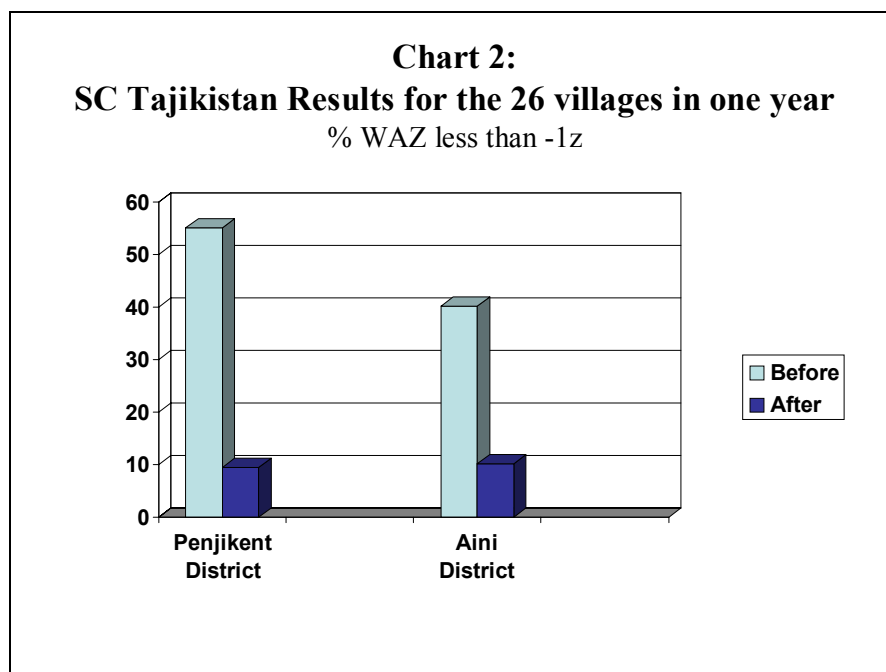
Normal children and their mothers are invited to the Hearth together with malnourished children and their mothers/caregivers. Initially the Hearths were too large, incorporating all first-time mothers. The idea was to reduce stigma by inviting everyone. Some discovery process took place in this setting with mothers of normal children attending. Over time, this evolved into smaller sessions. There have been no complaints about bringing food to the sessions. After the Hearth, the volunteers do home visits every 15 days for two months.

Results: Chart 1 above highlights the results. The scale of this project is significant. In 2007, with just 22 of the 76 partners, there were 907 villages covered in which 20,927 malnourished children participated in Hearths. Of these, 7600 moved to normal status. Only 4% of children did not improve their nutritional status. The cost per child for one month was six cents.

Tajikistan. Background: Save the Children Tajikistan conducted PD/Hearth in 26 villages as part of a Child Survival and Health Grant Program (CSHGP) funded by USAID which ended in 2008. It operated only in villages with >30% malnutrition, most of which is mild. Unlike many other PD/Hearth sites, in Tajikistan nearly every mother has at least a high school education.

Modifications: PDI is conducted in only two villages in each target district. It was felt that customs are very homogenous. For the session, mothers come for two days, then stay home on the third day, feeding their child the same menu at home as an extra meal. This cycle is then repeated. The actual days in attendance total nine days out of a twelve day session.

Results: Chart 2 indicates the extent of malnutrition in all children in the target areas before and after the PD/Hearths, not just those malnourished children participating in the PD/Hearth. Although there were many other complementary activities going on in the context of the CSHGP, it was PD/Hearth which brought the malnutrition rates down so significantly within one month of participation.



Ethiopia. Background: Judiann shared results from three sites of a PD/Hearth program in Ethiopia which was begun by an unnamed NGO and later handed over to the government. The Ethiopian district government is adopting this model.

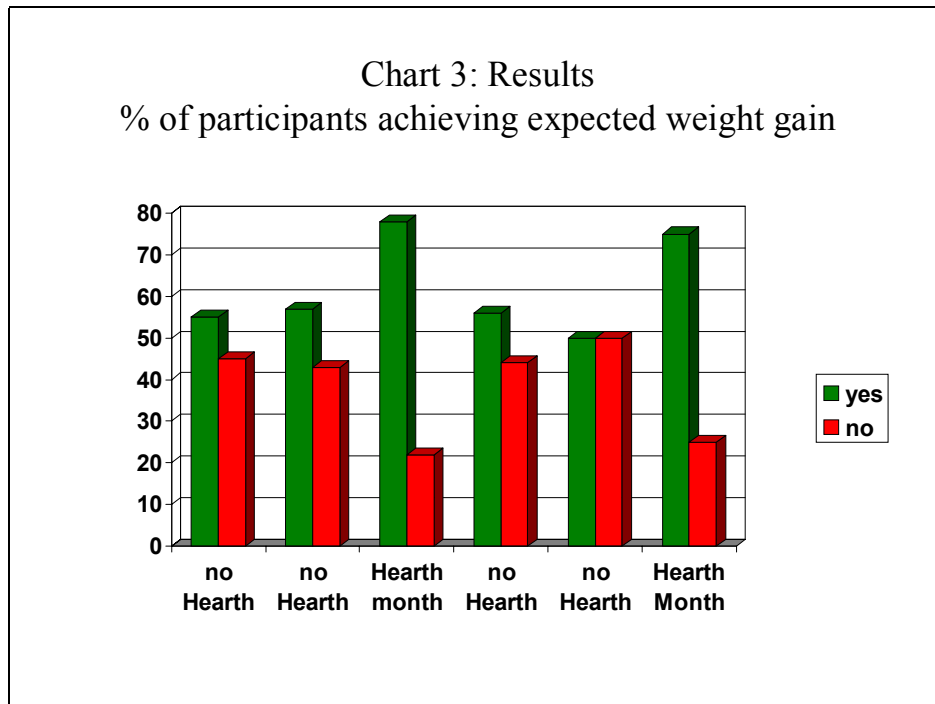
Modifications: The project site is in a famine-hit area, and subsequently, program leaders chose not to ask mothers to bring any contributions to the Hearths: any contributions were optional. Instead, NGOs provided most of the food. Other siblings in the family were left at home. A session was composed of six “PD” mothers and their children, and six other mothers with their malnourished children. Menus were created by an MOH nutritionist in Addis Ababa. When the evaluator asked some of the mothers if they could make any of the menus being used in the Hearth, she learned that some did not have access to more than one needed ingredient.

