Impact Evaluation of Service Delivery Grants to Improve Quality of Health Care Delivery in Cambodia

REPORT ON QUALITATIVE RESEARCH FINDINGS

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Health Equity and Quality Improvement Project (H-EQIP)

Australian Aid

KFW

KOICA
Korea International Cooperation Agency

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Contents

FIGURES

TABLES

Abbreviations

ANC	Antenatal Care
CDHS	Cambodia Demographic Health Surveys
CRS	Catholic Relief Services
CSES	Cambodia Socio Economic Survey
DFAT	Australian Department of Foreign Affairs and Trade
DLI	Disbursement Linked Indicator
FGD	Focus Group Discussion
FLSG	Fixed Lump Sum Grant
HC	Health Center
HEF	Health Equity Fund
H-EQIP	Health Equity and Quality Improvement Project
HMIS	Health Management Information System
HW	Health Worker
IDI	In-Depth Interview
IDPoor	Identification of Poor Households Program
IMCI	Integrated Management of Childhood Illness
IV	Intravenous
KHR	Khmer Riel
KOICA	Korea International Cooperation Agency
L2	Level 2 Quality Assessment
MDG	Millennium Development Goal
MEF	Ministry of Economy and Finance
MOH	Ministry of Health
NECHR	National Ethics Committee for Health Research
NCD	Noncommunicable Disease
NGO	Non-governmental Organization
NQEMP	National Quality Enhancement Monitoring Program
NQEMT	National Quality Enhancement Monitoring Tool
NSSF	National Social Security Fund
OD	Operational District
OOP	Out-of-Pocket
OPD	Outpatient Department
PAC	Priority Access Card
PBB	Programme-Based Budget
PBG	Performance-Based Grant
PHD	Provincial Health Department
PMRS	Patient Management and Registration System
PNC	Postnatal Care
PRH	Provincial Referral Hospital
QA	Quality Assurance
QOC	Quality of Care
RGC	Royal Government of Cambodia
RH	Referral Hospital
SDG	Service Delivery Grant
SOA	Special Operating Agency
TBA	Traditional Birth Attendant
UHC	Universal Health Coverage
VHSG	Village Health Support Group

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Executive Summary

The aim of this report is to present the qualitative findings of the Service Delivery Grants (SDGs) impact evaluation, undertaken in Cambodia in the second half of 2018 and 2019. The qualitative study explores aspects of SDG implementation, outcomes and impact, health-seeking behaviors and challenges, and the role of the Health Equity Fund (HEF). The results featured in the report complement and enhance the knowledge from the quantitative SDG impact evaluation surveys and the administrative data presented in the main impact evaluation report. The report includes a discussion and outlines some policy implications on these themes in the closing chapter.

Health Equity and Quality Improvement Project (H-EQIP), and Service Delivery Grants (SDGs)

H-EQIP is the flagship project of the Cambodian Ministry of Health (MOH) with cofinancing from the Governments of Australia, Germany and Korea, and the World Bank. H-EQIP aims to accelerate overall reforms in the health sector, improve financial protection for the poor and vulnerable groups, and expand access and coverage of health services, while strengthening their quality and affordability, and create sustainable government institutions for health care management.

H-EQIP is divided into three components (see diagram on the next page):

Component 1 (US$74.2 million) – Strengthening Health Service Delivery: Component 1 uses re-designed SDGs to provide performance-based financing to different levels of the health system based on results achievement.

Component 2 (US$70 million) – Improving Financial Protection and Equity: Component 2 expands the country's HEF system, increasing domestic ownership and creating sustainable domestic institutional arrangements for managing HEFs.

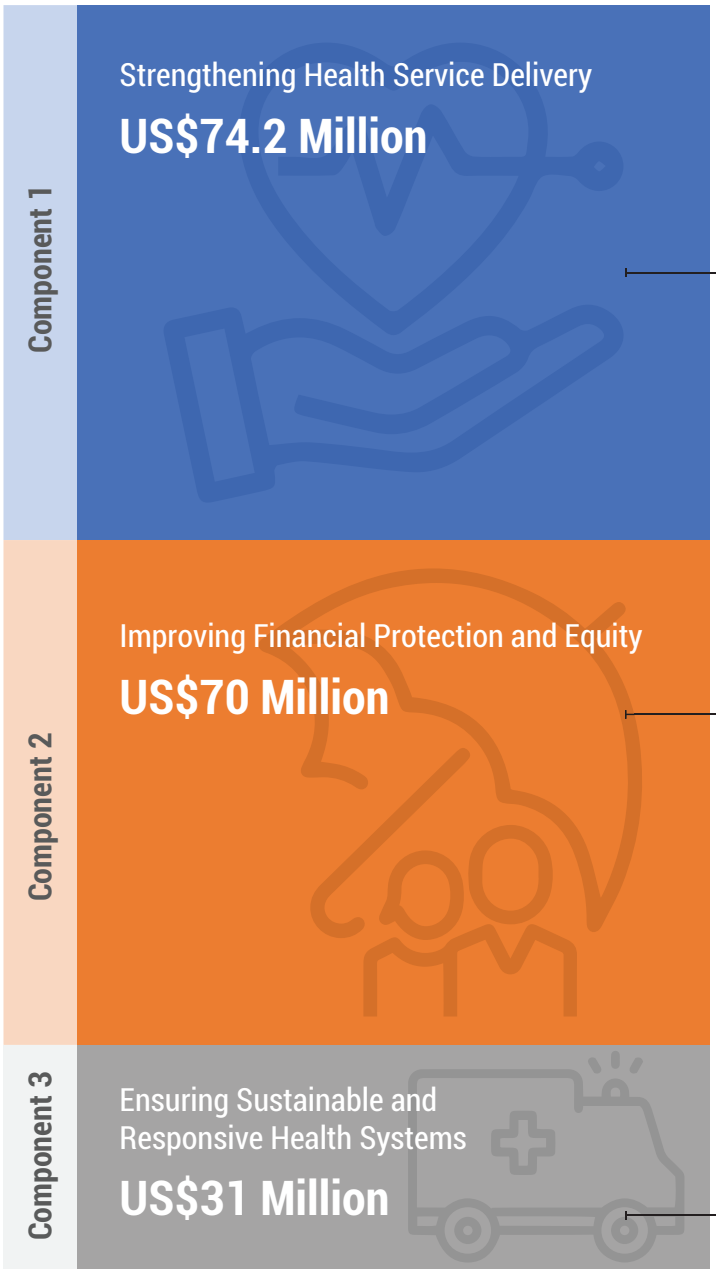
Component 3 (US$31 million) – Ensuring Sustainable and Responsive Health Systems: Component 3 uses results-based instruments, known as Disbursement Linked Indicators (DLIs) to improve supply-side readiness and strengthen health sector institutions, enhance the quality of pre-service and in-service training for health workers, equip health facilities to meet minimum standards for providing obstetric and neonatal care, enhance health service quality monitoring, improve timeliness of SDG and HEF payments, and establish sustainable health service purchasing arrangements. This component also benefits from a grant contributed by the Government of Japan through the World Bank - Japan Policy and Human Resources Development Trust Fund, which has been important in supporting the monitoring activities undertaken as part of the SDG system.

H-EQIP aims to use performance-based payments under SDGs with strong links to performance and focuses on quality of services (MOH, 2016). This is combined with fixed grants to health facilities, in addition to further streamlining the funds flow and reporting arrangements. The payment of SDGs to health centers (HCs) and hospitals is closely linked to performance in the delivery of basic and comprehensive packages of services, such as critical reproductive, maternal, neonatal, child, and adolescent health services. The SDG includes two types of grants to achieve its objectives:

1. **Fixed Lump Sum Grants (FLSG)** are intended as a complement to the facility operational budget, to manage and implement direct spending for the purpose of promoting quality and equity in patient care.

2. **Performance-based Grants (PBG)** are intended to reward health facilities for quality performance and to reward operational district (OD) and provincial health department (PHD) offices, and in particular certified assessors for conducting quality ex-ante assessments. Up to 80 percent of PBGs can be spent for staff incentives. At least 20 percent of PBGs are eligible for any other SDG-eligible expenditures in the H-EQIP SDG manual, such as small civil works, equipment, drugs, and operational costs.

Health Equity and Quality Improvement Project (H-EQIP)



Uses re-designed Service Delivery Grants (SDGs) to provide performance-based financing at different levels of the health systems based on results achievements.

Expands the country's Health Equity Fund (HEF) System, increasing domestic ownership and creating sustainable domestic institutional arrangements for managing HEFs.

