Evaluation Report

Internal Evaluation with Outcome Harvesting – PHC Project Luzon

Annika Schulte
M&E Officer German Doctors e.V. Bonn
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German Doctors e.V.
Löbestraße 1a
53173 Bonn

Vorstand
Dr. Harald Kischlat
Dr. Christine Winkelmann

Vereinsregister-Nr. 9695
Eingetragen beim Amtsgericht Bonn

USt.-IdNr. DE292039254

www.german-doctors.de

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Abbreviations

BHS	Barangay Health Station
BHW	Barangay Health Worker
BNS	Barangay Nutrition Scholar
CGDDC	Committee of German Doctors for Developing Countries
DAC	Development Assistance Committee
FGD	Focus Group Discussion
GD	German Doctors e.V.
LGU	Local Government Unit
M&E	Monitoring and Evaluation
MHO	Municipal Health Officer
MOA	Memorandum of Agreement
MUAC	Mid-Upper Arm Circumference
NGO	Non-governmental Organization
OH	Outcome Harvesting
PHC	Primary Health Care
PHO	Provincial Health Officer
RHU	Rural Health Units
RC	Rolling Clinic

Summary

The Primary Health Care (PHC) project and the Rolling Clinic (RC) in Apayao / Kalinga, Luzon started in 2017. Since then, over 300 barangay[1] health workers (BHWs) have been trained, and basic medical services have been provided by regular Rolling Clinics to the population in remote areas with only limited or no access to primary health care. The project now enters its final phase, and decisions regarding continuation or an exit are pending. This internal evaluation can be used for further planning.

This internal evaluation was planned and conducted according to the Outcome Harvesting (OH) approach. Primary data was collected from main stakeholders (community members, trained BHWs, local healthcare staff, the local team, and community officials) through interviews and focus-group discussions. Monitoring data and project reports were also used to identify the project outcomes.

The results show that the project has been successful in achieving its set goals. A total of 15 outcomes were identified during the Outcome Harvesting process. These matched the goals of trained BHWs in fulfilling their roles in the local healthcare system, improving the health situation and health-promoting behavior, and strengthening the local healthcare system. Contributing factors included comprehensive training of the BHWs, role modelling by the whole team, the WASH[2] component, and strong partnership / community involvement.

The PHC approach is relevant and appropriate for the region. An integrated WASH component in PHC improves outcomes and should be integrated in this approach in further projects. A plan and associated activities on how to sustainably transfer the components to the local healthcare system should be developed and implemented soon based on existing limitations.

Acknowledgement

This report is an internal evaluation of the PHC project in Luzon achieved by implementing the Outcome Harvesting approach. It benefited immensely from the support of various individuals who contributed to the implementation of this internal evaluation. The project team in Luzon deserves special mention. We thank the whole team for facilitating ground operations, especially data collection in the field. A special thanks goes to Gerhard Steinmaier and Jocelyn Pasayon, who were always willing to share information and coordinate data collection in the field. We also thank Novilyn, who was responsible for data collection on site. We are grateful to Wadel Cabrera, who supported us with his methodological expertise in the implementation of outcome harvesting and led workshops. We heartfully thank various stakeholders, local health staff, BHWs, local leaders, and community members, who tirelessly gave their time and reflective input to enrich the process.

[1] Barangay is the Filipino term for "village" or "district" and refers to the smallest administrative unit in the Philippines.
[2] WASH stands for “water, sanitation and hygiene” whereas all three terms belong to the basic needs of human beings. Universal, affordable as well as sustainable access to WASH is recognized as a human right and thus a key issue within international development.

1 Introduction

The CGDCC project in Luzon (provinces Apayao and Kalinga) started at the end of 2017 and is expected to run until the end of 2022. A Rolling Clinic offering health services for people in remote areas was established in different Barangays in the Apayao and Kalinga regions in early 2018. Several cohorts of Barangay Health Workers (BHWs) have been trained so far, and trained BHWs have already started working in their communities, where they provide basic medical services, establish referral systems, conduct health promotion in the communities, and promote the right to health. This PHC approach is linked to the Rolling Clinic, where the trained health workers gain valuable practical experience. Nearly 400 BHWs will have been trained and serve the families in the project area by the end of the project.

The project includes the following components:

- Primary health care (PHC) (training BHWs, referral system)
- Rolling Clinic (service provision, training ground BHWs)
- Water project (improving the overall health situation, eliminating water-borne diseases)
- Cataract operations

The project's target population is the indigenous people in the Kalinga and Apayao provinces. These individuals living in remote areas have high health risks compromising their quality of life. When ill, they have no guarantee of receiving care, especially affordable care. They have no reliable access to health care, no health insurance, and medications are expensive. The main problems are the numerous infectious diseases, such as diarrhea, respiratory-tract infections, measles, skin infections, and worm infestation. Non-communicable diseases like hypertension or diabetes are widespread among the population (Source: project proposal, 2017).

A total of 289 BHWs were trained in the project by the end of 2020. By the end of July 2021, another 40 BHWs will have been trained, totaling 329 trained BHWs. The following table shows the details of this training.

Table 1. Data about BHW training in the project

Barangay / Cluster	Number of BHWs	Date of Graduation	Municipality	Region
Pangol/Lay-asan Cluster	26	27.07.2018	Tanudan	Kalinga
Daga Cluster	23	15.11.2018	Conner	Apayao
Buluan/Paddaoan Cluster	33	26.04.2019	Conner	Apayao
Ableg/Balinciagao/Guinaang/Balatoc Cluster	91	07.08.2019	Pasil	Kalinga
Mawegue/Guinamgamman Cluster	33	06.11.2019	Conner	Apayao
Lubo Cluster	26	22.01.2020	Tanudan	Kalinga
Lattut Cluster	15	03.10.2020	Rizal	
Nabuangan Cluster	15	16.10.2020	Conner	Apayao
Dupligan Cluster	27	30.10.2020	Tanudan	Kalinga
Taloctoc	14	July 2021		
Manggali	26	July 2021		
Total	**329**			

The project's holistic approach aims to improve the health situation and strengthen health-seeking behavior. Local health structures are also to be improved. The Outcome Harvesting should include all mentioned project components.

1.1 Objective of the evaluation

Progress during the first half of the project was monitored based on the review of the implemented activities and their direct results (outputs). There exists no Monitoring & Evaluation (M&E) system based on a Logical Framework (LogFrame) approach, including indicators to measure the degree of goal achievement, so no baseline data is in place to measure the progress and success of goal attainment, especially at the outcome level. German Doctors Bonn and the CGDDC therefore decided to apply the Outcome Harvesting approach in a mid-term review to identify recent relevant outcomes and project contributions in attaining those outcomes. The findings will be used mainly for learning and future planning of the project. The staff (GD Bonn and the Luzon team) also wanted to gain experience in performing the Outcome Harvesting method, which appears to be a feasible approach for other projects by both organizations. Neither organization has applied the methodology in practice yet.

Outcome Harvesting addressed the following harvest questions:

1) *How and in which areas have the social actors changed (positive or negative) since the project was started?*

    1A) How do the identified outcomes reflect improvement in the healthcare situation and health-seeking behavior of community members (at the individual level)?

    1B) How do the identified outcomes reflect improvement in the living / health conditions in the communities / at a society level?

    1C) How do the identified outcomes reflect the building and strengthening of the capacity of BHWs so that they can independently implement basic health care, including activities to strengthen health education in the communities?

    1D) How do the identified outcomes reflect the strengthening of the local healthcare system / structures?

2) *Derived from the outcomes already achieved, which project components and activities (Rolling Clinic, PHC component, WASH activities/water committees) mainly contributed to the identified changes?*

3) *How do the identified outcomes contribute to successfully embedding the PHC project in the local system? Is it still realistic to expect that the RC will be able to taper off its activities at the end of the project? What are indications that the changes achieved will endure without further outside support?*

4) *Based on the identified outcomes and analysis, which parts of the projects should be further developed / adapted to achieve the set goals by the end of the project?*

1.2 Evaluation mission

The internal evaluation took place between November 2020 and June 2021. The evaluation questions were developed together with the local project team and the GD Bonn staff. According to the Outcome Harvesting approach, the evaluation team and participating stakeholders were defined as following:

Table 2. Definition of stakeholders involved

Terms in OH	Definition	Persons involved
Change agents	individuals/organizations that influence an outcome	GD staff in Luzon, trained BHWs, trainers
Social actors (direct)	individuals, groups, communities, and organizations that change because of a change-agent´s intervention	community members, trained BHWs (old and new), trainers / PHC/RC staff
Other social actors (indirect) / data sources	Individuals or groups that might have changed because of the influence of social actors (unintended outcomes) can be used as data sources / for validating mechanism.	MHOs, Provincial Health Officers (Tabuk/Kalinga, Luna), midwives, NDP nurses, staff Conner District Hospital, trainer/PHC staff, mayors/ barangay officials, members of water committees
Ultimate beneficiaries	not directly affected by all parts of the intervention, but in the area of interest relevance for validating outcomes / data triangulation	community members (PHC)
Outcome-Harvest users	individuals who require the findings of OH to make decisions / take actions	staff Luzon, committee of GD Philippines / Chief Operations Officer Joelyn, staff GD Bonn
Harvester	person responsible for managing the OH	Annika, Wadel (mentor process)

The Covid situation and related travel restrictions made primary data collection challenging. Cooperation with researchers from the St. Pauls University could not be realized. A local social worker could finally be identified, and primary data collection was conducted in April 2021.

The field work was realized during the Rolling Clinic, which provided the researcher with easy access to relevant stakeholders. Orientation was given prior to the field work. Guidelines for focus-group discussions (FGDs) and interviews were developed. An informed consent form in the local language was developed and used during the field work.