Results: With significant modifications—so significant the TAG discussed if the program could truly be called “PD/Hearth”—of the 1100 children monitored after one month, some had gained some weight: 64% gained <200g, many of those possibly not achieving any gain; 9% gained between 200 and 400g; 9% gained 400g; and 18% gained >400g.

Bolivia. Background: Judiann shared information about an un-named NGO working in Bolivia, which has made significant modifications to the PD/Hearth design.

Modifications: Staff conduct PDIs in some villages, but not all. For the sessions, all mothers with children under age three are invited. Sessions are held for one week every three months. Volunteers and mothers decide menus one day at a time, and do not know the nutrient value of the menus. Children are supplemented with zinc. The program looks for an expected weight gain, for example, if the child should gain 100 g in two months but does not, he is at risk.

Results: When there is a month with Hearth, the children grow well (see Chart 3). However, they falter in the intervening two months. This trend is apparent both on aggregated data and individual children’s growth cards. Children are more or less following an upward growth line, which is interpreted in Bolivia as indicative of success.



Vanessa Dickey (Mercy Corps)

[Powerpoint: PD/Hearth Assessment: Indonesia](#)

Judiann McNulty (Independent Consultant)

FINDINGS AND LESSONS LEARNED: An In-Depth Assessment of the Large Scale Implementation of PD/Hearth¹

Indonesia

Background: In 2002 Jerry Sternin trained CARE, CRS, Mercy Corps, PATH, Save the Children, and WV in PD/Hearth in Indonesia. The group piloted the approach and formed the PD Network. Most of the targeted children were living in urban areas on Java although one NGO worked in an urban area of Sumatra, and CRS worked in a rural area in eastern Indonesia. The urban context challenged the PD/Hearth model, which is built on the concept of mothers preparing the food they feed their family. In urban Indonesia many households have no cooking facilities, so caregivers must buy prepared food. Junk foods, continual snacking of unhealthy snack foods chosen by the child, and using food as a pacifier are common issues. There is general permissiveness. In this setting, while PD/Hearth aims to teach something new, they must also meet the tough challenge to undo some negative behaviors to which caregivers are attached. In addition, there are issues of

¹ “Findings and Lessons Learned: An In-Depth Assessment of the Large Scale Implementation of PD/Hearth in Indonesia Funded by USAID Food For Peace (draft)”. Report prepared by Judiann McNulty, DrPH, Consultant; Eko Setyo Pambudi, Statistician, University of Indonesia. Involved NGOs: CARE, Catholic Relief Services, Mercy Corps, Save the Children, USA, World Vision International.

crowding and a lack of social cohesion which inhibit cooperation. The urban context brings in extensive TB, and pediatric TB is difficult to diagnose.

With about a year of funding left on the Title II DAP under which most of the NGOs were operating PD/Hearth, and with the government adopting the approach, the group believed an evaluation by Judiann would be a very important legacy to leave for the government about what to do/not do with the approach. The evaluation had as its objectives to:

1. Document the effectiveness of PD/Hearth in Indonesia (nutritional status, behavior changes, community empowerment, local capacity)
2. Determine the factors, methods, or processes which contributed to effectiveness
3. Document key factors and the model for future implementation as guidance for the GOI
4. Describe the extent, process, and lessons learned of scaling up

Although the study was mainly qualitative, all the NGOs had the same baseline. Each provided their monitoring data. Some specific anthropometric studies and final knowledge / practice / coverage (KPC) survey results were added. There were not many Hearth implementation sites still functioning to observe.

Modifications: The evaluation examined adherence to methodology using a list of the fourteen essential elements. These modified elements are listed in the box below; in this box de-worming activities are separated from micronutrient provision.

Adherence to Methodology

Modified Elements

- ✓ Every community conducts a PDI
- ✓ De-worming
- ✓ Menus provide a special nutrient-dense meal
- ✓ Follow-up visits at home for two weeks after PD/Hearth (every 1-2 days)
- ✓ If a child doesn't gain weight, refer child to a health facility

Elements Followed by All NGOs

- ✓ Community women volunteers conduct Hearth sessions
- ✓ Community growth monitoring monitors nutritional status
- ✓ Micronutrients (Vitamin A and Iron)
- ✓ Caregivers bring a daily contribution of food and/or materials
- ✓ Menus based on locally available and affordable foods
- ✓ Caregivers present and actively involved every day
- ✓ Conduct the Hearth session for 10-12 days
- ✓ Actively involve the community throughout the process
- ✓ Monitor and evaluate progress
- ✓ Limit the number of participants in each Hearth session

Results: Of the total 9997 children involved, only 4847 had both initial and one-month follow-up weights recorded and were therefore included in the analysis. By looking at all four years' of data from the five NGOs, the study found that the graduation rate across NGOs was 45% with a range of 35-54%, using as a graduation criteria gaining at least 400 g of weight. Average graduation rates per sites within NGOs ranged from 21-92%. Several of the NGOs were assisting District Health Offices (DHO). The average graduation rate for DHO sites implementing alone ranged from 23-70%. In spite of doing very well in terms of coverage and adherence to the methodology, graduation rates were surprisingly lower than expected.