Uses results-based instruments to improve supply-side readiness and strengthen health sector institutions, enhance the quality of pre-service and in-service training for health workers, equip health facilities to meet minimum standards for providing obstetric and neonatal care, enhance health service quality monitoring, improve timeliness of SDG and HEF payments, and establish sustainable health service purchasing arrangements.

The SDG Impact Evaluation and Qualitative Study

The purpose of the SDG impact evaluation is to measure the impact – outputs and short-term outcomes – of the implementation of performance-based SDGs in Cambodia. More specifically, the evaluation aims to assess the impact of PBGs through the implementation of the National Quality Enhancement Monitoring Program (NQEMP), in parallel with the synergistic effects from FLSG.

The impact evaluation uses a difference-in-difference design that compares the change between a baseline and follow-up time in districts that received the intervention versus districts that did not receive the intervention. The treatment assignment for rolling out the NQEMP is at the OD level and was rolled out in three phases. The impact evaluation quantitative surveys were arranged to take place at three points aligned with SDGs' Baseline, Midline and Endline. This design aimed to collect data before the rollout of NQEMP to the ODs in the first, second and third phase, allowing for comparisons in time and between districts with and without NQEMP.

Following the findings and recommendations of the Baseline report completed in 2018, it was decided to incorporate qualitative research into the next two rounds of the impact evaluation. This qualitative study aims to support triangulating and explaining the quantitative findings in the impact evaluation, and to pick up some qualitative elements that may not be discernible using quantitative methods. To do this, it provides information on SDG's implementation, the suggested mechanisms through which SDG (FLSG and PBG) had an impact on quality and utilization, and the demand-side factors that shape SDG's impact on utilization. The qualitative report also inquires about beneficiary and provider perspectives that answer the "*how*" and "*why*" questions that have policy relevance. As a piece supporting the larger impact evaluation, the key findings of this report are also being included in a qualitative chapter in the impact evaluation report. To fit this purpose, the studies were integrated in the impact evaluation Midline and Endline data collection points, also benefitting the phased rollout of NQEMP and PBG.

Methodology

Theory of Change

SDG combines assessments using the National Quality Enhancement Monitoring Tool (NQEMT) with performance-based financing through the PBG. The NQEMT provides clear goals and understanding on how to improve quality of care, while ex-post verification and ex-ante assessments provide key information for the coaching and management of HCs. Finally, PBG incentives, linked to assessment, align the remuneration of ODs and HCs with their performance, closing a positive feedback loop. The quality of health service delivery is expected to be positively reinforced by the quarterly quality assessment using NQEMT, leading to the regular disbursement and use of performance-based SDG.

In addition, NQEMP assessments are expected to support monitoring and evaluation and perceptions of quality of care and clinical competency among health workers (HWs). Moreover, the combination of assessments and PBG incentives will increase HWs' motivation, morale and clinical competency. All these outcomes will contribute to improve quality of care, which will increase utilization of public health facilities. In addition, the combination of PBG and FLSG funds will supplement the budget available to HCs to improve use and functionality of infrastructure, and availability of staff, supplies and consumables.

Research Questions

Reaching to stakeholders in the health system and users of health services, the qualitative study aimed to answer the following questions:

1. What are ODs, HCs and HWs' awareness, understanding and perceptions of SDG?
2. How has SDG (FLSG and PBG) funding been used in ODs and HCs?
3. What were the challenges in the implementation of SDG?
4. What implications and impact did interventions have on quality of care and the use of health services?
5. What are the health-seeking behaviors among community members? What are the reasons informing their choices of provider?
6. What were the challenges faced by HEF beneficiaries when using HEF and attending public health facilities?
7. What is the role of HEF in increasing the use of public health services?

Design, Sample and Methods

Data collection for the qualitative study was also structured in two rounds coupled with the second ('Midline') and third ('Endline') data collection points of the SDG's quantitative survey. The Midline data collection included slightly more open-ended questions to explore areas of interest for the research, while the Endline contained a more structured and exhaustive list of questions and probes, to achieve a greater level of detail. In this study, Endline data was compared across SDG Phases 1, 2 and 3 and, whenever possible, with Midline data from Phases 2 and 3.

Respondents were selected following purposive sampling; this selection was aimed to interview community members and key health care providers and managers across a range of provinces involved in SDG. Whenever possible, the Endline data collection was conducted approximately at the same facilities and communities reached during Midline.

In-depth interviews were conducted with HC Chiefs (i.e., Director), HWs and OD Directors. FGDs were conducted across the catchment areas of selected HCs and selected on three criteria; urban or remote, their OD during the nationwide 'Level 2' quality of care assessment conducted in 2014-15, and the SDG phase of their HC. Respondents were eligible if they had experienced at least two visits to a public health facility in the year preceding the evaluation, and at least two participants had one visits in the six months preceding the evaluation. Semi-structured research tools were used for both focus group discussions (FGDs) and in-depth interviews (IDIs). Data was analyzed following the Framework method (Gale et al., 2013).

A total of 60 IDIs and 14 FGDs were conducted as part of the Midline between June and December 2018, and 47 IDIs and 26 FGDs as part of the Endline between July and August 2019.

Number of in-depth interviews (IDIs) and focus group discussions (FGDs) conducted at Midline and Endline, stratified by respondent type

TYPE OF RESPONDENT	MIDLINE	ENDLINE	TOTAL
OD Director (IDIs)	8	8	16
HC Chief (IDIs)	18	13	31
Health worker (IDIs)	34	26	60
Community (FGDs)	14	26	40

Summary of Key Findings and Policy Implications

The report presents and discusses in detail the responses from 60 IDIs and 14 FGDs conducted as part of the Midline, and 47 IDIs and 26 FGDs as part of the Endline. This executive summary outlines together the key findings and conclusions of the study, organized by leading themes and presented along with their implications for policy.

Implementation

SDG was well-known and welcomed across most stakeholders in the health system. HCs and ODs went through a learning process and became better using and reporting SDG funds, especially FLSG. Coaching by ODs was central to HCs in their learning and improvements, emphasizing the importance of investing in this skill. FLSG funds were perceived as an essential top-up to the HC's budget, while PBG funds were largely seen as a way to motivate HWs. The system of regular assessments, coaching and feedback by their supervisors was seen as effective and positive for HWs to learn.

Implementation challenges decreased in time as stakeholders learned their roles, although some remained. FLSG spending guidelines were perceived to be too strict and failing to account for some of HCs' essential needs. To maximize the benefits of SDG spending, further discussion involving HCs and ODs should aim to make the guidelines more responsive. As financial literacy and capacity of HCs improves in due course, the MEF and other decision makers may also be more willing to allow greater flexibility in how SDG resources can be eligible for a larger set of activities. Challenges on the assessment process included the use phone calls to gather feedback from areas with poor connectivity, and the scheduling of some of assessments. The introduction of a larger sample of phone numbers—already in place now—and better communication between ODs and HCs may help address these challenges.

SDG Outcomes on Quality of Care and Availability of Services

SDGs influenced quality following several pathways, represented in the SDG results chain. FLSG funding was broadly and consistently used to increase the availability of equipment, supplies and consumables (e.g. newer equipment, fewer drug and commodity stock-outs, gasoline) and improving the use and functionality of available infrastructure (through availability of water, sanitation, electricity, hygiene supplies etc). These inputs, along with improved financial autonomy in the HCs, helped address long-standing needs and systemic barriers and improve structural quality. Besides supporting inputs to an adequate setting, SDGs created a cycle of clear objectives, coaching and feedback serving as a roadmap to improve quality. Health system stakeholders believed that checklists and assessments created clear, common objectives for ODs and HCs, while ODs' guidance and feedback further improved HWs' understanding of their work and how to perform better. Following objectives and feedback, HWs improved their knowledge and skills, cared more about hygiene, had a better attitude towards patients (thorough check-ups, respectful and friendly behavior) and were more punctual and also respectful of on-call duty. ODs coaching during their structured assessment visits was clearly valuable and needs to continue.