2. Methodology

2.1 Evaluation approach

The Outcome Harvesting approach was used for this internal evaluation. This eliminates the necessity for predefined M&E frameworks. This method can also be used if there is no explicit theory of change in the project or baseline data available. The following steps were applied (Inrac, 2017) according to the OH approach:

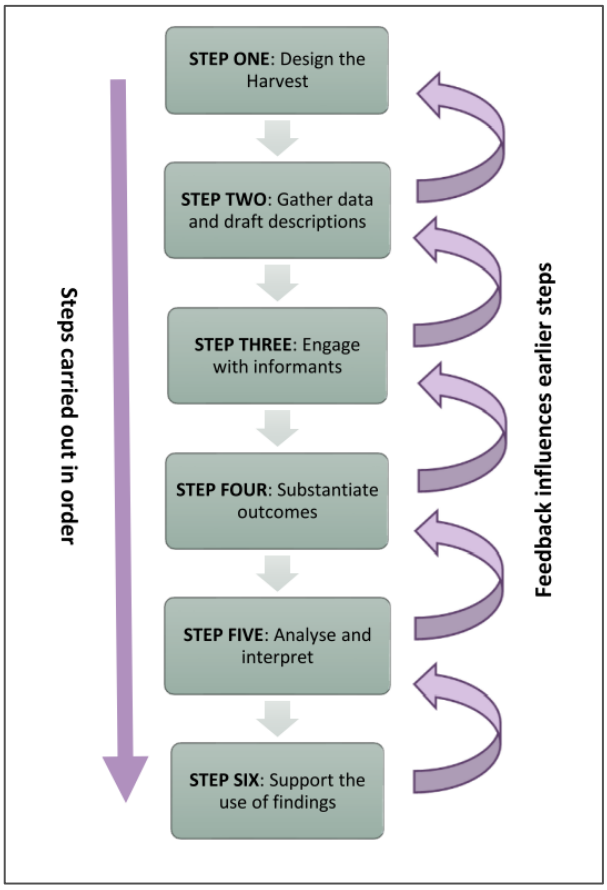


Figure 1. Steps in the Outcome-Harvesting approach (Intrac, 2017)

Step 1 - Design the harvest: in the first step, harvester and harvest user develop questions that guide the evaluation process and which are based on the needs of the harvest users. Based on the developed questions, the harvester and harvest user define what information will be collected and which stakeholder will be included in the data collection. The format of the outcome description will be developed in detail In the harvest design.

Step 2 - Gather data and draft descriptions: existing documents will be reviewed for evidence of potential outcomes to which the intervention contributed. In addition to the review of secondary data, primary data is collected from different sources, including the social actors. Outcome descriptions will then be formulated.

Step 3 - Engage with informants: the formulated outcome descriptions will be reviewed and further drafted together with the change agents. Stakeholders may consult with other stakeholders who can provide additional information about the outcomes. The harvester examines each outcome to ensure it is sufficiently specific and coherent.

Step 4 - Substantiate outcomes: a sample of the outcome descriptions is verified by third-level parties, so-called substantiators. These are independent persons are not directly involved in project implementation, but who are familiar with the project and possible outcomes of the interventions. This should increase the accuracy and credibility of outcome results. The process also can lead to a better understanding of the outcomes and the healthcare contribution of the project.

Step 5 - Analyze and interpret: harvested outcomes will be grouped (e.g. according to predefined categories) and interpreted according to answers to the harvesting questions. Normal methods of qualitative data analysis can be used. It is also possible to create a theory of change with the identified outcomes and examine the theory for possible shortcomings.

Step 6 - Support the use of findings: findings and interpretations should be discussed with relevant stakeholders to identify possible actions to improve the project based on the insights gained.

2.2 Data collection and analysis

The evaluation was based on the review and analysis of primary and secondary data. For secondary-data analysis, quarterly project reports, project-monitoring data, case histories, BHW monitoring data, and evaluation reports were reviewed and possible outcomes identified. For the primary data collection,

interviews and FGDs were conducted with the following stakeholders: trained BHWs, health staff (nurses / midwifes, local doctors), barangay captains, community members, and local project staff. Focus group discussions and interview guidelines were developed before conducting the field work. Guidelines were created as transparently as possible to ensure that pre-existing assumptions did not influence the data collection and formulation of outcomes.

The gathered data were triangulated, i.e., different sources validated the identified outcomes. A substantiation process with external experts who were not directly involved in the project, but had sufficient knowledge about the project and the approach, was carried out for data validation. Data quality was improved by the inclusion of internal and external stakeholders in the data-collection process.

Data security was ensured at all times. Participants in the primary data collection were informed about the evaluation process and the use and protection of data. Informed consent was given by all participants.

Purposive sampling was used to select the five barangays, Lattut, Ammaboy, Bawac, Dangtalan, and Mawigue, to be included in the OH process. The following criteria were applied to select the study barangays: accessibility during the Covid situation, easy access within the Rolling Clinic, and inclusion of barangays from the three municipalities Tanudan, Conner, and Pasil. The participants for the interviews and FGDs were selected by convenience sampling. It was ensured that the following groups were included: trained BHWs, health staff (nurses / midwifes, local doctors), barangay captains, community members, and local project staff.

The identified outcomes were categorized according to pre-defined groups (BHW outcomes, community outcomes, healthcare staff outcomes, healthcare structure outcomes) for data analysis. An OH framework including assumptions about changes was developed while designing the OH. The existing assumptions were compared with the identified outcomes during the stages of analysis. A theory of change was developed with the help of the identified outcomes and discussed with the local team. Monitoring of project data was used to support the findings and identify possible shortcomings.

Identified outcomes were validated by substantiators and the project team. This helped complete the outcomes and better understand the context.

2.3 Limitations

The mid-term survey using OH has some limitations. The evaluation focused on the area of change and did not include other relevant criteria to evaluate the success of the project (DAC criteria for project evaluation include: assessment of relevance, efficiency, impact, coherence, and sustainability).

The selection of participants also had limitations because purposive sampling was chosen to facilitate data collection, i.e., to gather qualitative information on changes and the project's contribution to them. A transfer of the gained knowledge to other areas in the project region is not possible. As part of the OH evaluation, different key stakeholders were interviewed about changes. Other stakeholders, such as government representatives or *hilots* (traditional healers), who were not included in this survey, could have completed the picture.

In the application of the Outcome Harvesting method, a central step is the so-called ping-pong, in which the outcome descriptions are finalized step by step through a question-and-answer process. This was only possible to a limited extent with certain actors, partly because frequent access to them was impossible due to the Corona restrictions. Some actors, like community members, could only be reached during field

visits. Another limitation was that data collection was performed in the local language, and the material was then summarized in English for data interpretation. This could have led to a loss of data, as well incorrect interpretation because the original material was unavailable or unusable. Validation was carried out using secondary data, the inclusion of substantiators, and a validation workshop to prevent possible bias.

Changes can be identified, and the contribution of the intervention to such changes can be determined with the OH method as a qualitative, open method which does not allow any attribution. Plausibility can be checked if an effect takes place.

The assessment was conducted as an internal evaluation; objectivity cannot be guaranteed. An external data collector was assigned to collect data in the field as openly and objectively as possible.

3 Results

3.1 Identified Outcomes

A total of 15 outcomes were identified using an outcome-harvesting approach, and the primary and secondary data were examined for possible outcomes. Outcome descriptions, their significance, and the contribution of the project to the described changes were determined. An outcome could often draw on multiple data sources. The following outcomes were identified.

Outcome 1: trained BHWs fulfilled their roles to provide services and promote health as the frontline in community-based healthcare services.

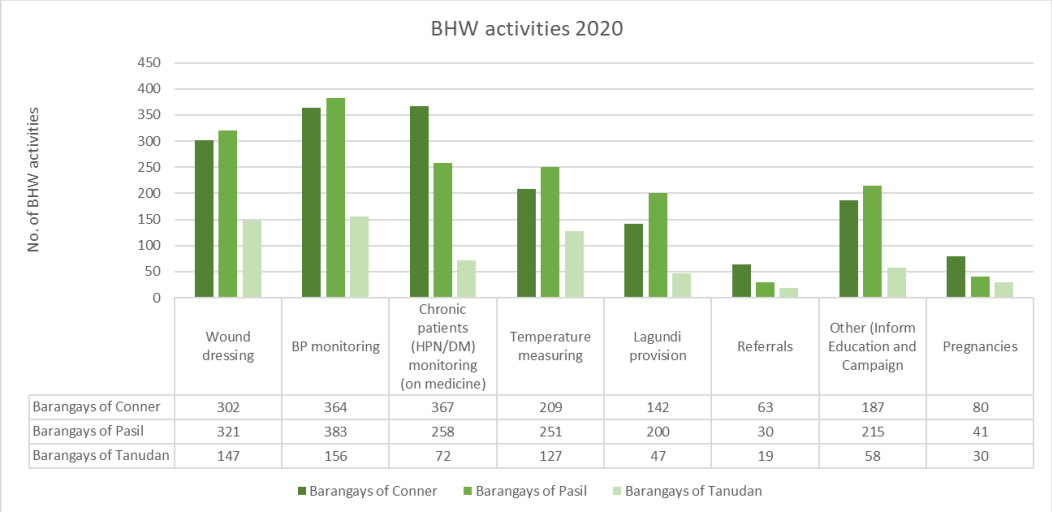
Barangay health workers have been able to promote healthy living in their communities since their graduation. For example, they now conduct regular health classes and educate community members about different health and hygiene topics, like diarrhea, brushing teeth, family planning, and breast feeding. They also provide other health-and-hygiene services, like supporting / initiating regular clean-up drives and/or cleaning events in their communities and promoting and facilitating the use of sanitary toilets during health talks in the communities. They provide supervision of the health-and-hygiene situation in the barangays, link with different stakeholders, promote healthy nutrition, and support community gardens growing vegetables and supplying herbal medicines for community needs, especially when there is malnutrition. Regular exercise / Zumba classes have been established for pregnant women, older people, chronic patients, and for healthcare workers on a weekly basis in some barangays. Trained BHWs held monthly health classes for patients in the RC before the Covid pandemic started. Barangay health workers can now support the local healthcare system and their communities. Figure 2 shows the monitoring data of BHW activities in 2020.