The evaluation examined key factors associated with success, focusing on graduation rates then exploring what happened in areas with high rates, e.g. "successful" areas. Associated factors included:

- Complementary activities such as water/sanitation, Healthy Communities
- Other ways of using the health messages
- De-worming prior to admission: per government policy, under-fives cannot be de-wormed unless they have a positive (and expensive) worm test
- More frequent home visits after the PD/Hearth
- Better understanding of the PD/Hearth by the *kader* (volunteer worker); belief in the process of PD/Hearth by *puskesmas* (health center, PKM) staff
- Level of understanding by community leaders on the causes and consequences of malnutrition
- Community support of the Hearth with materials or funding, or local leaders stopping by or providing food
- The frequency of support *kader* received from the PKM
- Quality of the menus: those that were more nutrient-dense and had more variety were more successful.

Other noted issues included **location**. Overall, CRS in its rural site saw the most behavior change and improvement in overall nutritional status in the communities. Rural communities had more diffusion, perhaps because people pay attention to what their neighbors are doing and share new information. The results of CARE, SC, and WV were mixed. There appeared to be little diffusion of information and behavior change in urban areas. Within target areas there were communities that had less than 30% malnutrition rate, and this was problematic. Diarrhea prevalence was surprisingly less in the urban than rural areas.

Quantity of posts: Some NGOs had many Hearth posts (CARE had 188) and some only a few (SC had 12). This difference was not analyzed.

Targeting: 5.8% of included children were not malnourished, as the Indonesian growth charts in use at the beginning of the program over-estimated under-nutrition. Children who were more malnourished gained weight more readily. It is not clear what effect PD/Hearth has on children who are low weight-for-age simply because they are stunted - whether weight gain through PD/Hearth will make them overweight for their stature. To be in line with government policy, the program measured all children under-five, not only the targeted under-threes. In looking at the change in the nutritional status between day 1 and day 10 or 12 in children 6-59 months, in Mercy Corp's program most of the children were between 2-4 years of age, so there was not much change noted.

PDI: Whether or not a PDI was conducted did not make a difference in the graduation rate. While the reasons were not thoroughly explored, it may be that the PDI was not well conducted, NGOs

were unable to separate out the relevant behaviors, or the findings were not used to inform the Hearth sessions. In some cases, there were 70 PDI practices identified. The PDI did not identify *strategies*. For example, through the PDI, NGOs would discover that PD mothers were breastfeeding longer, but they did not explore how mothers managed to keep breastfeeding longer.

Effort: Where NGOs put their behavior change effort, they saw more change. Mercy Corps started PD/Hearth at the start of the DAP and added more behavior change activities as time went by (competitions, posters, etc.). WV had frequent campaigns around breastfeeding, and their changes in breastfeeding were impressive. Mother-to-mother support groups were important.

Food aid: All the participating NGOs had commodities. Use in Hearths was mixed. Commodities were not targeted to particular families, but were in communities through FFW or other activities. Food for Peace (FFP) commodities were successfully used in the Hearths, for example, oil did not distort the Hearth menu because it is consistent with locally available oil which is a common ingredient.

Ashley Aakesson (Children's Nutrition Program of Haiti): Haiti

[Powerpoint: Children's Nutrition Program of Haiti](#)

The Children's Nutrition Program of Haiti (CNP) is a small organization working in Leogane, Haiti, close to Port-au-Prince in a highly mobile rural population of around 120,000 in 90 villages. Last year, they had 299 children participating in PD/Hearths, down from 452 the year before. Last year, 56 of the 90 villages in their target area had one or more Hearths.

CNP has modified the standard PD/Hearth approach. They do not do complete PDIs in every community before every Hearth. Instead, *monitrices* work with community health workers to identify positive deviant (PD) families, with whom they do three home observations before every Hearth. These PD home observations require *monitrices* to "look for treasure". It is hard to train people to do this. Some *monitrices* are better at this than others. Based off the home observations, *monitrices* are to incorporate something new each time they conduct a Hearth, and this is checked by supervisors. CNP finds it very difficult to keep the spirit of discovery alive with their paid group of *monitrices* who are becoming more and more expert as they repeat this process.

CNP covers the medical care for every child over a six month period. They believe this is one key behind their high results, and recognize this may not be feasible for other programs.

They use 36 paid *monitrices* working in pairs. In the six to seven years the project has been operating, there has been very little turnover. *Monitrices* have six weeks of intensive training up-front to learn menus, develop songs, explore the market, etc. The training is very hands-on. Two full-time supervisors supervise each Hearth at least two times and ideally three times during implementation. A Program Manager spends around 30% time supervising Hearths, doing refresher training, and similar work. *Monitrices* receive one week refresher training each year. They need to practice doing role plays, incorporate new activities such as linkages to community-managed acute malnutrition (CMAM), and keep the project spirit up. CNP *monitrices* are now better off than the average village resident.

In other respects, CNP's PD/Hearth follows standard procedures as outlined in the *Manual* and *Addendum*. Its admission criteria is -1 or -2 SD W/A or growth faltering--level weight gain for

two months. In the recent past there used to be registers listing every child in the community, every pregnant woman, in/out migration, deaths, etc., as part of the government's GMP/EPI program, but this is simply not happening anymore. GM itself is deteriorating, and this is CNP's major method of case finding. Identifying target children is a challenge under these circumstances. On average, CNP has four to eight children/Hearth. New families continually come in with the extensive in/out migration of the population, and CNP is not finding diffusion. It is not that easy to find who has influence in the community.