SDGs increased HWs motivation in three distinct ways. HWs and HC Chiefs' motivation to improve their assessment scores was the result of co-existing reasons. Financial incentives (PBG, salary and user fees) motivated some HWs. SDG linked income to the assessments to a well-accepted and objective measure, which HWs could improve with their own efforts - the assessment score. ODs played an active role by coaching HWs, helping them understand how to improve their scores. This made HWs, especially in Phases 1 and 2, strive harder to achieve higher scores. In addition, assessments were linked to HCs and HWs reputation and peer pressure, which motivated them to work hard and get a good score, to avoid embarrassment. The value of a fair and objective assessment system and the importance of credibility and peer-pressure in addition to the financial incentives, are all important aspects to continue strengthening. Last but not least, some HWs were satisfied because of the improvements in their workplace that could be paid with SDG funds (e.g. FLSG). Other incentives, such as HWs sense of duty, also played a role.

Evidence on improved managerial capacity was more nuanced, with intermediate outcomes that provided managers with more tools and consolidated good practices. These included new funds, roles and processes that improved the communication within HCs and with ODs, and financial autonomy that made HCs more proactive and responsive to emergencies. Assessments were particularly seen as being useful, as they guided ODs and HC Chiefs' supervision, measured progress, and highlighted gaps to improve. This data likely helped ODs and HC Chiefs make more informed decisions on coaching and resource allocation

Differences between SDG phases were subtle and limited, by design, to outcomes influenced by assessments and PBG. Evidence of SDG effects was identified across three phases; it was stronger in Phases 1 and 2 at Endline (though Phase 1 HCs are not comparable, and so the main focus in the methodology is to delinerate Phases 2 and 3) than Phase 3 which had not received the PBG intervention. Phases 1 and 2 contained stronger evidence of HWs' increased availability, the learning processes of HWs and HC Chiefs and HWs' improved behaviors. They also included multiple accounts of HWs wanting to improve their scores to receive more money and improve their image, working harder and improving their scores to receive PBG. Despite these clear findings, differences between phases were sometimes subtle for several reasons, including the short duration of Phase 2, and especially an early exposure of HCs in Phase 3. At Endline, most Phase 3 HCs that had not yet commenced the intervention were already aware of PBG and assessments, keen on their introduction and some were already changing their practices. These changes unfortunately reduce the likelihood that the impact evaluation can detect the differences in improvements in Phase 2 relative to Phase 3. Likewise, observable differences between phases were reduced by the effects of SDG components that were implemented in all phases from the start, such as FLSG and financial autonomy. The effects of some of the incentives not linked to PBG scores, and the persistence of some of the challenges mentioned in this report, may also dilute the differences that can be observed between phases.

An area which will require more attention in the future is the use of the SDG modality to overcome equity barriers across multiple dimensions of vulnerability- including gender, ethnicity, remoteness, disability and age, going beyond the socioeconomic dimension of equity that is addressed through HEF.

Some challenges persisted; some HCs perceived that the FLSG allocations were too normative and did not account for their unique circumstances; others suffered from staff shortages and HWs struggling to learn and cope up with increased expectations. These may constrain HCs' ability to achieve scores and may also limit the effects of the assessment on motivation. Though higher SDG payments are now being made available for HCs in remote areas and those serving indigenous population, this is an area where further policy action is warranted. Strategies to address larger policy and health system challenges will also need to be addressed, as they reduce the effectiveness of the system—these include HWs' load, clinical skills gap, increasing capacity for accounting/financial management and dual-practice issues.

The study also hints at potential design innovations for the future, to further enhance the impact of the system. One such aspect could be to leverage technologies and communications to support with feedback loops and increasing availability of the 'right' information with the beneficiaries. This could also be tried with different options to measure patient satisfaction effectively - overcoming some of the limitations of the current phone-call based system. Integration of innovations with good communications that address community perception of public health facilities could strengthen the connection between health facilities and communities, further enhancing the effectiveness of the system.

SDG Outcomes on Utilization of Public Health Services

SDGs also influenced utilization of public health facilities through several mechanisms, although this influence was moderate and indirect, and was interlinked with the HEF system and other contributing factors. As part of the results chain, it was theorized that SDGs contribute to increase the demand and access to public health facilities at HC level. This increment would be produced by improvements in quality and availability of HC's services, which would be perceived by communities, and address their needs, challenges and preferences. To assess SDG's possible contribution to increase the utilization of public health services, the study compared three dimensions explored in the IDIs and FGDs:

1. SDG-linked changes in HCs reported by supply-side respondents
2. Changes perceived by community members in the HCs
3. Communities' needs, challenges, and preferences to choose a health provider

SDGs influenced utilization more directly through increased availability of drugs, reduced waiting times, better availability of HWs and longer opening hours. These were perceived by both supply and demand-side respondents and were part of communities' health-seeking priorities. SDGs may also have a smaller or more indirect influence through its other effects, reported by both supply- and demand-side respondents but not framed by them as priorities. These included increased availability of equipment, improved functionality of infrastructure (e.g. water, toilets, hygiene), and HW's improved attitude and behavior towards patients (through more thorough medical examination, asking more questions and being friendly and respectful). Observing SDGs' effect on utilization was challenging for several reasons. First, differences between SDG phases on quality were already subtle due to early exposure, challenges and external factors. More importantly, improvements in quality and availability could increase the use of public heath services only partially, as they were only some of the factors prioritized by communities. Other factors, described below, also played a role in communities' health-seeking behaviors.

Factors Influencing Communities' Choice of Provider

People in the communities reported using both public and private providers, moving back and forth between public and private providers based on the accessibility and availability of services, respondents' socio-cultural perceptions and financial factors. The distance to the provider and the condition of the road were sometimes a barrier, especially in rural areas and in Ratanakiri district, and particularly during rainy season. Physical barriers made private providers in the vicinity a more reasonable choice. Requiring care at night also influenced people to seek care in private facilities, purchase drugs directly, or go to the hospital. Some of the private providers were HWs in dual practice settings, owning their own practice or pharmacy, providing care at the patient's home and/or selling medicines. Some people also prioritised private providers for services that they thought would be unavailable in the HC, such as intravenous (IV) fluid injections and chronic disease treatment. Injections (IV and others) were thought to be more effective than oral medication and actively sought in the community. Public HCs were sought for maternal and child health services and as entry point to be referred to hospitals, which were strongly preferred for serious conditions and accidents. HCs and private providers were perceived as more convenient than hospitals, being the provider of choice for "*minor illness*", such as fever, common cold and stomachache.

Affordability was consistently mentioned by respondents across all FGDs as a reason for seeking public providers. Private care was often considered faster and more convenient, which justified the additional cost. Affordability was the most common reason to seek care at public health facilities. Having IDPoor card and awareness of the benefits provided by HEF was also a factor strongly influencing people's decision to seek care at public health facilities. However, for many respondents (with and without HEF), even attending public facilities could be a financial challenge due to the multiple out-of-pocket (OOP) payments required including transportation, and they may hesitate using any provider unless they consider that it is essential to do so.

The Role of HEF in Increasing the Use of Public Health Services

Findings from both demand and supply-side suggested an increase in utilization of public health care services among HEF beneficiaries. HEF benefits targeted two of communities' top priorities when seeking care; cost (through free services) and physical access (through transport vouchers). Our study observed good awareness and understanding of HEF benefits in most FGDs, and both demand and supply-side respondents agreed on the important role of HEF and other demand-side initiatives (National Social Security Fund - NSSF, and 1,000-day scheme) in the increased use of public health services. Interestingly, antenatal care (ANC), delivery and immunization were the services that HWs most commonly reported to increase. In addition, the majority of IDPoor respondents reported good experiences using IDPoor card. Overall, the evidence in our study suggests that HEF had a role in increasing the use of services, but the effects of other programs (including NSSF, the 1,000-day scheme and SDG itself) makes it difficult to trace the dimensions of HEF's role.

Challenges in the HEF system were identified at several steps of the process including acquiring a IDPoor card, using benefits and receiving care. Respondents still reported that some people lacked information and, as result, they missed out on benefits. Sometimes people also did not know that the cards expire, and that they cannot use their households' card (or their partner's) unless their name is included in it. Another challenge was the IDPoor process, which was seen by some as having errors of including the wrong people and excluding the deserving people. Once a household had a IDPoor card, beneficiaries experienced different challenges. Supply-side respondents highlighted that people not bringing the card was a major challenge to provide services. Some people would forget the card in a rush to the facility and end up paying for cheap services (especially if the return trip to collect the card is equally or more expensive). Others were reticent to use cards, afraid of receiving worse care or be submitted to lengthy procedures.