Evidence from the primary data collection and monitoring data (Figure 2) show that trained BHWs are already active in their function as educators in their communities. There is also evidence that BHWs have established their roles as health providers. For example, BHWs independently provide different basic healthcare services in their communities, like monitoring the blood pressure of hypertensive patients, assisting midwives and nurses in immunization in the BHS, identifying children for immunization,

distributing vitamin A, and deworming. They also monitor newly built toilets, conduct monthly clean-up drives, advise pregnant mothers during and to attend prenatal check-ups, promote family planning and breast feeding, track pregnant mothers in their catchment areas, assist in oral healthcare, track TB patients, regularly monitor underweight children, dress wounds, provide Lagundi syrup (alternative medicine), refer patients, perform first-aid procedures, follow up mental patients, and manage common illnesses like back pain with alternative approaches. The trained BHWs filled a gap during the Covid pandemic, e.g. by following up mentally-ill patients who are normally seen by the Rolling Clinic.

The qualitative data indicate that BHWs conducted their regular duties in the BHS. Statistics, also on the frequency of visiting their assigned households, are not available. This information is recorded in the health center´s logbooks, which the PHC team check during their field visits. After our project has terminated, the designated midwife will be responsible for the BHWs. The health provider's roles will still include other tasks, like carrying out assessments and referrals independently, collecting regular data, and regularly maintaining the logbooks. Figure 2 shows that BHWs already refer patients, which indicates that the referral system from BHW to different actors in the healthcare system already functions.

Barangay health workers also act as organizers, which may include advocacy activities like to enabling the community to participate in decision making and influencing policy decision makers in healthcare at barangay, municipal, and provincial levels. Since this function was not a primary focus of project planning in the Luzon project, no respective goals and indicators were formulated in the LogFrame project, and such activities or training sessions have not been part of the project. Monthly meetings are held with the barangay captains and BHWs to discuss current topics and problems so these can be conveyed to the mayor by the barangay captain. There are also regular meetings with the MHO and the BHWs.



	Wound dressing	BP monitoring	Chronic patients (HPN/DM) monitoring (on medicine)	Temperature measuring	Lagundi provision	Referrals	Other (Inform Education and Campaign	Pregnancies
Barangays of Conner	302	364	367	209	142	63	187	80
Barangays of Pasil	321	383	258	251	200	30	215	41
Barangays of Tanudan	147	156	72	127	47	19	58	30

Figure 2. Summary of BHW activities in 2020

Among the 289 BHWs trained by the end of 2020, four dropped out due to private business (Pangol) and death (Daga and Balinciagao). All other trained BHWs are still active. Most are accredited by the province and municipality. The four dropouts have been replaced. They will not receive the same comprehensive PHC training, but will be trained in the Rolling Clinic and by the local healthcare staff (e.g. nurse or midwife) who were trained by the PHC team.

Outcome 2. BHWs gained self-confidence and are empowered to independently conduct their tasks

The training has enabled BHWs to gain confidence in caring for / dealing with patients and community members and fulfilling their responsibilities as healthcare workers. Previously, government trained BHWs waited for nurses to start working. Now, they begin by themselves, like taking vital signs, recording patients' concerns, preparing treatment, visiting TB patients and pregnant women, and treating chronically ill patients. They are less dependent on the midwives, nurses, and doctors because they have become more independent in performing their tasks. They have become more reliable thanks to their new skills. Barangay health workers are more visible in the communities, e.g. as mentioned by the community in Lattut. Their roles have been strengthened. Some BHWs also feel confident enough to report issues to the barangay officials, e.g. if they need transportation support.

Outcome 3. More community members practice improved health-seeking / preventive behavior

The findings from the OH exercise indicate that more people in the project region practice better health-seeking and preventive behavior. Examples are in water, sanitation, and hygiene. Community members take better care of personal / community hygiene, e.g. people wash their hands more often. People come more often to the Rural Health Unit (RHU) and request WASH material, e.g. to construct their own `comfort room' (euphemism for toilet) or ask for access to clean water. Figures 3 and 4 show a summary of BHW monitoring data on the number of toilets in the target areas. The figures show an increasing number of toilets in all municipalities, and the number of households without any toilet have decreased in the Conner and Tanudan barangays. The RHUs in Tanudan and Conner are providing toilet bowls.

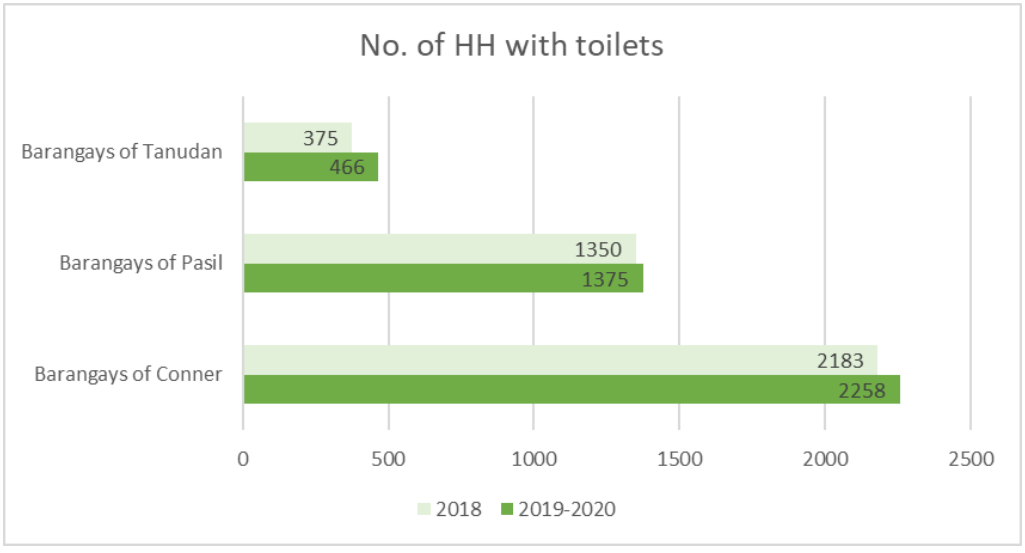


Figure 3: Number of households with a toilet, BHW data from 2018 and 2019/2020

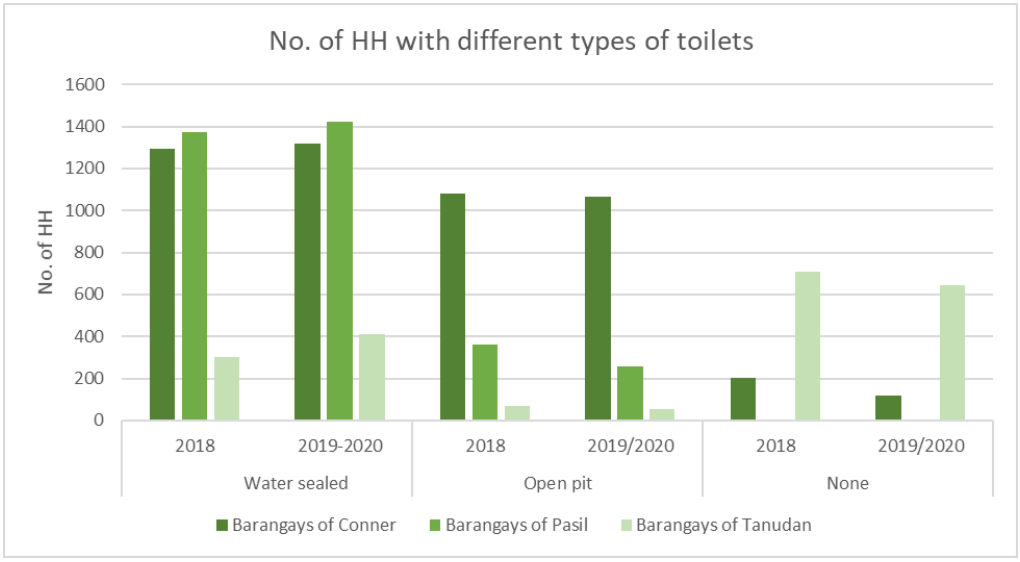


Figure 4. Number of households with water-sealed toilets or open pits; BHW data from 2018 and 2019/2020

Figure 5 includes data on access to water in the target municipalities. Water available in individual houses (level-3 water) has increased in the barangays of Conner and Tanudan; it has remained in the same Pasil barangay. Water only available in a spring or river (level-1 water) has remained the same in the Conner and Pasil barangays and decreased in Pangol, Lay-Asan, and Tanudan. Water available in the community (level-2 water) decreased in Tanudan.

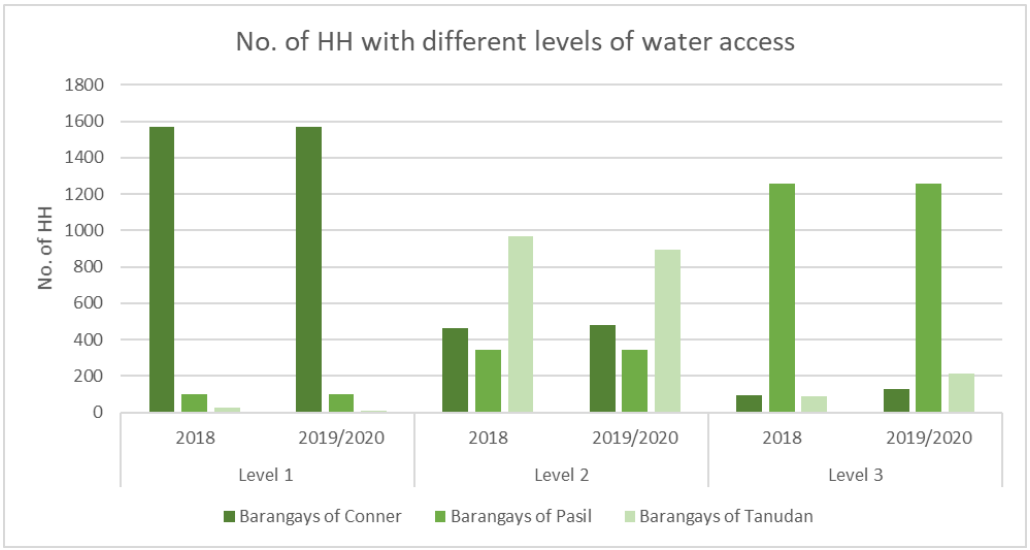


Figure 5. Number of households with access to different levels of water; BHW data from 2018 and 2019/2020

The water project in Bawak, which was implemented in the PHC project, certainly further improved the water situation. Level-1-water use decreased from 158 households in 2019 to 35 households in 2020. Level-2-water use increased from 3 households in 2019 to 90 in 2020, and level-3-water use increased from 9 in 2019 to 62 in 2020. The figures demonstrate the significant effect of safe-water use in the water project.