Children are weighed at the beginning and end of the Hearth, and then six months later during follow-up. Hearths themselves take place at a volunteer mother's house, where cooking pots and water are available. Various incentives keep these volunteers involved.

Everyone graduates after a month. CNP does follow-up after six months to check on progress. Their success criteria are the rate of growth, not change in status, though CNP reported on change in status at this meeting to better compare to other PD/Hearth programs. CNP results indicate that 62% of children had a rate of growth that increased 1 SD. In 2006 and 2007, there were 84% at or above the international standard median growth curve; last year it was 86%. There were 4% lost to follow-up, and one of them was a death. CNP would like to have essential elements to monitor during each Hearth, to learn more about what keeps the mothers attending and the children doing well after six months. It is not clear exactly "why" PD/Hearth works: that's not being captured.

CNP's program is integrated to other activities in several ways. Its Hearths are integrated with a rehabilitation hospital program for recuperation for severe malnutrition that started using community-based management of acute malnutrition (CMAM) last year. *Monitrices* have been trained to use mid-upper arm circumference (MUAC) and edema as screening criteria for which they refer to a pediatrician at a partner hospital in Leogane. CMAM entrance and discharge criteria, and CMAM case follow-up and documentation follow the essentials of the Valid Field Guide for CMAM. Children are immediately referred to the PD/Hearth program. Not very many children are involved – between 40 and 60 children per year. CNP has a safe water program and a point of use (POU) treatment component for which they subsidize Hearth families' participation. They also work in micro-credit and anticipate developing a model that will work with Hearth mothers. Their *monitrices* work as assistants in health posts. The cost of the CNP's PD/Hearth model is around US\$10 per child, per month. People within Haiti are looking at PD/Hearth again. CNP would like to scale its program up by training other organizations in Haiti.

DISCUSSION on ESSENTIAL ELEMENTS

PD/Hearth Setting:

Discussion touched on the requirement to have at least 30% moderately to severely malnourished children in a community in order to support PD/Hearth implementation. A number of PD/Hearth applications have been tried in areas with lower rates of malnutrition or predominantly mildly malnourished children with mixed results.

In Indonesia, where participating NGOs targeted communities that had less than 30% malnutrition rate, results were not as good. In Malawi, to achieve scale up of its I-LIFE project, CRS and their partners included communities with lower malnutrition rates in line with an emphasis on prevention rather than rehabilitation. They incorporated nutrition messages through Care Group Volunteers, integrated activities with agricultural programs, and initiated Hearths and community feeding sessions. While overall results are good, further data analysis is needed to understand the effectiveness of this approach.

One participant stated that the power of PD/Hearth is in the caregivers “seeing” the change in their children and therefore being reinforced for changing their practices. Where there is very little malnutrition, or predominantly mild/moderate malnutrition, participants were concerned that it would be difficult for caregivers to see the change in their children. Additionally, where mothers do not perceive the malnutrition is a problem, motivating participation is difficult.

Essential Element 1: *Each and every community conducts a Positive Deviance Inquiry using community members and staff.* There are a number of organizations which have modified, compressed, or even abandoned the PD aspect of PD/Hearth. Discussion revolved around these key points:

Who should conduct the PDI?

TAG participants discussed a range of variations related to who conducts the PDI. The PD/Hearth manual recommends that the community members and staff conduct a joint discovery to identify the unique practices and strategies used by caregivers with well-nourished children. Programs modifying this step tend to either omit the PDI or conduct the PDI as formative research for development of the Hearth session by either volunteers or staff. When the PDI is conducted as formative research by staff or volunteers, there is a tendency to see the process as too labor intensive to conduct in every community where staff or volunteers are identifying the same solutions.

Can a PDI from one community be used for other communities?

A number of organizations have moved to conducting one PDI and applying the results in a larger number of communities. The rationale provided was generally related to the amount of time involved and the homogeneity of the communities.

Several participants expressed concerns that the discovery process by the community is critical to achieving ownership of the results, sustaining rehabilitation, and preventing future malnutrition. They discussed the importance of not thinking of the PDI as a formal questionnaire, but rather a more anthropological process including relaxing and “hanging out” with a caregiver, mentally noting what she is doing. On the other side, some participants pointed to results of programs where PD practices were incorporated by staff or volunteers and led to good rehabilitation outcomes.

Is a PDI essential to sustainably rehabilitate malnourished children?

In Indonesia, the 2008 evaluation looked at the differences between more or less successful projects. Whether a PDI was done or not did not come out as a difference related to the child’s nutritional rehabilitation. It is unknown whether the quality of the PDIs was a factor in this finding.

Several challenges to conducting quality PDIs were raised including:

- The identification of an over-abundance of less relevant behaviors;
- Inability to identify the strategies that enabled PDs to achieve better results;
- Inability to identify the key practices; and
- Failure to incorporate the PD practices in the Hearth sessions – following PDIs, menus are often created by outside experts or developed on a day-by-day basis, ignoring the

results of the PDI; behavior change messaging is based on outside expert knowledge instead of community-identified strategies.

Discussion touched on the importance of training and coaching related to conducting the PDI and analyzing the results in order to help the community identify the real PD practices to be expanded.