When people were willing to use HEF benefits, they could face financial and language barriers limiting their ability to benefit from them. OOP expenditures were commonplace among HEF beneficiaries, and the respodents often highlighted the need to pay for expenses not covered by HEF, especially in the hospital settings. Payments could be at times significant for the respondents, forcing them to borrow money. Voluntary informal payments, aimed at obtaining better care or expressing gratitude, were sometimes reported; according to supply-side respondents, these payments were no longer required by HWs, but some FGD respondents still reported the practice. Language barriers were a challenge for people from indigenous population backgrounds, especially older people who were not fluent in Khmer. The supply-side findings also highlighted some additional challenges that the HC encountered with registering IDPoor card beneficiaries if they came from outside the catchment area, or if they did not have the beneficiary's name in the Patient Management and Registration System (PMRS), and if the name of a household member was missing in the system.

Some of the challenges faced by HEF beneficaries could be synergistically addressed by the SDG system. Further focus on HWs care, attitudes and behavior towards patients may help addressing the negative experiences encountered by HEF beneficiaries, informal payments and the perceived lack of quality in public HCs. Identifying some of the mutually-reinforcing positive aspects of the SDG and HEF systems are additional policy measures for increasing the utilization of public facilities and reducing unnecessary OOP costs by this vulnerable group. The increasingly welcoming and friendly attitude of HWs attracts HEF beneficiaries, while HWs see this higher utilization by HEF beneficiaries as an additional supplement to their income, which can reinforce their positive behavior, creating a virtuous circle of improved motivation of HWs and increased utilization by HEF beneficiaries.

Opportunities to leverage technologies and communications to increasing availability of the "*right*" information with beneficiaries should also be explored. Similar to NQEMP assessments that follow up with HC patients and this has implications for their score, systems could be in place to follow up with HEF beneficiaries specifically. These could act as platforms to share information with them and also to collect useful information on their experience and satisfaction that can be used for troubleshooting. In addition, further education on HEF and other schemes should be a priority both in HCs and during outreach. HWs should collaborate with and follow up closely with HC Chiefs to ensure that the information is conveyed correctly.

Summary of Key Findings and Policy Implications

Service Delivery Grant (SDG) Implementation

→ SDGs were well-known and welcomed across most stakeholders in the health system.

→ Challenges decreased in time as stakeholders learned their roles.

SDG Outcomes on Utilization of Public Health Services

→ SDGs had a moderate and indirect influence increasing utilization of public health facilities through several mechanisms, including but limited to:

1. Increase in the availability of drugs and health workers;
2. Reduction in waiting times;
3. Greater availability of HWs;
4. Longer opening hours of public health facilities;

These findings were perceived by both supply and demand-side respondents and were part of communities' health-seeking priorities.

→ SDGs effect was heavily interlinked with the HEF system and other factors influencing communities' choice of provider.

→ Identifying some of the mutually-reinforcing positive aspects of the SDG and HEF systems are additional policy measures for increasing the utilization of public facilities and reducing unnecessary out-of-pocket costs.

SDG Outcomes on Quality of Care and Availability of Services

→ SDGs influenced the quality of care following several pathways.

→ FLSG funding was broadly and consistently used to increase the availability of equipment, supplies and consumables.

→ SDGs created a cycle of clear objectives, coaching and feedback serving as a roadmap to improve quality. Health system stakeholders believed that checklists and assessments created clear, common objectives for ODs and HCs, while ODs' guidance and feedback further improved HWs' understanding of their work and how to perform better.

→ SDGs increased HWs motivation through financial incentives, linking performance to reputation and improving the workplace.

→ Challenges remained regarding FLSG allocations, being too strict, staff shortages and struggles of health workers.

→ Differences between SDG phases were subtle and limited for several reasons, including the short duration of Phase 2, and especially an early exposure of HCs in Phase 3.

→ Potential design innovations that leverage technologies and communications may support with feedback loops and increase availability of information with the beneficiaries.

Factors Influencing Communities' Choice of Provider

→ People in the communities reported using both public and private providers, moving back and forth between public and private providers based on the accessibility and availability of services, respondents' socio-cultural perceptions and financial factors.

→ Physical barriers, requiring care at night, dual practice and services that were perceived as not available in the health center influenced people to seek care in private facilities.

→ Public HCs were sought for maternal and child health services and as entry point to be referred to hospitals.

→ Affordability was consistently mentioned by respondents across all FGDs as a reason for seeking public providers; private care was often considered faster and more convenient, which justified the additional cost.

Role of Health Equity Fund in Increasing the Use of Public Health Services

→ Findings from both demand and supply-side suggested an increase in utilization of public health care services among HEF beneficiaries.

→ The study observed good awareness and understanding of HEF benefits in general, although some challenges were reported regarding knowledge on how to access the benefits.

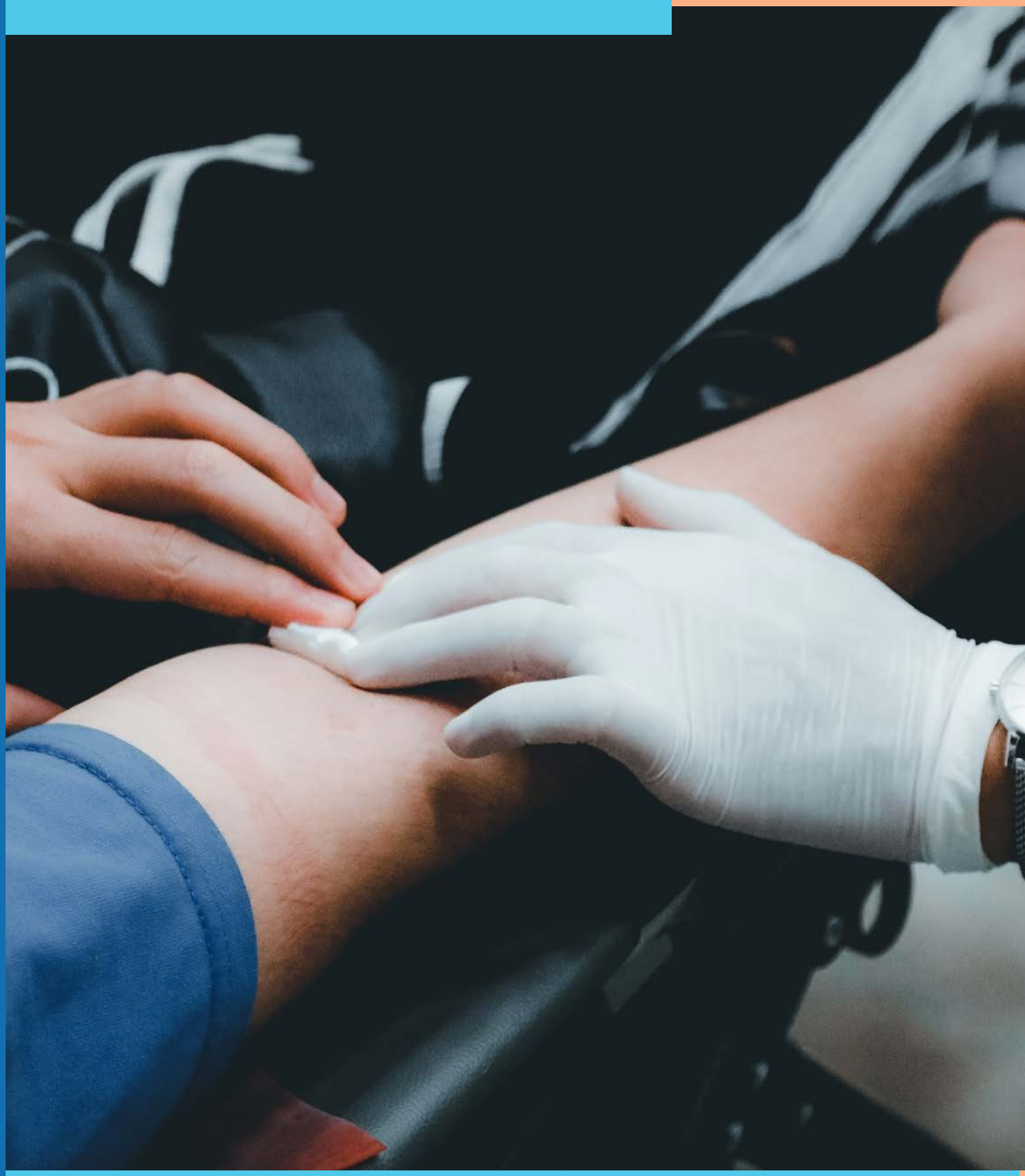
→ Challenges in acquiring a IDPoor card, lack of information on accessing HEF benefits and using cards, and financial and language barriers when trying to use benefits and receiving care limited the ability of respondents to benefit from HEF.