Many people in the communities fenced in animals (pigs, chicken) that can create dirty environments. Results from the data collection indicate that the project, but also the outbreak of swine fever that occurred during the project implementation, certainly contributed to changes in behavior. Community members are more respectful of and clean in their surroundings. Awareness of the importance of garbage

separation has increased. Monitoring data also shows that garbage is no longer burned in the municipality of Pasil. 45.3% of the households still use garbage pits, while 54.7% separate their garbage (BHW HH data 2021). Garbage is still burned by 52 households (3.5%) in the municipality of Tanudan, where 42.2% use garbage pits, and 54.3% separate their garbage. The situation is similar in the municipality of Conner, where 44.6% of households use garbage pits, 3.4% burn their garbage, and 52.0% separate their garbage. Data indicate that the health- education discussions and joint actions (like cleaning drives) in the project contributed to such behavioral changes.

One notable change in the health-seeking behavior of community members which can be strongly linked to the project is the use of medicine. Project activities taught community members to rely not only on medicines, but also to use alternatives (e.g. lagundi syrup, herbal medicine). Patients are no longer so focused on medicines like antibiotics, which are no longer commonly used without a doctor's prescription. More people are aware that exercise or drinking water can improve their health and well-being and can also relieve pain. The local healthcare staff promotes this in their daily work with patients. Contributing activities (PHC approach) and the project staff as role models have been the strong focus in the project on health promotion.

Changes in health-seeking behavior have been observed in disease management / prevention among community members / patients. Chronically ill patients can now better self-manage their conditions, e.g. avoid food that is not good for them. It is not clear from the data collected whether compliance to medication has improved.

Community members have become more health conscious of the food they eat and have healthier lifestyles thanks to the project's health-promotion and gardening activities. It is not yet clear whether, aside from dietary changes, community gardens are being widely used, the malnutrition status has improved, or if breastfeeding has increased.

More patients have come for TB screening (sputum examination), and fewer pregnant women deliver at home. Although the importance of safe deliveries accompanied by skilled healthcare staff is better understood, misconceptions about hospital births still persist, and transportation remains a challenge in the remote areas. It is also hard or even impossible for some women in labor to reach the hospital due to heavy rains, landslides, muddy roads, or lack of transportation. Barangay health workers monitor pregnant women and remind them in advance to be aware of the delivery date so that they can reach the healthcare facilities in time. The Traditional Birth Attendants (TBAs) have not been included in the project yet.

The project has most likely strongly contributed to healthcare in the region through its educational component. Government programs, like the 4Ps program, and RHU routine activities, like immunization, deworming, and prenatal care, have also probably contributed to changes in the population's health behavior.

Outcome 4: Community members change their attitudes toward mental illness

The attitudes of community members towards mentally ill individuals have changed over the past few years. More people know that mental illness is not infectious, and people explain this to their relatives so that there is more awareness of this topic in the communities. More people ask more frequently about mental illness and search for help. Family members of mentally ill clients understand the disease better so that they can be more supportive. The data indicates that patients are better integrated in their families

and communities now. The role modelling of the RC staff regarding care and treatment of mentally ill people was a significant factor in the change of general attitudes. Community members, healthcare staff, and provincial government officials realize that patients have significantly improved under treatment. This helped reduce stigmatization of mentally ill patients. German volunteers gave lectures in the communities and to the local healthcare staff / BHWs, who now give advice and information, education, and communication (IEC) materials to the families of mentally ill patients.

Outcome 5: Community members have greater trust in BHWs as the basis of healthcare service utilization

The gathered data indicate that people in the community trust more in the BHWs, the nurse, and the assigned midwife. Community members, e.g. in Lattut and Mawigue, notice that BHWs are more present in their barangays. Community members in the Bawak barangay report they realize the importance of BHWs in good child health. The project contributed to the active and permanent participation of community members in different project activities. The communities were engaged in the selection of BHWs, which built trust from the beginning. Communities have also gained trust because health workers received comprehensive training and have gained more self-confidence in fulfilling their tasks. BHWs competently perform assessments and referrals under close supervision by the local healthcare authorities. Families' acceptance of and trust in BHWs play an important role in following their advice and utilizing their services. No data could be collected regarding the recognition of and trust / confidence in BHWs by the barangay and municipal council.

Outcome 6: Improved health status / health situation in the communities

There appears to be an overall decrease in the number of sick people in their communities (e.g. Mawigue, Ammaboy, Tanudan). Children's coughs can be cured by lagundi. The nutritional status of children/people with malnutrition has notably improved. Fewer cases of communicable diseases, like diarrhea, acute gastroenteritis, and typhoid fever (often water-borne), as well as dengue fever (transmitted by mosquitoes), have been reported (see also monitoring data from the RC, Figures 6 and 7). The Covid pandemic with more social distancing may also have contributed.

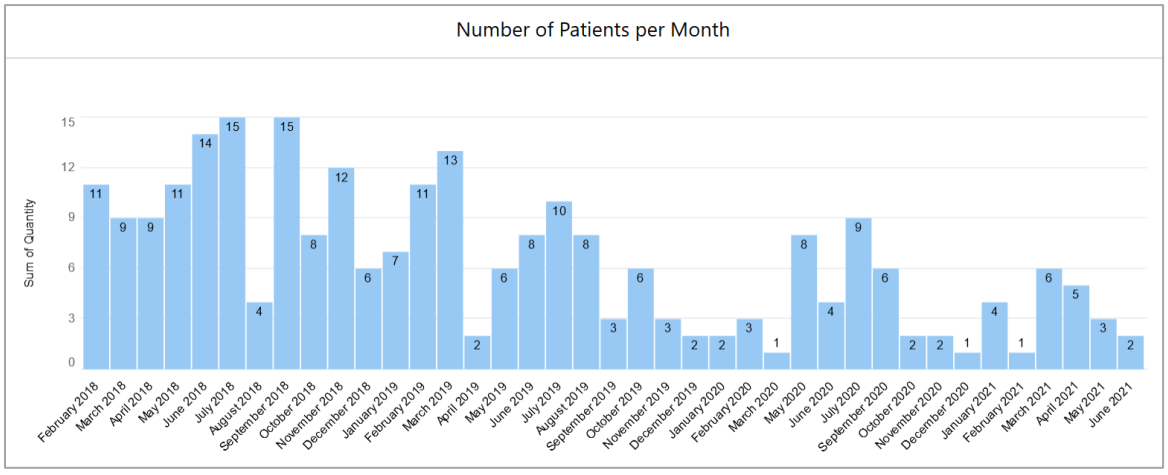


Figure 6. Number of patients with diarrhea; Rolling Clinic February 2018 – June 2021

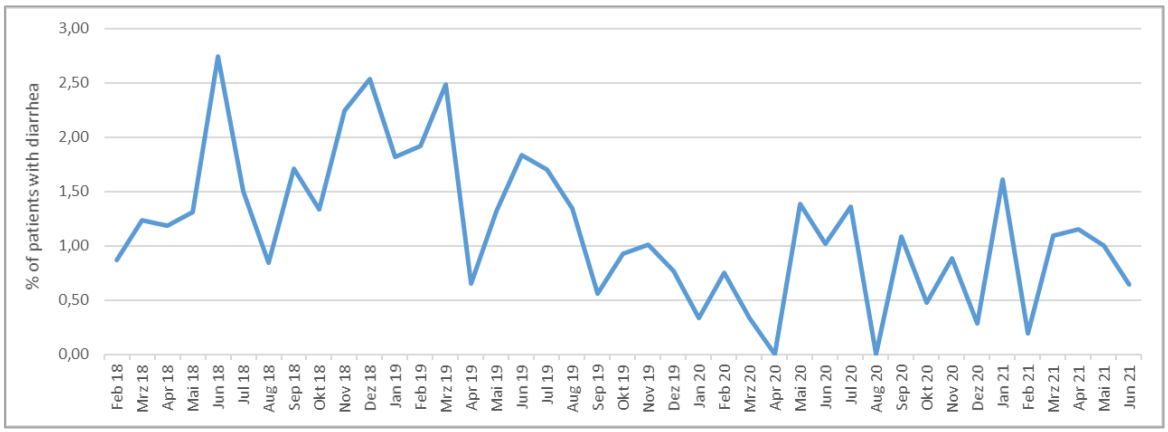


Figure 7. Proportion of patients with diarrhea; Rolling Clinic February 2018 – June 2021

Improved vision among cataract patients (mainly the elderly) can be directly attributed to the project activities. The treated clients are now more active, can see clearly, and can do more essential things, like taking care of their grandchildren. Mentally ill patients (Pangol/Lay-asan in Tanudan, barangay Paddoan, Conner, and in barangay Taloctoc) with long-lasting histories of epilepsy without treatment and some mentally ill individuals were kept in cages before their health status improved. There is the concrete example of four patients who improved under treatment and now stay with their families. People with epilepsy have fewer seizures and an improved physical status (e.g. they can walk now). BHWs monitor the progress of such patients and supervise theie intake of medication (e.g. with seizure-monitoring sheets). Treated patients can again perform daily activities, like taking a bath and self-care. Data also indicate a reduction in the mortality rate during pregnancy/deliveries (e.g., in Dangtalan and Pasil), but there is little knowledge about the contribution of the project activities. Other factors may have influenced this notable change over the past few years. The cooperation with Linawa Tabuk (occupational therapy) had to temporarily stop due to the Covid situation.

Data from the Rolling Clinic and interviews indicate that many people have been helped by treatment. The Rolling Clinic has treated almost 21,000 patients (Figure 8). Continuous treatment and follow-up of patients is strongly related to the improved health status, especially that of mentally ill and chronically ill patients.