These challenges led to a discussion around the staff and skill sets needed for PD/Hearth. Participants felt that it was difficult to train people to do successful PDIs and that some personalities are better at it than others. It was suggested that those who are more comfortable with structured questionnaires will feel very uncomfortable working “off script”. Many staff feel more comfortable using “what they already know”, or following a set of instructions. One recommendation made was to seek out staff with qualitative skills and consider splitting the work such that a social mobilization team would engage the community in conducting the PDI and a separate monitoring team would support more quantitative work. It was noted that illiterate women can be among the best to conduct successful PDIs.

Discussion also included a number of suggestions related to conducting effective PDIs

The TAG reiterated some good practices already in the *Addendum* which are being rediscovered, and highlighted new considerations becoming more apparent.

- A successful PDI will uncover a variety of behaviors by going beyond the immediate caretaker and looking at grandmothers and others in the community.
- While it is useful to try to time the household visit for when a child might likely be eating, the PDI should go beyond a search for a food item. It should extend and expand until all key practices are discovered or rediscovered.
- The PDI should be conducted more than once if there are seasonal coping issues.
- It is helpful to identify behaviors that are the easiest to change, making sure they are simple.
- Looking at barriers can be instructive. The PDI can consider why others are not doing the PD actions and how to overcome the barriers.
- It is important to identify strategies and not just behaviors. An example was given of Bolivia where the practice was serving a meat soup, but the strategy was the way a mother scooped down to get to the nutrients at the bottom of the soup pot.
- The person behind a successful PDI will take a “non-expert” approach, and be willing to take the time, possibly all day but at least 2 hours, following the caregiver in the home or kitchen.
- Probing for enabling factors is important. An example provided was asking, “How do you manage to have fish in your house when your neighbor can’t afford to?”
- The PDI should look at health-seeking behavior and caring behaviors, and also consider practices related to food processing and preservation.

There was agreement that there has been an over-reliance on using formal questionnaires that can often curtail the discovery process.

Comments were also made about the lost opportunities to incorporate PD findings beyond the Hearth sessions in wider community nutrition programming efforts.

Essential Element 2: *Utilize community women volunteers to conduct the Hearth sessions and the follow-up home visits.* Part of the original intent behind Element 2 was to minimize the response many communities have to someone coming in from outside. Some organizations, CNP and CCF India are examples, are modifying this element to create a community-level paid cadre who moves from community to community. The projects that have experimented with this have not had any adverse responses from communities. Participants felt that those modifying this element should consider the pros and cons before making modifications. On the positive side, since they work with PD/Hearths all the time, paid staff become more experienced and can solve problems as they arise. Without needing to divide their time between volunteer work and livelihood, they can commit more time to the process. At the same time, the expertise they are building tends to stay with them instead of being distributed more widely through a network of volunteers. They may be more apt to drop the PD/PDI aspects, secure that they “know” the answers.

Whether or not the women are volunteers or paid is often related to the amount of other work they are being asked to do. Growth monitoring, counseling mothers, or covering a large area usually require compensation. The more time consuming work expected of them, the more likely that compensation will also be expected.

Management and supervision are key to quality and retention and some level of skilled and paid staff are needed. CCF India partners successfully used non-health staff as supervisors covering up to thirteen community-based staff working in over 150 communities.

Essential Element 3: *Prior to the Hearth sessions, de-worm all children, update immunizations, and provide needed micronutrients.* TAG participants agreed on the need to integrate PD/Hearth into larger child-health programs for a variety of relevant interventions: de-worming, EPI, Vitamin A campaigns, zinc supplementation, referral, etc.

Essential Element 4: *Use growth monitoring to identify newly malnourished children and monitor nutritional status of participants who have graduated from the Hearth.* The standard admission criteria for PD/Hearth program is through low weight-for-age identified through growth monitoring. Weight for age enables parents / caregivers to see their child’s progress, and enables the wider community to monitor children’s progress overall. However, some participants noticed that classification by weight/age can misclassify a child as malnourished, even when the child is continuing to steadily gain weight; or not identify a child who has growth faltered between weighting sessions. Further use of weight gain tables are recommended.

The presentation from Indonesia raised a question, however, about whether any children are being missed when programs use only weight-for-age and if weight-for-height should also be considered as admission criteria. Analysis of the USAID Title II Development Assistant Program (DAP) baseline data in Indonesia among the five collaborating NGOs showed that many wasted (low WFH) children would be missed if only routine GM data were used: 44.4% of the children who were wasted would not show up as malnourished by low WFA when weighed for routine GMP.

Further discussion is needed to clarify guidance on this issue.

One participant proposed mid-upper arm circumference (MUAC) as a screening method or for entry/exit, either alone or in addition to GMP using WFA or WFH, or the monthly weight change

card under development. Other participants responded that MUAC identifies only those children who are malnourished and wouldn't identify those who are faltering. Early detection was felt to be critical and cannot be accomplished with MUAC.

Essential Element 5: *Ensure that caregivers bring a daily contribution of food and/or materials to the Hearth sessions.* There was general agreement by the TAG that caregivers bring a contribution to the Hearth. Many programs face no complaints about the requirement to bring food or materials such as fire wood.

TAG presentations touched on ways communities help supply the Hearth. For example, Care Groups in Malawi have, on their own initiative, developed communal gardens to harvest foods for nutrition programs, and have developed innovative ways to preserve food. In some places food aid commodities, particularly oil, may be available through food for work (FFW) or other safety net projects, and become part of the Hearth contributions.