"When we have budget package, it means that our Health Centers are self-sufficient and don't need Operational Districts to spend money on our behalf. We can spend ourselves according to the guidelines that they give us. Well, we are responsible for ourselves (....) we can buy immediately, we don't need to wait"

- HC10 Phase 2 Endline

"There were a lot of people who accessed services in our facility because they understand the IDPoor card. If they visit for prenatal care and vaccinations, they will be also provided some allowances"

- HW23 Phase 1 Endline



1.

Introduction

The aim of this report is to present the qualitative findings of the Service Delivery Grants (SDGs) impact evaluation, undertaken in Cambodia in the second half of 2018 and 2019. The qualitative study explores aspects of SDG implementation, outcomes and impact, health-seeking behaviors and challenges, and the role of the Health Equity Fund (HEF). The results of in-depth interviews (IDIs) and focus group discussions (FGDs) conducted with health system stakeholders and health service users featured in the report complement and enhance the knowledge from the quantitative SDG impact evaluation surveys and the administrative data presented in the main impact evaluation report. The report includes a discussion and outlines some policy implications on these themes in the closing chapter.

Background

Cambodia remains a leading example of how a low-income country can quickly advance toward health goals[1]. Progress and innovations in health financing and in-service delivery in the country have contributed to the achievement of all health-related Millennium Development Goals (MDGs) and set course to the Sustainable Development Goals. The government is improving access to care through a larger health workforce, as well better-quality health infrastructure. There are continuing efforts to improve the quality of health services, which encompass preservice training, in-service training, an ambitious performance-based financing program, and efforts to strengthen regulation.

So far, there has been notable improvement in the maternal and child health outcomes. The maternal mortality ratio decreased from 442 per 100,000 live births in 2005 to 170 per 100,000 live births in 2014, and under-5 mortality rate decreased from 83 per 1,000 live births in 2000 to 35 per 1,000 live births in 2014. In 2010 the MDG Progress Index estimated that Cambodia ranked the fifth best performer out of 76 countries. Strong political commitment combined with a willingness to innovate yielded significant improvements in service delivery including dramatic increases in facility-based deliveries (10 percent in 2000 to 83 percent in 2014), uptake of antenatal care (ANC), and coverage of other maternal and child health services.

Despite these improvements, the need for stronger efforts to reduce inequities in care due to geography and income persists. For example, the reduction in child mortality since 2005 was twice as high in urban areas compared to rural, and higher for the richest income quintiles compared to the poorest. Child mortality has remained unchanged at 3.3 times higher for the poorest quintile compared to the wealthiest quintile since 2005, and three times higher for rural children compared to urban children. Inequities in utilization of health services accounted for part of the inequities in health outcomes. Moreover, health spending is a major source of debt and impoverishment among the poor and near-poor, and the chronically ill. Despite an overall decline in health spending and catastrophic spending as a percentage of income in recent years due largely to rising incomes, an estimated 2 percent of Cambodians fell into poverty in 2011 due to health costs. Health spending remains a significant burden on the poor, with about 18 percent of the poor incurring debt because of health expenses.

Two major health financing initiatives that stand out in the Cambodian context have endeavored to enhance the performance of the public health system with a focus on the poor and aim to improve financial protection by addressing high out-of-pocket (OOP) spending. They are the HEF, a health financing system that reimburses hospitals and health centers (HCs) for the user fees they would have otherwise received, and aims to improve access to health services for the poorest people in Cambodia, and SDGs, a financing program that has rewarded health facilities with flexible resources to enhance the provision of quality health services at all levels.

1 This section is adapted from the SDG Impact Evaluation Baseline Report (Nagpal et al, 2019)

Health Equity and Quality Improvement Project (H-EQIP)

H-EQIP is the flagship project of the Cambodian Ministry of Health (MOH, 2016) with cofinancing from the Governments of Australia, Germany, and Korea, and the World Bank. It builds upon the innovations and achievements of its predecessor projects, the Health Sector Support Project (HSSP), and the Second Health Sector Support Project (HSSP2). In particular, it consolidates and scales up proven, potentially transformative interventions such as the HEF system and SDGs. Key shifts in H-EQIP design from its immediate predecessor HSSP2 include: (i) mainstreaming implementation of project activities through Royal Government of Cambodia (RGC) systems; (ii) increasing funding flows to the implementation level; (iii) building domestic capacity to take over project implementation support and monitoring; and (iv) introducing use of output-based payments through HEF, performance-based financing through SDGs, and Disbursement Linked Indicators (DLIs). Through these measures, H-EQIP aims to accelerate overall reforms in the health sector, improve financial protection for the poor and vulnerable groups and expand access and coverage of health services while strengthening their quality and affordability, and create sustainable government institutions for health care management.

H-EQIP is divided into three components:

Component 1 – Strengthening Health Service Delivery: Component 1 uses re-designed SDGs to provide performance-based financing to different levels of the health system based on results achievement. SDGs target HCs, referral hospitals (RHs) and the supervisory levels - the Provincial Health Departments (PHDs) and Operational Districts (ODs), by measuring and incentivizing their performance;

Component 2 – Improving Financial Protection and Equity: Component 2 expands the HEF system, increasing domestic ownership and creating sustainable domestic institutional arrangements for managing HEFs. It aims to improve utilization by the poor and ensure sustainability by transferring implementation responsibilities to domestic institutions in a planned and progressive manner during the project implementation period. The Payment Certification Agency (PCA)[2] created under H-EQIP is expected to gradually enhance its capacity and skillsets to perform the HEF monitoring and payment verification roles, as well as manage the information system for HEFs;

Component 3 – Ensuring Sustainable and Responsive Health Systems: Component 3 uses results-based instruments known as Disbursement Linked Indicators (DLIs) to improve supply-side readiness and strengthen health sector institutions, enhance the quality of pre-service and in-service training for health workers (HWs), equip health facilities to meet minimum standards for providing obstetric and neonatal care, enhance health service quality monitoring, improve timeliness of SDG and HEF payments, and establish sustainable health service purchasing arrangements. This component also finances civil works identified in MOH's civil works plan for 2016-2020, prioritizing investments in remote areas, and addressing concerns of patient safety and maternal and neonatal survival. It also supports project management activities such as day-to-day coordination, administration, procurement, financial management, environmental and social safeguards management and monitoring and evaluation. This component also benefits from a grant contributed by the Government of Japan through the World Bank- Japan Policy and Human Resources Development Trust Fund, which has been important in supporting the monitoring activities undertaken as part of the SDG system.

H-EQIP was approved by the World Bank Board of Executive Directors on May 19, 2016 and became effective on November 9, 2016, with an initial five-year duration, through June 2021 and received two rounds of additional financing and an extension until 2022 over the course of its implementation.

2 The Payment Certification Agency is an autonomous public entity created by the Royal Government of Cambodia in 2017 to support the administration of the Health Equity Fund system, and also as the verification agency for Service Delivery Grants.

Operationally, the framework for quality improvement initiatives under H-EQIP includes the following:

- To provide additional, flexible financial resources to health facilities to improve the use and functionality of available infrastructure, and maintain availability of necessary supplies and consumables, through fixed lump sum SDGs for all levels of the health system.
- To measure and reward improvements in performance of health facilities, HWs' knowledge and clinical skills, hygiene and infection control, availability of medicines and consumables, through performance-based SDGs for health facilities.
- To improve performance of health facilities through performance-based SDGs for supervisory levels, to improve monitoring and supervision, introduce standardized assessments of performance, and reward coaching and other measures taken by supervisors.
- To enhance the competencies and skills of HWs through pre-service as well as in-service training opportunities through disbursement linked indicators.
- To promote access and availability of services, especially in remote areas through necessary augmentation to the health infrastructure.

To improve HWs' morale, motivation and remuneration in a manner closely linked to their performance on quality, improved productivity and higher patient satisfaction through an overall focus on results, performance and performance-linked payments.