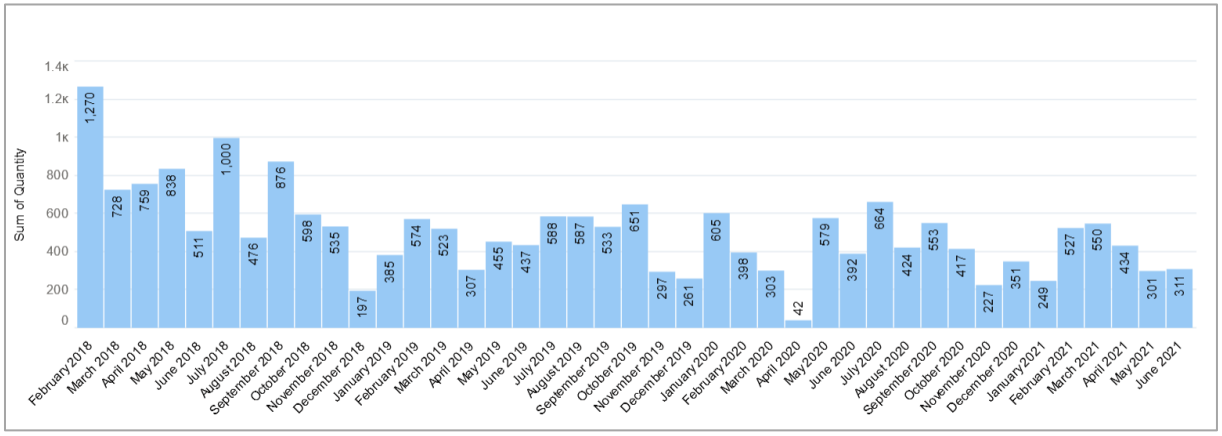


Figure 8. Number of patients (cases) treated in the Rolling Clinic between 2018 – June 2021

The monitoring data from the Rolling Clinic also shows a decrease in so-called killer diseases (diarrhea, pneumonia, malnutrition: MUAC< 11.5 / MUAC<12.5) within the project period (Figure 9). This can be attributed to the Rolling Clinic and the project's prevention activities.

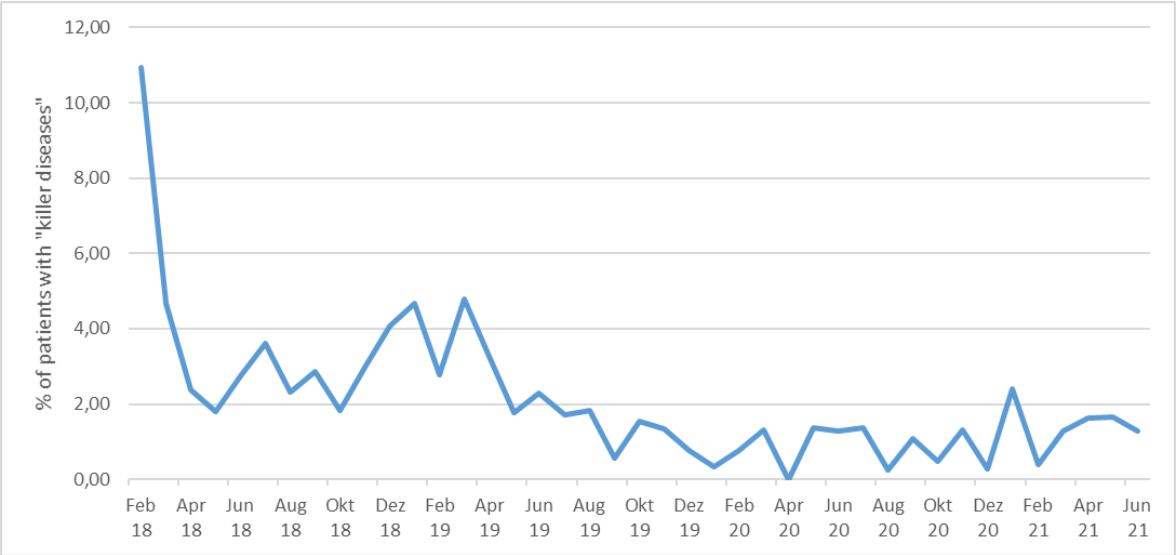


Figure 9. Number of patients (cases) treated in the Rolling Clinic between 2018 – June 2021 with "killer diseases"

It is not easy or even possible to identify concrete contributions of project activities in terms of health status and the overall health situation in the villages based on the qualitative data. Many other factors influence the people's health status, such as the social environment, the economic situation, the climate, and the Corona pandemic. Only trends can be shown here, which must be interpreted carefully.

Outcome 7: Better access to quality healthcare services within the established local referral system

Community members in the project barangays have better access to healthcare services, especially those with chronic diseases. Thanks to the established access to services by trained BHWs / BNSs, people do not go to distance hospitals for consultations, but use the local healthcare system and now know how to take care of themselves. All trained BHWs perform duty in the BHS (existing in every barangay) from Monday to Friday to provide healthcare and monitoring as needed. BHWs rotate in the BHS, keeping the BHS continuously manned. Healthcare centers are no longer full of patients with minor illnesses, who are treated in the local RC system and by BHWs. The use of herbal medicine to treat common coughs and colds is increasing, so those patients do not appear in the RHU so often. The RC and BHW systems have reduced the workload of local doctors. A clear referral system has also been established in all barangays by BHW graduates, who refer cases to the midwife / nurses, and other health facilities, including the associated hospitals (e.g. for vaccinations, prescriptions / distribution of medicines, etc.). They also refer patients for laboratory and dental examinations to the RHU and refer TB patients to the RHU/TB dots (directly observed therapy for tuberculosis) for diagnosis and treatment. They refer patients with malnutrition to the Barangay Nutrition Scholar for the feeding program. There is a regular exchange between BHWs and nutrition scholars to support the care for malnourished children and adults.

Mentally ill patients are identified, treated, and referred to the local system and hospital during the Rolling Clinics. The BHWs also organize transportation. Local doctors support the referral system between RC-

RHU- and BHWS/health staff. Barangay health workers refer patients to different services and staff, like the assigned midwife. One existing problem is the referral and the flow of information in the other direction (back from the health system to the RC and to the BHWs) to ensure follow-up treatment and monitoring. If the BHWs and the RC do not explicitly request it, information is often not returned.

Transportation for emergency situations and referrals, e.g. for cataract patients, has improved. The ambulance at LGU/RHU that can be requested to transport patients. It was only available for emergencies before the project, but now it can be also used for other referrals from the Rolling Clinic. Transportation from the barangays is organized with patrol cars when needed. Those patrol cars are currently not available in all barangays. There is a patrol car provided by the governor in Conner, but not in Tanudan and Pasil.

The data does not provide information about patient satisfaction with the healthcare system, performance of the BHWs, and the established referral system.

The described changes can be linked to the project implementation. For example, the existing BHWs were previously not included in the referral system, and their tasks were very limited. The comprehensive training and project partnership with all relevant stakeholders enable the BHWs to provide quality basic services and integrate them in the local healthcare system.

Outcome 8: Better care and monitoring for chronically and mentally ill patients

Chronically ill clients are better monitored and provided with relevant information materials. The local public healthcare system (RHU) manages the mentally ill patients together with the RC so that staff can monitor their conditions. They were previously mainly managed by private physicians from other regions. A lot of people with mental illnesses have not been treated at all. The Department of Health allows MHOs to request medicine for chronically ill and mentally ill patients for their continuous maintenance. There is now a list in every RHU with the number of chronically ill patients (data from BHW). New patients are identified by RCs and then referred to the system. The importance of the monitoring sheets for the chronically ill patients is well established within the RHU, and the availability of medication is ensured. The lists help the RHU order necessary medications. The problem is that medicine can be requested only once a year. As changes during the year normally occur, e.g. new chronically ill patients are identified, there are sometimes not enough medicines available.

There is evidence that the project has highly contributed to the improvement of care and monitoring for chronically ill and mentally ill patients. The Rolling Clinic identified many patients in need, started treatment, and raised awareness among the trained health workers and existing healthcare staff. The project also developed and established the monitoring sheets for chronically ill patients which are now used by the RHU.

The number of chronically ill patients seen in the Rolling Clinic has remained fairly constant. Many such patients now come regularly for treatment and supervision.

Outcome 9: Barangay Health Workers have gained better social positions within the healthcare system

Data indicates that the social position of trained BHWs in the local healthcare system has improved. Almost all trained BHWs receive small incentives (estimation: Pasil 100%, Tanudan about 90%, Conner about 80%), which means their work is recognized by the authorities. One municipal mayor increased the budget so that higher incentives for BHWs and BNS are available (increase from 500 pesos per month to 1000 pesos in 2020). Detailed information on incentives is provided in Table 3. The hospital director also guarantees trained BHWs free access to hospital services. BHWs who are now taking more responsibility reduce the workload and budget ofthe RHU. The newly trained BHWs are now considered fully accredited public-health workers. This eliminated any differentiation between the government and the BHWs selected in the German Doctors' project. Both groups of BWHs were jointly addressed. BHWs are now part of the barangay development plan. The local doctors who have been interviewed feel that the newly trained BHWs are more helpful to the system. Collected data indicate that German Doctors played a large role in the favorable perception of the healthcare workers by the community and the local government and contributed to their acceptance.

Table 3: Overview of incentives paid to BHWs / BNS by different actors

Municipalities	LGU	Province	Barangay
Conner	BHW & BHS: 3,000 / quarter	BNS: 1,200 / year BHW: 3,000 / year	BHW & BNS: 600 / month
Pasil	BHW & BNS: 1,050 / quarter	None	New BHW/ BNS: 2,500 /quarter longer in services: 3,200/quarter
Lattut	None	5,000 / year for all BHWs (will be divided)	BHW & BNS: 700 / month
Tanudan			
Barangay Pangol	BHW: 1,500 /quarter		BHW under 5 years in service: 500 / quarter BHW over 5 years in service: 1,500 / quarter
Barangay Lay-Asan	BHW: 1,500 /quarter	BHW: 2,500 / year	BHW under 5 years in service: 2,000 / quarter BHW over 5 years in service: 4,200 / quarter
Other barangays in Tanudan	Incentives depend on the length of service and are based on the IRA (internal revenue allotment)		

Special payments were also made to the BHWs due to the Covid situation.