An effective PD/Hearth session includes more than just looking at the diet or menu. There is an important element of social-behavior change. The *Addendum* addresses this situation by recommending an emphasis on very small contributions, menus using only foods that can be acquired by the poorest families, and focusing on strategies being used by PD families that enable them to manage. In this way the intent of this element—to practice a behavior change built on feeding children nutritious, affordable food—can be realized in the poorest settings. Bringing contributions provides parents/caregivers with practice obtaining foods or other supplies they do not commonly harvest or buy for their children, reinforcing the new behavior(s). Negotiations with the community can determine appropriate ways to help reinforce the practice of the new behavior(s).

Essential Element 6: *Design Hearth session menus based on locally available and affordable foods.* There was consensus that this element was important. The Ethiopian experience provided an example of where this element was modified, with externally created menus, mothers were unable to obtain listed ingredients.

Discussion revolved around several issues.

Reintroduction of indigenous plants

Participants questioned whether it was acceptable to reintroduce indigenous plants if they do not naturally emerge in the PDI. An example raised was *moringa*, a plant readily available in many African countries that has been largely forgotten. In the case of *moringa* what was once a food with a bitter taste had taken on a tradition as a medicine. But Ethiopian grandmothers remembered it and how to use it as a food. It was found being eaten by adults in Rwanda, although no longer in the children's pot. The Ghanaian government was promoting it in the north. To use a rediscovered food item like *moringa* may require recipes, which also need to be discovered. There may need to be special recipes, even whole menus, for different seasons. *Moringa*, for example, was being made into a powder, and mixed with honey. The TAG consensus was that indigenous foods were promising and PDIs needed to go "beyond the usual suspects" to rediscover their uses. It is possible that grandmothers, herbalists, elders, or others might remember *moringa* or other long-forgotten indigenous foods and how they were used, thereby assisting in their rediscovery.

Modifications for urban settings

While PD/Hearths have traditionally focused on cooking together, this was found to be inappropriate in urban areas of Indonesia where households often did not even have cooking facilities and vendors supplied the household food.

Participants suggested that it might be more appropriate in this setting to focus both the PDI and the subsequent Hearth sessions on snack foods and foods from street vendors. PDIs could point to healthier snack options or street vendors that sell food PD families are using or street vendors that prepare food more hygienically than others. While the cooking aspect of a “traditional” PD/Hearth program was no longer appropriate, participants could still bring a purchased donation of an appropriate food type, perhaps from an identified vendor, thereby practicing the desired behavior.

Use of food aid

The TAG discussed the role of food aid, which has become part of some PD/Hearths where there are food-for-work (FFW) or safety net activities targeting the village. Commodities like oil correspond to local foods and therefore do not distort the Hearth menu. Families receiving food aid sometimes use the commodities as their contribution for participating. Community leaders can help to mitigate any reluctance to continue contributions if food aid ends.

Essential Element 7: *The Hearth session menus must provide a special nutrient-dense meal sufficient to ensure rapid recuperation of the child.* In Bolivia, volunteers and mothers decide menus one day at a time without knowing the nutrient content. This carries the risk of compromising weight gain. In Indonesia, menus that were more nutrient dense and had more variety were more successful. The TAG was in agreement that to effect rapid recuperation, it is essential the Hearth contain a nutrient-dense menu (meal and snack) with listed amounts of calories, protein and micronutrients per child based on their age.

Essential Element 8: *Have caregivers present and actively involved every day of the Hearth session.* Participants agreed that it was essential to have both the caregiver and the child involved each day of the Hearth session in order to both achieve and sustain the recuperative effects. There may be an issue with caregivers needing to bring additional children to the session. This needs to be managed where it exists.

Essential Element 9: *Conduct the Hearth session for 10-12 days within a two-week period.* There was general agreement that conducting the Hearth session for a concentrated, contiguous period of time was important. There were, however, several variations presented to the exact timing.

- In SC’s Tajikistan program, mothers came for two days, then stayed home on the third day, feeding their child the same menu at home as an extra meal. This cycle is then repeated. The actual days in attendance total 9 days out of a 12 day session. Results from the first site are a reduction from 54 %to 9 % weight-for-age z scores (WAZ) less than -1z; in site 2: from 40% to 10% WAZ less than -1z.
- The NGO in Bolivia held Hearths for one week every three months. Their results indicate that between 50-56% of children achieved expected weight gain in the months when there was no Hearth, while between 73-77% achieved expected weight gain when the Hearth is in session.
- In Malawi CRS conducted a 12-day session. While no results data was presented, they reported a “huge increase in the number of children rehabilitated”.
- The CCF India partner description included a list of modifications which does not include any variation on the number of days they meet in session, so it is assumed to be standard (e.g.

10-12 days within a two-week period). Of 20,927 malnourished children who participated; 7,600 (36.3%) moved to normal status; 4% of children did not improve nutritional status.

- The five Indonesia-based NGOs conducted sessions of 10 or 12 days within a 2 week period. Their results indicated that 45% of participants gained 400 g or more in month.

Both standard sessions and modified sessions have helped large numbers of children improve their nutritional status. Organizations used different criteria for success, making comparison difficult, so no conclusions were drawn on whether more children would have improved using one type of design over another.

Essential Element 10: *Include follow-up visits at home for two weeks after the Hearth session (every 1-2 days) to ensure the average of 21 days of practice needed to change a new behavior into a habit.* The TAG reiterated the importance of follow-up visits for behavior change, but explored modifications to the follow-up visit schedule. CCF India partners conducted follow-up visits every 15 days for 2 months. Of 20,927 malnourished children who participated; 7,600 (36.3%) moved to normal status; 4% of children did not improve nutritional status. In Indonesia, more frequent home visits after the PD/Hearth were positively associated with greater success (e.g. graduation).