Service Delivery Grants

H-EQIP has used performance-based payments under SDGs with much stronger links to performance and focuses on quality of services (MOH, 2016). This is combined with fixed grants to health facilities, in addition to further streamlining the funds flow and reporting arrangements. The payment of SDGs to HCs and hospitals is more closely linked to performance in the delivery of basic and comprehensive packages of services, such as critical reproductive, maternal, neonatal, child, and adolescent health services. The SDG includes two types of grants to achieve its objectives:

1. **Fixed Lump Sum Grants (FLSG)** are intended as a complement to the facility operational budget, to manage and implement direct spending for the purpose of promoting quality and equity in patient care.
2. **Performance-based Grants (PBG)** are intended to reward health facilities for quality performance and to reward OD and PHD offices, and in particular, certified assessors in these offices, for conducting quality ex-ante assessment. Up to 80 percent of PBGs can be spent for staff incentives. At least 20 percent of PBGs are eligible for any other SDG-eligible expenditures from those laid out in the H-EQIP SDG manual, such as small civil works, equipment, drugs, and operational costs. The performance-based SDGs are an additional layer of payments that are provided, based on assessed and verified performance, over and above the FLSGs.

Quality health service delivery in the H-EQIP operational definition refers to infrastructure development, managerial capacity, and clinical competency, achieved through the implementation of new performance-linked SDGs introduced under H-EQIP, that is in effect at three levels: PHD and OD offices, RHs, and HCs. The performance of these entities is measured by the National Quality Enhancement Monitoring Tools (NQEMT), which are applied quarterly by certified assessors from the OD and PHD offices.

The ex-post verification (on a sample basis) for the PBG was initially carried out by an independent verification agency financed by KfW, and in early 2019, this function was handed over to PCA set up as an autonomous entity under the MOH with a multi-stakeholder board chaired by the Ministry of Economy and Finance (MEF). Once assessed and verified, the MOH releases the performance-based SDG payments directly to the health facilities, which provide a flexible source of funding that can be used as per the provisions of the SDG manual.

Provincial Health Department and Operational District levels

SDGs at this level aim to strengthen the management of ODs and PHDs. Performance of ODs and PHDs is measured every quarter against their self-reported activities on a scorecard measuring key supervisory processes and health system outputs. These include: (a) timely completion of quality checklists for health facilities in their jurisdiction; (b) contribution to capacity building activities for in-service and pre-service training; (c) drug stock-outs in health facilities, human resources availability; (d) submission of Health Management Information System (HMIS) reports; and (e) quarterly review meetings and system functionality. Funds received by these supervisory levels are predominantly intended to meet their travel costs (travel for assessment and coaching is also supported through this mechanism) as well as for performance-based incentives.

Health Centers

SDGs to HCs help support the delivery of Minimum Package of Activities for HCs. The quality of service delivery is systematically measured each quarter, using standardized assessment tools. The NQEMT at HC level include: the HC balanced scorecard, indices tool, individual performance evaluation for HC staff, selected and adjusted clinical vignettes (adapted from those used in the L2 quality assessments[3]), neonatal observational checklist, and content of care traces extracted from community client satisfaction surveys. Structural measures comprise the context in which care is delivered, including infrastructure, staff, financing and equipment. Process measures include the technical and interpersonal process and actions that make up health care as reflected in the transactions between patients and providers and staff throughout the delivery of health care. Outcomes refer to the effects of health care on the status of patients and populations and will be considered a result of inputs and processes of care. Since 2018, additional performance-based resources are available for the special needs of remote areas and for HCs with a higher proportion of indigenous population.

SDG Impact Evaluation

The purpose of the SDG impact evaluation is to measure the impact – outputs and short-term outcomes – of implementation of performance-based SDGs. More specifically, the evaluation aims to assess the impact of PBGs through the implementation of National Quality Enhancement Monitoring Program (NQEMP), in parallel with the synergistic effects from fixed lump sum SDG. The evaluation has three primary research questions:

1. Does the NQEMP have an impact at the levels of the ODs and HCs?
2. Are the impacts of the intervention heterogeneous with regard to differences in the local context? This includes variations across ODs, HCs, HWs and populations.
3. Does the intervention affect equity? In particular, does the intervention narrow the gap in the various outcomes across HCs (for example, by raising the performance of the initially lower-quality centers) and populations (especially HEF and non-HEF)?

The impact evaluation uses a 'difference-in-difference design' that compares the change between a baseline and follow-up time in districts that received the intervention versus districts that did not receive the intervention. The treatment assignment for rolling out NQEMP is at the OD level and was rolled out in three phases. In the first phase, the intervention was purposefully rolled out to Special Operating Agency (SOA)[4] districts, as those districts were more "*ready*" to implement the intervention. This initial assignment was not randomized. The assignment of the remaining non-SOA districts was randomized. Half of these districts were assigned to the rollout in Phase 2 (called "*treatment*" districts) while the other half were assigned to receive the intervention in Phase 3 (called "*control*" districts) *(Table 1)*.

The impact evaluation uses a range of measurement methods that provide a combination of administrative data and survey data. The methods include: impact evaluation quantitative surveys and qualitative interviews, NQEMP quality scores, Implementation Support Mission aide-memoires, SDG Process documentation, Cambodia Socio Economic Survey (CSES), Cambodia Demographic Health Surveys (CDHS), and administrative data from the Cambodia Health Management Information System (HMIS) and the Patient Management and Registration System (PMRS). The impact evaluation quantitative surveys were arranged to take place at three points aligned with SDGs' Baseline, Midline and Endline surveys. This set up aimed to collect data before the rollout of NQEMP to the ODs in the first, second and third phase, allowing for comparisons in time and between districts with and without NQEMP.

3 A 'Level 2' Quality of Care Assessment (more comprehensive and advanced compared to a Level 1 assessment done previously) was conducted in Cambodia during 2014-15 to collect baseline data on the quality of care, mainly the process of care, routinely offered at public health facilities. The design of the NQEMP has built upon this experience.

4 SOAs are designated organizational units with service delivery functions, which are granted some additional delegation of managerial authority and flexibility, jointly by the MOH and MEF, under a sub-decree and other policy issuances, in return for stronger accountability for performance.

Following the findings and recommendations of the Baseline report completed in 2018 (Nagpal et al., 2019), the impact evaluation team decided to incorporate qualitative research into the Midline and Endline rounds of the impact evaluation, benefitting from the phased rollout of NQEMP and PBG. This qualitative study aims to support triangulating and explaining the quantitative findings in the impact evaluation, and to pick up some qualitative elements that may not be discernible using quantitative methods. To do this, it elicits and provides information on SDG implementation, the suggested mechanisms through which SDG (FLSG and PBG) had an impact on quality and utilization, and the demand-side factors that shape SDG's impact on utilization. The qualitative report also inquires about beneficiary and provider perspectives that answer the "*how*" and "*why*" questions that have policy relevance. As a piece supporting the larger impact evaluation, the key findings of this report are also included in a qualitative chapter in the impact evaluation report, where they are compared to quantitative findings and discussed together.

To achieve these objectives, a combination of IDIs and FGDs were used to explore the knowledge, experience, and views of stakeholders in the health system and users of health services.

TABLE 1. Number of Facilities in the Baseline Survey by Phase and Province

Province	Phase 1 (SOA)	Phase 2 (treatment)	Phase 3 (control)	Total
Banteay Meanchey	2	-	2	4
Battambang and Pailin	-	4	2	6
Kampong Cham	3	1	-	4
Kampong Chhnang	-	2	1	3
Kampong Speu	-	2	-	2
Kampong Thom	-	1	2	3
Kampot and Kep	-	1	2	3
Kandal	-	2	2	4
Kratie	-	-	2	2
Mondul Kiri	1	-	-	1
Oddar Meanchey	1	-	-	1
Phnom Penh	-	3	4	7
Prey Veng	1	3	2	6
Pursat	1	3	-	4
Ratanakiri	1	-	-	1
Siemreap	4	-	-	4
Sihanoukville	-	-	1	1
Stung Treng	1	-	-	1
Svay Rieng	-	3	1	4
Takeo	4	-	-	4
Tbong Khmum	2	2	1	5
Total	**21**	**27**	**22**	**70**

2.