Outcome 10: Increased focus on / prioritization of health by relevant actors

An increased prioritization of healthcare has occurred in some barangays, e.g., in the barangay Bawak budget allocated for medicine especially for chronically ill patients. The assigned nurse and the BHWs have a good relationship with the barangay captain so that they can initiate the budget process together. There was no involvement of the Local Health Boards because they are not functional / active. Another example is the barangay Lattut, where the barangay captain provides the budget for medicines in his community. Barangay officials (e.g. Lattut, Bawak, Mawigue) in the project barangays are more attentive to healthcare issues and community health compared to other barangays where the German Doctors' project is not active. They are aware of the RC and PHC, they inform people to go to the RC, and some assist in service delivery. They are proud that the GD train the BHWs. They held regular bimonthly meetings together with other officials on health conditions, including sanitation, in their communities.

It is currently impossible to predict how sustainable these changes will be based on the collected data. Factors like elections, which may result in personnel changes, could have a negative impact on the sustainability of these changes, so that the prioritization of health will not be sustained. The Memorandum of Agreement (MOAs) state that BHWs will at stay in their positions regardless of election results and new appointments of persons in higher positions, like mayors or captains. The constancy of the program and the presence of reliable RC and PHC staff are important factors in budget allocation. Trust in the program and its benefits are rewarded with additional budgetary resources.

An important point mentioned in the interview is that the GD project has gained the confidence of the local authorities / government representatives. They believe that training helps people to help themselves because they can see the benefit to their communities. This may well also have contributed to the increased awareness of healthcare by relevant stakeholders. The additional project achievements beyond the original agreements, e.g. disaster aid, water projects, and toilet construction, have certainly had a beneficial effect on stakeholders' support of the project.

It was also mentioned during the interviews that the Local Government Unit (LGU) spends little money on healthcare, e.g. for medicines / BHW kits. The budget for healthcare has not been increased during the past years. The risk of creating dependency on NGOs (like the GD) may discourage the local government from taking over responsibility.

Outcome 11: Local healthcare staff increased medical knowledge, increasingly promoted healthy lifestyles in the communities, and are better integrated in the communities

The local healthcare staff mentioned in the interviews that they have increased their medical knowledge and healthcare in general. They have learned from the German volunteers. They also mentioned that the attitudes of the project team have improved, e.g. in regard to time discipline.

The data further indicates that the local healthcare staff (e.g. RHU doctor / nurses) changed some of their ways of promoting health. They now promote alternative treatment approaches, like the importance of drinking water or exercise / massages before immediately starting treatment with (pain) medicines. Healthcare staff have also learned about herbal lagundi syrup to treat coughs and colds. This approach is applied in the PHC training. The promotion and use of massage and herbal medicines renewed people's trust in local approaches and materials.

Some local healthcare staff changed their views, especially in dealing with co-workers, barangay officials, and community members. A midwife mentioned that she learned that building trust and confidence among community members is important because it helps her to perform her tasks effectively and that the project helped her be more flexible in helping her community, be aware of existing needs, and be more health conscious.

Close collaboration within the project with lectures, involvement in the project as a trainer, and role modeling by German Doctors had a definite effect on the changes. When starting the project, patients trusted the foreign doctors more than the local staff, but now trust in the local staff has increased.

Outcome 12: Improved data management and data use by healthcare stakeholders

Local actors use data collected by the project, mainly by BHWs, more efficiently. Members of the local health board can now easily access the data collected by BHWs, like information about the toilet situation, so that they can plan actions for those families who do not have a toilet. The MHOs can also trace the patients more easily with the assistance of the trained BHWs. There is a regular meeting in the municipality with different stakeholders (MHOs, midwife/nurses, BHWs), and BHWS and MHOs also communicate more frequently.

Outcome 13: Greater unity and active participation in project communities

Unity in the communities has increased since the project started, e.g. in the barangay Bawak. Community members are willing to apply what they have learned from the GD program, like regular exercise and water therapy. The project helped build good inter-relationships within the community. Community members now communicate more often with each other. The primary data do not clearly define the contribution of the project here. The participatory approach with a lot of community engagement and community organizing probably contributed to a stronger feeling of unity. Success in building community unity also depends on the status of community cohesion when the project started. Collaborative activities initiated and enhanced community unity. People had their own way of living before and were not used to "*bayanihan* work / spirit", which means helping each other without receiving any personal benefit, i.e., a spirit of communal unity. People used to wait for governmental support or assistance. Due to the strong empowerment and participation component applied by the project, people are now more active and engaged in their communities and have a stronger *bayanihan* spirit.

Outcome 14: Local health stakeholders want to independently replicate / use the PHC approach

Key community stakeholders in the local healthcare sector have expressed their strong interest in the PHC approach and project activities. Interviewees said they would like to continue the PHC approach after the project ends. The MHO in Tanudan and the PHO in Luna expressed their strong interest. Initial discussions and program orientation had already been provided to the stakeholders, and further actions are planned soon to support replication of the approach.

Outcome 15: BHWs improved their English skills

The primary data collection identified that the BHWs' English language skills have improved as a result of the project, especially during work with the volunteer doctors.

Identified risks

It was frequently mentioned in the interviews and group discussions that the Rolling Clinic and German volunteer doctors are still needed in the area. One major reason mentioned was the lack of local doctors. They cannot provide the same medical attendance in the remote villages as the Rolling Clinic. Despite the trained BHWs, there is still a gap in coverage regarding access to medical care. The risk of creating a parallel structure by the Rolling Clinic in the long term still exists because the RC takes over treatments

which cannot be provided by the local system due to a lack of resources. This has not changed, as the main budget for healthcare has remained the same. Discussions should be held to determine if this gap can be closed in the coming year by greater working experience among the BHWs, including a further improvement in the referral system. If not, alternatives should be considered, such as increased lobbying to advocate for more staff resources from the state. This also applies to the availability of the medicines currently provided by the Rolling Clinic.

3.2 Summary of Outcomes

The identified outcomes described in detail in Chapter 3.1 are summarized in the main project objectives.

Output (Result): The capacity of BHWs is strengthened so that they can independently provide basic healthcare services, including activities to strengthen health education in their communities.

Outcome 1: Trained BHWs fulfill their roles to provide services and promote health as the frontline in community-based healthcare services.

Outcome 2: BHWs gained self-confidence and are empowered to independently conduct their tasks.

Outcome Goal: Improved health situation, health awareness, and health-seeking behavior

Outcome 3: More community members practice improved health-seeking / preventive behavior.

Outcome 4: Community members have changed their attitudes toward mental illness.

Outcome 5: Community members have greater trust in BHWs as a basis for healthcare service utilization.

Outcome 6: Improved health status / health situation in the communities

Outcome Goal: The local healthcare system is strengthened

Outcome 7: Better access to quality healthcare services within the established local referral system

Outcome 8: Better care and monitoring for chronically ill and mentally ill patients

Outcome 9: BHWs have gained a better social position within the health system.

Outcome 10: Increased focus on / prioritization of health by relevant stakeholders

Outcome 11: Local healthcare staff have increased their medical knowledge, increasingly promote healthy lifestyles in the communities, and are better connected within the communities.

Outcome 12: Improved data management and data use by healthcare-system stakeholders

Positive, unintended outcomes

Outcome 13: Greater unity and active participation in project communities

Outcome 14: Local healthcare stakeholders independently replicate / use the PHC approach.

Outcome 15: BHWs have improved their English skills.

3.3 Interpretation of findings

The identified outcomes were connected to the goals from the LogFrame to interpret the findings of the outcome harvesting (Table 4). Whether the overall project goal, "The living conditions of the indigenous people in Kalinga and Apayao Provinces have improved" has already been achieved is not clear from the available data in this evaluation. The outcomes show that the overall health status / health situation has improved, and the WASH situation has improved in some barangays. These outcomes are expected to generate improved living conditions among vulnerable people in the area. Improvements in the treatment of chronically ill and mentally ill people in the area will surely affect their living conditions.

Regarding the project objective - the improvement of the health situation of community members living in the project area - several outcomes can be identified. The improved care and monitoring of chronically ill and mentally ill people leads to improved health of those affected and their relatives. The project activities (Rolling Clinic treatment, BHW monitoring, and health education) have contributed to this outcome. There is also evidence that the project activities, along with other factors, contributed to the improved health status of people here. There are fewer communicable diseases, like diarrhea, and also fewer so-called killer diseases (diarrhea, pneumonia, malnutrition: MUAC< 11.5 / MUAC<12.5). Additional factors, like governmental healthcare programs or the recent Covid situation, certainly contributed. The improved health also can be related to the improved health-seeking behavior that has been noticed over the past few years. The indicator "Number of patients with increased awareness" was not directly measured during project implementation. The strong focus on prevention and awareness in the project must have increased awareness before behavior (like better hygiene) changed. The identified outcome "Community members changed attitudes towards mentally ill people" is directly linked to the project activity. The project focussed on the treatment and care of mentally ill patients and performed a lot of awareness rising in the communities and with healthcare staff in the area. This surely had a great effect on the health of affected people. There are several success stories of mentally ill people who gained quality of life under treatment and regular supervision. Many other outcomes could be identified that cannot be directly assigned to the outcome goals from the LogFrame, but which correspond to the general goals of the PHC approach mentioned under 3.2. This speaks for the success of the project.

Table 4 shows further connections between the identified outcomes and the goals formulated in the LogFrame. The output goal of providing basic medical services by well-trained BHWs and the RC was fully achieved. The identified outcomes assigned here show that beyond the successful training (indicator), other important outcomes were achieved as prerequisites for a well-functioning local healthcare system and community utilization, among others. Regarding the goal "Pregnant women are aware of the value of pre-natal care and hospital delivery", the evidence from this data collection was not so clear. Home deliveries apparently decreased, but how the project contributed was also not so clear. The data also do not clearly indicate whether of pregnant women's awareness of the importance of pre- and postnatal care increased due to the strong health education / promotion component of the project. Data indicate that BHWs are fulfilling their role of assisting pregnant women and providing health advice (indicator) on prenatal care. The same applies to the target addressing killer diseases by well-trained BHWs and the RC. Data show that BHWs fulfill their role by applying their knowledge e.g. on Integrated Management for Childhood Illnesses.