Essential Element 11: *Actively involve the community throughout the process.* The TAG reconfirmed the importance of community involvement. In the Indonesian evaluation, a local leader who stops by the Hearth or provides food was associated with increased graduation rates.

The CRS Malawi presentation described different levels of effective community involvement. CRS decided up front to work very closely with local communities as part of their integration strategy. Village chiefs' participation was an important element for increasing overall community involvement. The chiefs were involved in the PDI process along with Care Group lead mothers. The Care Groups themselves were community-owned structures, comprised of local women leaders and households, providing a strong local base for PD/Hearth as part of a fully integrated program. Communities provided food, cash and allocated irrigated land for high nutrient crop cultivation for lean season use. The follow-up of malnourished children flowed easily from the Care Group structure.

An additional thought that emerged out of discussion was the opportunity to use the PD messages more broadly in the community with other health and nutrition programming.

Essential Element 12: *Monitor and evaluate progress.* The *Addendum* describes a monitoring process that looks at attendance, entering and one-month weights, and the percentage of children who graduate after one or two sessions. Graduation can be determined as 400 g weight gain in one month, a decidedly upward growth trend on the growth curve during two months, or moving up one level or achieving normal W/A.

The TAG discussed the amount of weight gain which would be considered sufficient for graduation. Participants felt that there is still much to learn about how children grow, about catch-up growth, and about how children grow who are becoming stunted. The age of the child was raised as an important factor. While the Indonesian study found no difference in the ability to gain weight by age, other participants stated that a nine-month old and a three year old are going to have large differences in the amount of weight each can gain in a month. Discussion revolved around the need to target by age.

A challenge raised was the children who register as malnourished on the growth chart, but who are on a good growth trajectory. These children can repeat sessions over and over without gaining enough weight quickly enough to graduate, particularly if they are over age two.

The *Addendum* lists some ways to look at longer-term impact: measuring weight gain at two months, six months, or a year, and tracking the growth of younger siblings. CNP in Haiti suggests identifying some indicators which could be monitored in each Hearth related to what keeps the mothers practicing the new behavior or strategy and the children doing well after six months.

Essential Element 13: *If a child doesn't gain weight after two 10-12 day sessions, refer the child to a health facility to check for any underlying causes of illness such as TB, HIV/AIDS, or other infection.* TAG participants agreed that it would be better to address chronic or acute diseases at the beginning of the recuperation period as possible, perhaps having a health screening, rather than waiting for two unsuccessful sessions before referral.

Essential Element 14: *Limit the number of participants in each Hearth session.* The *Addendum* suggests limiting the number of participants to a maximum of ten caregivers, with six to eight being an ideal number. The network of NGOs implementing PD/Hearth in Indonesia, which graduated 45% of participating children, adhered to the standard and limited the number of caregivers, but several other organizations modified this element. CRS Malawi invited an average of 18 mothers to its sessions. Most of the mothers had malnourished children, but this was not a criterion for inclusion, nor was rehabilitation the main goal. Instead, they were engaged in preventive activities integrated into the PD/Hearth session on food preparation, preservation, etc. CRS Malawi sees a double benefit coming from this, with high attendance for its demonstrations and high rates of recuperation (recuperation data not provided).

Others had even larger groups of caregivers involved. In Bolivia, all children under age three and their mothers were invited. CCF India NGO partners invited large groups of “normal” children and mothers, and for a while, first-time mothers, along with its target group, seeking to reduce stigma through the numbers. This had a corollary benefit, as the “normal” mothers enriched a discovery process. In the end, the large numbers overwhelmed the process. Non-targeted caregivers are now in separate sessions.

Integration with Other Programs: PD/Hearth is not intended to be a stand-alone program. Essential Element 3 highlights the need to take children up-front to a health facility for deworming and to catch up on any needed immunizations and micronutrient supplementation before attending Hearth. If GMP does not already exist in the community, the health facility needs support to establish one. Follow-up of children not doing well involves TB and HIV testing.

Just as malnutrition is about more than food, PD/Hearth goes beyond nutrition as a social change model. It acts as a springboard for women's groups, Care Groups, shared child-care groups, and the many groupings of women that are going on in a community. The Care Group model was presented as one vehicle for connection as a group of mothers who are already sharing experiences, thus providing a context for discovery to take place. CRS Malawi utilizes the Care Group to organize periodic community feeding events for the whole community. Follow-up is integrated in ongoing Care Group activities.

PD/Hearth will be most successful when linked to other health and nutrition interventions for all families within target communities, taking care to keep messages simple and focused. The TAG explored integration with broader programs which created useful synergy, like Healthy Communities, safe water/point-of-use (POU) treatment, and micro-finance. More nutrition-oriented integration has included gardening, agriculture, food demonstrations, food processing, food preparation/preservation/transport techniques, and Trials of Improved Practices (TIPS).

For recuperation of severe acute malnutrition (SAM), PD/Hearths have been integrated with hospital programs, community therapeutic care (CTC), or community-based management of acute malnutrition (CMAM). PD/Hearth can form the basis upon which to build basic rehabilitation. SAM children for whom Hearth may be inappropriate are referred to programs like CMAM which is a time-bound, physiologically-based methodology to speed up recuperation. PD/Hearth addresses ongoing nutrition in the home. Successfully recuperated children are moved directly into Hearths through an immediate referral as part of their discharge from CMAM.

Hearths are also an opportunity to potentially link with breastfeeding promotion (BFP), management of eclampsia/pre-eclampsia, home-based women's health records, and related women's health issues. Some organizations are already doing this. Pregnant women are being tracked and weighed during a monthly get together and meal. For others, pregnant and lactating women are being grouped together for tailored health education.