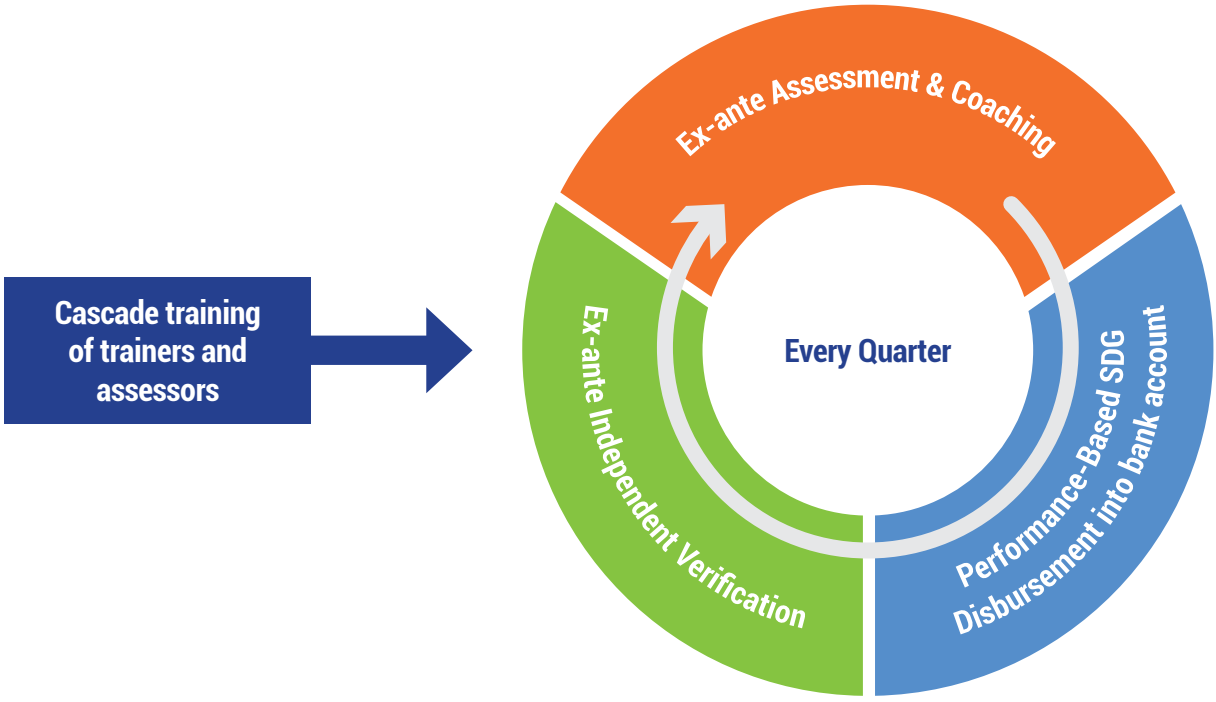
Methodology

SDG Theory of Change and Results Chain

The schematic in *Figure 1* outlines the theory of change as relevant to the SDG implementation, including the expected short-term outcomes, while *Appendix 1* outlines the SDG results chain in more detail.

As detailed in the full results chain in *Appendix 1*, SDG combines assessments using the NQEMT with performance-based financing through the PBG. The NQEMT provides clear goals and understanding on how to improve quality of care, while ex-post verification and ex-ante assessments provide key information for the coaching and management of HCs. PBG linked financial incentives to this assessment, thus aligning the remuneration of ODs and HCs with their performance, closing a positive feedback loop. The quality of health service delivery is positively reinforced through quarterly quality assessment using NQEMT, leading to the regular disbursement and use of performance-based SDG.

FIGURE 1. Schematic representation of the Theory of Change from Service Delivery Grants in Cambodia



EXPECTED OUTCOMES	
Supply	**Demand**
1. Improved monitoring and evaluation 2. Improved managerial capacity and financial autonomy 3. Improved perceptions of quality of care by health worker 4. Increased motivation and morale of health worker 5. Improved health worker clinical competency 6. Increased availability of health worker at health facilities 7. Improved use and functionality of available infrastructure 8. Increased availability of necessary supplies and consumables	1. Improved perceptions of quality of care by citizens 2. Improved financial protection 3. Increased utilization of public health facilities

In addition, NQEMP assessments support monitoring and evaluation, and perceptions of quality of care and clinical competency of HWs. The combination of assessments and PBG incentives is aimed to increase HWs' motivation and reinforce their morale and clinical competency. In addition, the combination of PBG and FLSG funds supplements the budget available to HCs to improve use and functionality of infrastructure, and availability of staff, supplies, and consumables. The ability to use these funds further strengthens managerial capacity and financial autonomy. All these outcomes have a direct effect on improving quality of care and attracting more users and leading to increased utilization of public health services.

This later step in the Theory of Change works in combination with the HEF. The HEF purchases services from public health facilities on an output basis (through a reimbursement of user fees on behalf of the poor). The HEF, thus, closely interacts with SDGs by enabling and increasing demand for HC services, especially for the most vulnerable groups in the population, increasing access to health services for the poor. Improved quality and performance of health facilities also attract more use by HEF beneficiaries, reinforcing and leveraging the quality improvements from SDGs, and further augmenting a major source of flexible revenue within the health system. Improved quality of services at HCs and hospitals also improves the effectiveness of HEF at achieving its objectives - with better quality of care, and improved demand for public health services.

Operational Districts

SDGs provide ODs with regular, verified, and detailed data on the quality of care at HCs. This aims to raise awareness of performance issues, which interact with incentives for the OD to perform essential management and supervision tasks. This is expected to:

- Increase OD awareness of performance issues and local constraints, including staffing and performance;
- Focus OD efforts on improving quality at lower-performing facilities;
- Lead ODs to increased, better informed and more regular/routine supervision of HCs.

The intervention directly encourages ODs to improve their management of clinics. It also creates indirect incentives, as HCs may more actively demand OD support so that they can improve their quality and hence obtain a larger bonus payment. As a result, the injection of SDG is likely to:

- Improve and change OD management in line with the incentives under NQEMP;
- Improve targeting of supervision and resources to facilities that are most in need;
- Enhance overall performance of the OD, for example, with regard to training, stock-outs, HMIS reporting, and indicators measured by the NQEMT;
- Increase the motivation and satisfaction of the OD and HC staff.

Health Centers

The intervention provides HCs with a range of incentives, as well as financing and autonomy to improve performance and motivation. The intervention is expected to:

- Increase the productivity of HC staff, as measured by improved performance on measured indicators, lower absenteeism and improved clinical quality;
- Improve the allocation of resources to deficient areas of care, and facility management, so as to improve quality scores;
- Increase HCs' awareness of performance problems, because of increased supervision by the OD and regular data collection/reporting that is tied to bonus payment;
- Focus HCs' attention on clients and improve attitudes toward clients;
- Raise the motivation of staff, thus improving retention and lowering the rate of workers engaging in "*dual practice*".

Households

Although the SDG results chain intervention does not directly target households, it is expected to indirectly impact households in the respective districts and catchment areas through the improved performance of the health facilities. Increases in the quality and quantity of health care delivery will increase the demand for such services. The intervention at the OD and HC levels is expected to:

- Increase the quality of care received, which in turn could affect perceptions of quality Increase demand for health care services at the HC level, thus increasing care seeking behavior and reducing the utilization rate of informal providers, private providers and higher-level public facilities;
- Improve equity as HEF households may disproportionally benefit because of the added demand-side incentives to use HCs.

Research Aim and Questions

The study was conducted in parallel at two levels, the health system and health care provider level (supply-side) and the user level (demand-side). On the supply-side, the study aims to explore SDG implementation using the perceptions and experiences of subnational stakeholders. It also aims to identify the impacts of SDG in the areas of health service provision and its implications on quality of care and utilization of service at public facilities, particularly HCs:

The supply-side research questions include:

1. What are ODs', HCs' and HWs' awareness, understanding and perceptions of SDG?
2. How has SDG (FLSG and PBG) funding been used in ODs and HCs?
3. What were the challenges in the implementation of SDG?
4. What implications and impacts did interventions have on quality of care and the use of health services?
   - How has SDG influenced different outcomes (for example, availability of supplies, workers' motivation) leading to better quality of care?
   - Did the improvements in the quality of care lead to improvements in utilization of public health services (explored in both supply and demand)?

On the demand-side, the study aims to understand the impact of SDG on quality of care and utilization of public health services as perceived by the community, particularly the poor. Using demand and supply information, we explored a second question on SDG's impact:

5. How did perceptions of service delivery and quality of care across users vary with the introduction of SDGs?
6. Did the improvements in the quality of care lead to improvements in utilization of public health services (explored in both supply and demand)?

In addition, the study aims to understand health-seeking behaviors and challenges of communities, and to explore HEF's role reducing OOP expenditure by the poor through increased use of public facilities.

The demand-side research questions also include:

7. What are the health-seeking behaviors among community members? What are the reasons informing their choices of provider (for example, public versus private, HC versus hospital)?
8. What were the challenges faced by HEF beneficiaries when using HEF and visiting public health facilities?
9. What was the role of HEF in increasing the use of public health services?