Table 4: Comparison of goals / indicators from project LogFrame and identified outcomes

Project Objective (Outcome)	Indicator	Linked Outcomes OH
The health situation of the habitants in 17 villages in Apayao and Kalinga provinces has improved by providing them with affordable, accessible, and high-quality healthcare.	The German Doctors provides medical consultations during rolling clinics. At least 10,000 patients have increased their awareness of preventive healthcare.	Better care and monitoring for chronically ill and mentally ill patients Improved health status / health situation in the communities More community members practice improved health-seeking / preventative behavior. Community members have changed their attitudes toward mentally ill people.
Outputs (Results)	**Indicator**	**OH Results**
Basic medical services are provided by well-trained health workers and the medical team in the rolling clinics.	Community health workers (BHWs) have participated successfully in the training sessions. The BHWs can identify malnutrition (MUAC screening), dehydration, and pneumonia in children under 5 years of age.	Trained BHWs fulfill their role by providing healthcare services and promoting health as the frontline in community-based healthcare services. BHWs gained self-confidence and are empowered to independently perform their duties. Community members have greater trust in BHWs as the basis for healthcare service utilization. Better access to high-quality healthcare services within the established local referral system
Pregnant women are aware of the value of pre-natal care and hospital delivery.	Our medical team advises 80% of the pregnant women in the 17 villages.	Trained BHWs fulfill their role by providing services and promoting health as the frontline in community-based healthcare services. More community members practice better health-seeking / preventive behavior.
Killer diseases and malnutrition are addressed by well-trained BHWs and the rolling clinic.	At least 10,000 patients are treated by the rolling-clinic team and referred to the next hospital if necessary each year. The BHWs know and apply the methods of "Integrated Management for Childhood Illnesses".	Trained BHWs fulfill their role by providing services and promoting health as the frontline in community-based healthcare services.

To be able to better classify and interpret the results of the data collection, a pathway of change was constructed with the identified outcomes and possible shortcomings that could not be explained with the existing data or were not mentioned by the participants in the primary data collection. Figure 10 shows the constructed pathway of change.

One component frequently mentioned in the data collection regarding the identified changes among the BHWs along with their skills, increased self-confidence, and social position in the communities is the comprehensive training as a core activity in the PHC approach. Changes were mainly attributed to training, which includes theoretical and practical lectures, discussions, and practical learning sessions. Compared to the BHW training previously provided by government, different stakeholders observed that the comprehensive PHC training leads to more highly skilled barangay health workers, who are much more helpful in the local healthcare system. The Rolling Clinic as a training ground was also occasionally mentioned in this context. The lectures and presentations by the volunteer doctors and by the medical head of the project were also found to be helpful, e.g. lectures on specific topics, like mental health, alcoholism, drug abuse, etc. and the short lectures by volunteer doctors in every RC, e.g. about vital signs.

Joint activities for health promotion, e.g. WASH and the clean-up drives, were supporting activities to achieve changes in the health-seeking behavior of community members and appeared to play an important role. Integrating trained BHWs in all community activities is a truly meaningful approach to creating more awareness of healthy lifestyles and prevention. The role models set by the PHC and rolling-clinic staff significantly contributed to the described changes. The project's strongly preventive focus helped promote the importance of healthy lifestyles and played a major role in changed perceptions, e.g. of mentally ill people.

The results from the primary data collection show that good cooperation between the project team and local stakeholders in the healthcare system and communities provided the basis for initiating changes, e.g. greater unity in the communities and the established referral system. Regular meetings among the different stakeholders in the healthcare sectors supported the good partnership. Barangay officials also placed greater importance on health topics, thanks to the good and the strong cooperation and coordination between the project and central stakeholders.

The uninterrupted treatment e.g. of mentally ill patients and chronically ill patients by the Rolling Clinic team directly contributed to the improved health of these patients. Implemented strategies, like documentation of chronically ill patients, have already been taken over by the local healthcare system, thereby ensuring sustainable improvement in patient care. The role modelling of the RC staff played an important role.

While there are obvious signs that initiated changes will last and some will also be adopted by the local healthcare system, the need to continue the Rolling Clinic was clearly expressed. Existing staff, especially physicians, are not available in sufficient numbers to handle the workload. For example, it was mentioned that doctors cannot visit remote regions on a regular basis. This is where the Rolling Clinic fills a gap that continues to exist. Based on the data collected, it is not yet possible to assess whether the basic healthcare provided by the BHWs and the established referral system are sufficient to ensure adequate medical care in the long term. It may require more time for all trained BHWs to perform their duties confidently and independently in the communities. Regular monitoring and evaluation of BHWs' performance should be established to maintain the quality of service and identify possible needs for further training, e.g. within the Rolling Clinic. While there is oral feedback on the performance of the BHWs to the PHC, the question is whether this will be regularly evaluated over the project's duration. One encouraging factor is that the payment of incentives depends on the performance of the BHWs in some barangays.

The collected data show the willingness of the local healthcare stakeholders to continue the program even after the project ends. A local doctor mentioned they can adapt the knowledge gained within the PHC project and apply it in other barangays. They are convinced that they will be able to adapt the approach like the GD did. The question remains how this can be assessed in the final project evaluation if it really occurs.

The fact that local representatives have already copied the approach independently in another barangay shows that changes can be permanent. This also indicates that the changes initiated by the project approach are considered very helpful in the local healthcare system and can be adopted as good practice.

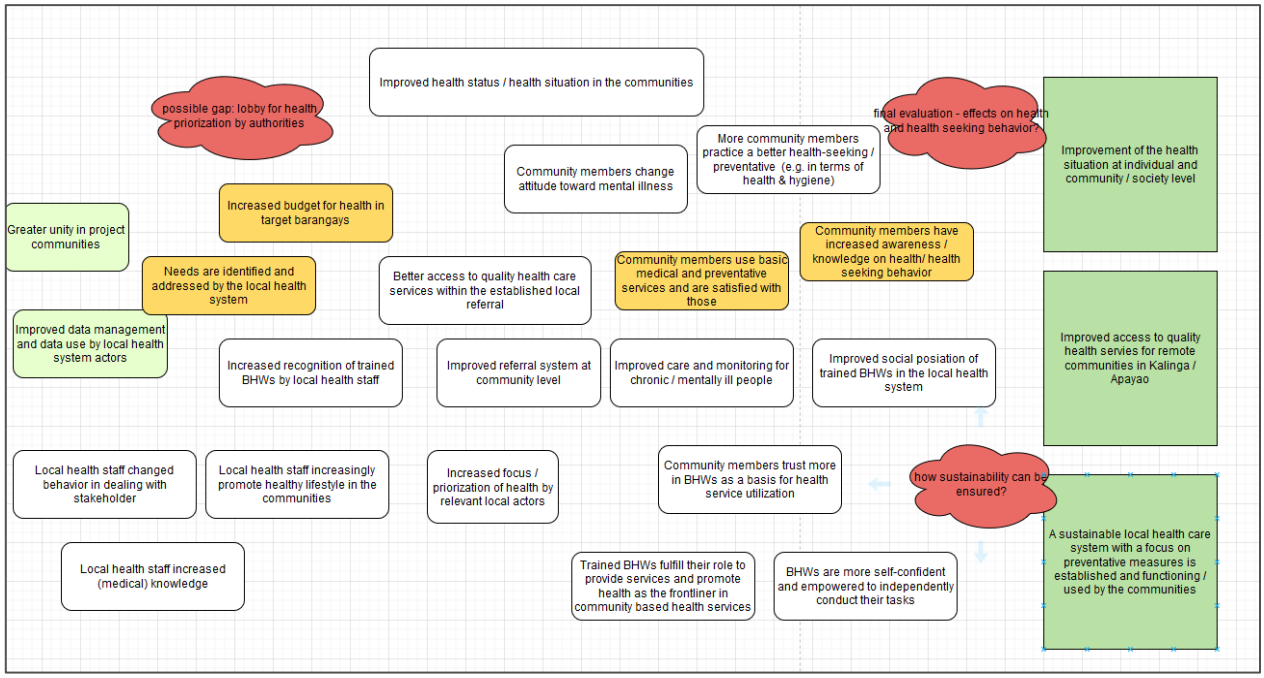


Figure 10: Reconstruction of a pathway of change according to the identified outcomes

4 Conclusion and ideas for the final project phase

The outcome harvesting with identified changes in relation to the objectives from the project application and LogFrame shows that the objectives have already been largely achieved. Identified outcomes can be linked to the project objective, "improve the health situation of people in remoted areas", so that the initial step toward achieving the goal has been made. The BHWs are successfully trained and are already providing healthcare services and health promotion (with support) in their areas. The data do not yet allow us to be certain that this has already led to greater awareness and increased health-promoting behavior in all key areas. Even if not explicitly mentioned in the LogFrame, the project has contributed to the strengthening of the local healthcare system.

As the LogFrame was only created for the first phase of the project, the OH aims to identify existing shortcomings that could be addressed in the final project phase. The following describes some ideas stemming from the results of the Outcome Harvesting.

Further support for the communities to improve the health knowledge and health-seeking behavior of community members

The evaluation contained no information about the expected improvement in health knowledge and health-seeking behavior concerning different relevant topics, like vaccination, family planning knowledge and application, knowledge and application of antenatal and postnatal care by pregnant women, exclusive breastfeeding, awareness / knowledge about TB symptoms and the need for testing, Covid-prevention measures, and knowledge about HIV and AIDS. Misconceptions about hospital births still persist in some areas. As these aspects are also identified as indicators in local healthcare strategies, awareness and knowledge of the community should be further strengthened. This will be implemented by the trained BHWs, but could also be intensified by additional awareness-rising activities until the end of the project. A central topic could also be Covid in general and especially vaccination against Covid. BHWs could also assess the current needs for health information / health topics so that activities can be developed based on existing community needs.