Scale Up: The TAG discussed several methods that organizations have planned for scale.

NGO collaboration

The Indonesia network, CCF India local NGO partners, and CRS Malawi demonstrate the scale that is possible when multiple NGOs apply the same approach in their different program areas. Participants discussed some of the options for reaching out to local NGOs and increasing their knowledge of the PD/Hearth approach.

Government

Another method of scale up is through governments. The government of Indonesia has a line in its national budget for PD/Hearth, and has established a PD Resource Center. The government of Ethiopia has adopted Hearth as a nutrition model. The government of Malawi is interested. Experience has shown that there is a tendency for governments to short-cut program standards, which can lead to a drop in quality and results, and this is difficult to counteract if NGOs are no longer engaged.

Incorporate PD practices in broader community programming

A third method of taking PD/Hearth to scale is to integrate PDI information with larger community efforts. CRS Malawi's model has enrolled nearly 15,000 children while at the same time involving over 69,000 parents in some aspects of Hearth as well as its broader program and that of government.

Organizations are facing challenges to keep standard PD/Hearth targeting, staffing, and methodology (as per the *Manual* and *Addendum*) in place when scaling up PD/Hearth. A number of modifications have grown out of addressing these constraints. Examples include a modified setting to included locations with <30% malnutrition rates, variations in targeted participants, a change in focus to prevention, frequently a reduced scope for the PDI, paid staff to expand coverage quickly, changes to the Hearth schedule and schedule for follow-up, and a standardized menu. The impact on results is not yet clear, but quality seems to be an emerging issue needing attention. PD/Hearth will require inputs at key points to bring the discussion back to quality.

There may be ways to reduce the overall PD/Hearth process, but ultimately, a child needs a certain amount of calories, protein, and other key inputs to recuperate. There is only so much of the PD/Hearth process that can be removed while maintaining an effective methodology.

Recommendations

The TAG came up with dozens of ideas and suggestions aimed at supporting PD/Hearth implementation at scale which are described in the meeting notes. The following recommendations for the CORE Group and partners will help continue the important process of developing guidance and standards for quality PD/Hearth implementation. Several of these recommendations would require substantive and ongoing resource investment while others might be able to be pursued by the PD/H Community of Practice.

1. Establish a learning agenda and analytic framework for PD/Hearth implementation and scale-up that would enable comparison of approaches and results.

- Maintain an inventory of PD/Hearth programs, especially those being implemented at some level of scale, tracked by key indicators.
- Develop a set of key indicators for program quality in order to facilitate comparison between programs (related to essential elements).
- Develop a set of key indicators related to scale-up methodology used including cost analysis and key inputs.
- Provide guidance to program evaluators and implementers on key aspects of the program to document for contribution to this learning agenda.
- Document and analyze learnings.

2. Develop a “lessons learned” paper that explores challenges and modifications made in current PD/Hearth programs with lessons learned and recommendations related to both essential elements and implications for scale.

- Hire a consultant with PD/Hearth experience to sift, compare, contrast, analyze, and summarize the valuable data and lessons learned that currently exists.
- Develop a paper or series of papers that provides guidance and support to improve program quality and evaluation.

3. Document NGO and government experiences in integration of PD/Hearth into overall nutrition or other development programs.

- Develop a call for case studies from organizations that have successfully integrated or linked PD/H into or with other health and development activities.
- Incorporate findings into the Nutrition Pathways tool, Nutrition Technical Reference Materials, and other nutrition-related documents.
- Support organizations to publish their findings.

4. Provide guidance on measurement methods for PD/Hearth programs in developmental, transitional, and emergency settings.

- Convene a task group to provide further guidance on use of wt/age, wt/height, MUAC, and growth promotion charts for entry and graduation from PD/H programs.

- Publicize evidence and documentation that may be forthcoming on how children grow, catch-up growth, recuperative feeding needs for children in transition to stunting.
- 5. Develop a series of case studies that examine how PD/Hearth has been replicated and taken to scale by different organizations.**
- Convene a task force to layout a framework for documentation of current projects that have scaled-up PD/Hearth
 - Identify current organizations that have scaled-up PD/Hearth using different approaches, such as through government, local NGOs, networks, Title II programs and networks.
 - Hire a consultant to work with these organizations to write a series of case studies of the various approaches and a lessons learned and summary section on what we have learned.
- 6. Rewrite the PD/H Essential Elements Guide using language that would enable adaptation and provide illustrative anecdotes to improve quality PD/H programming.**
- Hire a consultant to create the next edition of the PD/Hearth Addendum: Essential Elements Guide with current lessons learned, illustrations from the field, and in a language that is more easily understood by field practitioners, enabling adaptation to occur.
- 7. Develop and disseminate a series of short communiqués to various audiences to increase knowledge and awareness of PD/Hearth as an important strategy for sustainably rehabilitating malnourished children.**
- Utilize a variety of information dissemination tools and forum to disseminate new information on PD/Hearth. Potential topics include:
 - How to better use the Positive Deviance Inquiry
 - Case studies from effective programs - Malawi, Haiti, CCF India
 - Menu strategies
 - Overview of Essential Elements lessons learned
 - Why PD/Hearth is Alive and Well
 - Integration of PD/Hearth into Care Groups
 - PD and PD/H in urban settings

SUMMARY

The PD/H TAG ended on a positive note, all participants acknowledging that PD/Hearth is alive and well! There are several new and creative adaptations of the methodology, ongoing experiments in scaling-it up by different actors, and a conveyed community need for effective nutrition interventions. As discussed, there is ample evidence available that can be analyzed to extend current knowledge, and there is need and opportunity for extensive communication activities.