Further support for BHWs in their role as health providers

The evaluation shows that BHWs already perform many healthcare services independently. What the results do not yet fully reveal is whether all trained BHWs already have the competence to carry out assessments and referrals independently and if they collect and report required healthcare data regularly (i.e. fill in the logbooks). These tasks can be further supported in the last phase of the project so that BHWs gain more experience and confidence in conducting their duties independently. A two-way referral system has not been satisfactorily established yet. Information often does not get back to the BHWs for follow-up or regular monitoring activities. Project activities and networking with key stakeholders should continue to secure the two-way referral system and support BHWs in their independence.

Strengthening of the advocacy component

Adequate funding is necessary for a basic healthcare system to function sustainably. The evaluation data show that initial changes have taken place in the villages visited in the direction of increased prioritization of health, e.g., the higher incentives for BHWs paid in almost all barangays. Some BHWs are also already beginning to demand necessary services from officials, such as costs for transport in the referral system or for necessary materials. However, this seems to have been done only very sporadically so far. The local health boards as platforms for healthcare decisions are currently not very active, so the project staff cannot get involved and represent the needs of the target group at the political level. Advocacy activities were not integrated into the project planning from the beginning because of the political dimensions.

Increased lobbying by trained BHWs in their roles as organizers would help strengthen the resources of the local healthcare systems in the long run. If this cannot be carried out by the BHWs themselves due to the political situation, then attempts can be made, for example, through the lower levels (barangay meetings) to advocate for the needs of the communities. The training needs of the BHWs should be identified and, if necessary, training in lobbying / advocacy could be offered. The regular BHW meetings (also called BHW self-help groups) are a suitable forum for further training in advocacy and exchange in the future or for planning joint activities, e.g. for budget allocation in identified activities/services by the community, provision of a patrol car in each municipality for referral transportation, budget for referrals to the regional hospital, etc. The project team could support the BHWs in low-level advocacy activities during

the next months to help them gain capacities in influencing policy decision makers in healthcare at barangay, municipal, and provincial levels. Good cooperation with the MHO is important because s/he can present health-worker issues to a higher level, e.g., the Local Health Board (LHB). This is where the BHWs can present the wishes and needs of the population during regular meetings with the MHO. Interviewees mentioned that the long-term goal would be for all barangays to have their own health budgets. BHWs could contribute with advocacy activities.

Support local healthcare stakeholders in continuing PHC

Trained BHWs make up the core of the project; they fill a gap in the provision of basic healthcare services to communities in remote areas. For the changes to persist, the trained BHWs should not be steadily or easily replaced following elections because of political affiliations. The project team should develop ideas about measures taken to ensure that BHWs will not be replaced at any time, also after the project has ended. There should be further agreements with higher authorities for the phase after the project, e.g. within barangay resolutions.

At this stage of project implementation it should also be considered how the motivation of the volunteer BHWs, which seems to be high at the moment, can be maintained in the future. Interviewees mentioned that there is normally a high fluctuation of BHWs. This might risk the sustainability of our approach. The evaluation shows that the training of BHWs contributed to better social positions and improved acceptance of BHWs. This positively influences BHW motivation. Regular feedback from the local healthcare staff (e.g. in regular meetings) can also support and maintain motivation. Volunteer work is not so prominent in younger generations; younger BHWs may not be available in the long run. Concern was also expressed that BHWs may stop working if the German Doctors and the project team leave. Local healthcare stakeholders should be brought on board and develop further ideas to maintain BHW motivation.

Some BHWs may give up or have to give up their volunteer activities. Therefore, the local system should take over the role as initiator to identify and train new BHWs to replace them. The local healthcare staff already mentioned their willingness to continue with the PHC activities, so this could be further supported in the coming months by the project. Responsible persons in each region should be identified to take over responsibility for the trained BHWs and any new BHWs who require training in the future. Necessary materials, e.g., selection criteria or training manuals, should be known and made available to these individuals. There should also be joint consultations on how existing BHWs can be further trained and newly trained BHWs can complete hands-on training, which has hitherto been conducted by the RC.

Local stakeholders have already shown interest in replicating the PHC approach. This very positive development can be further advanced by the PHC team in the coming months. It should be determined to what extent and how the initial activities have already been implemented and which needs still exist, e.g. in terms of knowledge and materials. This could then be provided by the project during the final project phase.

Consideration could also be given to engaging even more stakeholders, such as TBAs or traditional healers / *hilots*, in the approach. Networking could strengthen the relationships among these stakeholders, BHWs, and other healthcare workers. It might even be feasible to integrate them into the referral system in the long term.

Development of a project plan (next year) and exit strategy for the project together with all stakeholders

A timely and clear exit strategy for the Rolling Clinic should be developed with central stakeholders, including a "plan for handing over". The evaluation shows that BHWs can fulfill their roles, but that local physicians or teams cannot replace the Rolling Clinic. The great need for the Rolling Clinic is assessed as high from the local perspective. Since it cannot be sustained, further strategies should be developed for the termination of the RC. The local staff also consider the RC as the main training ground for the BHWs, who are now already fully trained. Further planning of project activities should include assessment of remaining gaps to be bridged (including performance of BHW healthcare services, referral system) to determine needs in the event of a reduction or exit of the Rolling Clinic. Relevant stakeholders should confer and discuss the shortcomings, needs, and ideas and how to meet them in the future.

The assessment should also identify who will take responsibility for the BHWs after the project ends. The question is whether the responsible persons already have sufficient knowledge and the necessary materials (training manuals, etc.) to continue the approach after termination of the project. A local doctor expressed that the local staff who will take over the task of supervision of BHWs needs more orientation from the project team on supervision of BHWs. The question remains whether the time resources are available to continue the tasks of the service coordinator, which will still be necessary after the end of the project. All this should be clarified in the coming months, and necessary measures, such as training or printing of training materials, should be implemented. BHW dropouts are presently being replaced and trained by the Rolling Clinic, among others. The exit strategy needs to clarify how substitute BHWs can sufficiently gain knowledge and experience for their practical work. Internships in the RHUs or in the hospital, where they can practice basic skills, like measuring blood pressure or taking vital signs, offer a possible solution. A clear structure-replacement strategy, including needs, duties, and responsibilities, should be developed to ensure the sustainability of the approach.

The challenge of the lack of physicians in remote regions remains. One possibility could be the introduction of a telemedicine component that would allow BHWs to receive support through direct contact with local physicians and/or volunteer international physicians. Whether this is feasible in the local context (e.g., resources for internet/telephony) and whether this is desired/accepted by local staff need clarification. A local doctor already mentioned the need for and benefit from telemedicine during an interview, as many BHWs are not connected with anybody. The Cagayan Valley Medical Center, a possible cooperation partner, launched a telemedicine project in June 2021. Telemedicine could stabilize the system and support BHWs, e.g by facilitating prescriptions. Local doctors could distribute their services to reach remote areas more often after the RC ends. Such ideas should be further elaborated in joint discussions.

Medicines should also be discussed in detail as part of an exit strategy. The evaluation shows that medicine for chronically and mentally ill patients has improved in recent years and that medication is ordered according to need (chronic list). Gaps in the provision of these and possibly also other medicines still exist due to changing needs. These must be evaluated and discussed with local stakeholders and decision makers to see how these can best be bridged after the Rolling Clinic ends. Lobbying for a sufficient medicine budget could prove effective.

Integration of the WASH component into the German Doctors' general Primary Healthcare Approach

The success of the water project as one component in the Luzon project indicates that it should become part of the German doctors' PHC approach (CGDDC) in remote areas in the Philippines. The water project could sustainably help many people in their health-seeking behavior and health situation. Local stakeholders should always be involved and should also make their contributions. Committees to monitor and maintain local water supplies must be established to provide sustainability. If the water component is seen as an integral part of the PHC approach, it should appear in the objectives (LogFrame).

Strengthening the role of volunteer physicians as trainers

The evaluation showed that local health workers, including trained BHWs, have benefited from project activities, such as training sessions with volunteer doctors. This can be expanded, e.g., by separate training or exchange forums with volunteer physicians and health workers to facilitate professional exchange and mutual learning and ensure sustainability of the approach. The present Corona situation with travel restrictions presents a challenge. Online forums could be initiated until traveling is again possible.

Conduct (patient) satisfaction survey and establish a feedback mechanism

No data could be generated on the satisfaction of the people with the PHC activities and responsible BHWs in the communities during the evaluation. Satisfaction is a prerequisite for utilization and for behavioral changes in terms of health-seeking behavior promoted by the BHWs. A satisfaction survey of patients and households using BHW services could be conducted in the coming months. Results could be used to plan further project activities or contents, e.g. health-worker classes. Feedback (e.g. communal feedback box) could be established in the barangays. This would give the communities the opportunity to express their opinions and needs and initiate possible changes / improvements in the future. This should be developed and established together with local stakeholders to ensure sustainability. Feedback mechanisms relating to BHW performance should also be part of this process.

Integrate M&E from the beginning and into all project phases

The evaluated project has a LogFrame with objectives and indicators for the first project phase (2017 - 2019). No set goals and indicators to measure those exist for the second phase. The objectives and indicators from the first phase were therefore used to interpret the data. It is generally recommended to set up a monitoring system at the beginning of the project or, if only the first phase is planned, to use the first phase LogFrame as a basis for setting up a system for subsequent project periods. This enables the success of the project to be continuously monitored and, if necessary, adjustments to be made. It also simplifies reporting and later evaluation of the project. The focus of goal setting and indicator development should also be on measurable outcome indicators. The Outcome Harvesting approach offers a feasible monitoring tool for regular monitoring and discussion of the project outcomes. The present evaluation results can be helpful for further project development in the field of PHC regarding planning and implementing project-monitoring systems.

This evaluation focuses on the identification of outcomes as only one small component of evaluations in development cooperation (according to DAC criteria). Since the PHC approach seems to be feasible in the Philippine context of the Geographically Isolated and Disadvantaged Areas (GIDA) and is therefore highly

relevant for the CGDDC as a local NGO, it is certainly worthwhile to conclude the project with a more comprehensive evaluation. In addition to the specific project outcomes, the relevance, effectiveness, efficiency, coherence, and impact of the project should be examined to learn from previous experience, to record the knowledge and lessons learned, and to apply it in further project planning. Shortcomings can be identified so that they can be considered in advance and avoided in future projects.

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