Design, Sample and Methods

Data collection for the qualitative study was structured in two rounds coupled with the second (called 'Midline') and third ('Endline') data collection points of the SDG's quantitative survey (*see Figure 2*). This allowed for better comparability of quantitative and qualitative data and use of the survey data collection structure. Midline data collection included slightly more open questions to explore areas of interest for the study, while the Endline data collection contained a more structured and exhaustive list of questions and probes, to achieve a greater level of detail.

The study uses the IE design and its phased rollout to make useful comparisons between the phases that had received the PBG interventions already and those that did not. More specifically, Endline data was compared between SDG Phases 1, 2 and 3. Phase 1 represented all former SOAs, while Phases 2 and 3 included all the non-SOAs, randomized across two groups that had or had not received the intervention at the time of the Endline study. Whenever possible, the study compared Endline data to Midline data from Phases 2 and 3, when both these phases had not received the PBG interventions yet but were receiving the FLSGs.

Respondents were selected following purposive sampling; this selection aimed to interview community members and key health care providers and managers across a range of provinces involved in the implementation of SDGs, to maximize diversity of representation.

Whenever possible, the Endline data collection was conducted approximately at the same facilities and communities reached during Midline. This approach aimed to improve the comparability between Midline and Endline data and explore changes in time. For IDIs (*Table 2*), the sample was reduced to reduce the time and resources invested in travelling and allowed for longer, more detailed interviews. For FGDs, the same villages were sampled at Midline and Endline samples (*Table 3*). The interviews were more detailed and the number of FGDs was duplicated, allowing for smaller FGDs where each respondent could provide feedback in more detail.

FIGURE 2. Service Delivery Grant rollout Timeline and Data collection Points in the Impact Evaluation

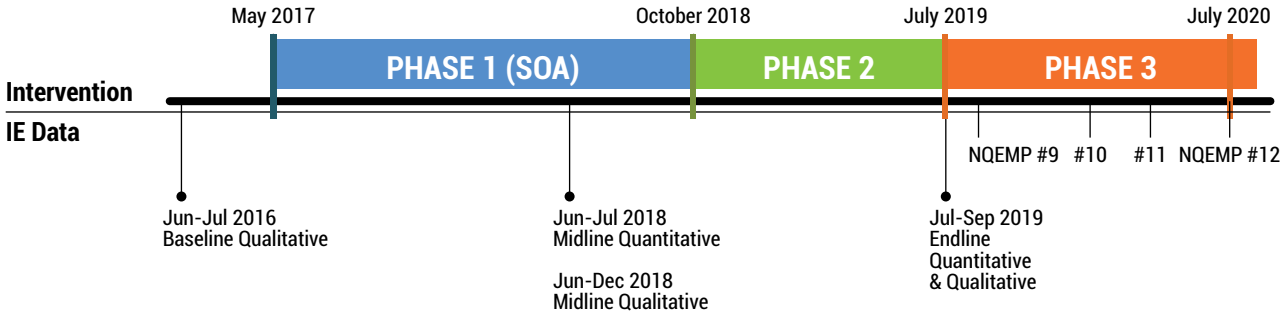


TABLE 2. Summary of Operational Districts (ODs) and Health Centers (HCs) sampled for the qualitative study, at Midline and Endline

Respondent*	Midline	Endline	Phase
OD1	✓	✓	1
OD2	✓	✓	1
OD3	✓	✓	3
OD4	✓	✓	3
OD5	✓	✓	2
OD6	✓	✓	2
OD7	✓	✓	3
OD8	✓	✓	2
HC1	✓	✓	3
HC2	✓	✓	3
HC3	✓	✓	2
HC4	✓	✓	1
HC5	✓	✓	3
HC6	✓	✓	3
HC7	✓	✓	2
HC8	✓	✓	3
HC9	✓	✓	3
HC10	✓	✓	2
HC11	✓	✓	1
HC12	✓	✓	1
HC13	✓	Not collected	2
HC14	✓	Not collected	2
HC15	✓	Not collected	2
HC16	✓	Not collected	1

*Respondents have been coded by type and not named in this report to protect the confidentiality of informants

TABLE 3. Summary of villages sampled for the qualitative study, at Midline and Endline

Village number*	Midline	Endline	Phase
1	FGD 1	FGD 5 & 6	2
2	FGD 2	FGD 3 & 4	3
3	FGD 3	FGD 20 & 21	1
4	FGD 4	FGD 11 & 12	3
5	FGD5	Not collected	1
6	FGD 6	FGD 25 & 26	1
7	FGD 7	FGD 13 & 14	2
8	FGD 8	FGD 15 & 16	3
9	FGD 9	FGD 23 & 24	1
10	FGD 10	FGD 17 & 22	2
11	FGD 11	FGD 9 & 10	3
12	FGD 12	FGD 7 & 8	2
13	FGD 13	FGD 1 & 2	3
14	FGD 14	FGD 18 & 19	3

*Villages have not been named in this report to protect the confidentiality of informants.

In-depth Interviews

IDIs were conducted with HC Chiefs (that is, Director of the HC), HWs and OD Directors. The study aimed to sample a balanced selection of ODs and HCs across the three phases of SDG impact evaluation following their quality score in the L2 quality assessment undertaken by the MOH in 2014-15. A detailed explanation of the process to select the Baseline ODs and HCs can be found in the impact evaluation Baseline study report (Nagpal et al, 2019).

OD Directors and HC Chiefs (or their Deputies) were contacted two days in advance by the field team supervisors to set a date and time for the interview and provide them time to gather the facility budget, revenues and HEF utilization documentation before the actual interview. In each of the HCs, at least two HWs were interviewed. All HWs needed to have worked in the facility for at least one year to be considered eligible for the interview. One of the IDIs targeted a HW with a role directly connected to SDG, for example, handling the role of the cashier or accountant- as the HC level does not have dedicated accounting staff and one of the HWs is trained to add that role in addition to their other duties. The other targeted any HW, ideally providing maternal or child health services such as midwife, nurse or vaccinator. At least one of these two staff needed to be responsible for nutrition and immunization.

Focus Group Discussions

FGDs with community members were conducted across seven provinces. Communities were selected from the catchment areas of selected HCs based on three criteria; urban or remote, the standard deviation of the L2 quality assessment score of the OD in which they were placed, and the phase of their HC. In addition, villages had to be accessible by car at the time of data collection.

Respondents were eligible if they had experienced at least two visits to a public health facility in the year preceding the evaluation, and at least two of these participants had had one of these visits in the six months before the evaluation. In addition, depending on their groups they had to follow some of the following eligibility criteria: (i) be indigenous people (there were separate FGDs for indigenous vs non-indigenous); (ii) age (15-49 years old vs. older than 49 years old); (iii) IDPoor/HEF status (HEF vs. non-HEF); and (iv) gender (male vs. female) adults. The ideal number of FGD participants was six and eligible respondents could include patients, their caretakers, and their companions. In each village, the field team supervisor first met the village chief, presented her/him with the mission letters and introduced her/him to the specific objectives of the project's qualitative component. To identify HEF beneficiaries and indigenous people, the research team asked for the village chief's assistance to identify potential FGD respondents within these groups. The field team supervisor also asked for the village chief's assistance to decide on the most suitable place for the FGD. FGDs were conducted in a quiet place, where risks for disruption or interruption were minimal, and where confidentiality was ensured, so respondents could feel confident when giving their responses. Typically, FGDs were conducted in a public space such as the village ceremony hall, a school classroom, or a pagoda.

Research Tools

Semi-structured research tools were used for both FGDs and IDIs. These tools provided a list of questions and key probes that interviewers should ask. This approach helped to ensure that key topics were discussed and helped to improve the comparability of the results across respondents of the same type. In addition, the interviewers adopted a flexible approach to using the tools and could follow up as they found necessary to ensure they captured all relevant information in the interview. *Table 4* presents a summary outline of the tools.

TABLE 4. Summary outline of tools used for in-depth interviews (IDIs) and focus group discussions (FGDs)

Tool	Outline
Operational District tool (IDIs)	1. Respondent background 2. Awareness of SDG and other sources of financing 3. Experience and perception of FLSG and PBG 4. Observed changes at HC level 5. Observed changes at OD 6. HEF utilization 7. Recommendations
Health Center tool (IDIs)	1. Respondent and HC background 2. Awareness of SDG and other sources of financing 3. Experience and perception of FLSG and PBG 4. Observed changes at HC level 5. HEF utilization 6. Recommendations
Health Worker tool (IDIs)	1. Respondent and HC background 2. Awareness of SDG and other sources of financing 3. Experience and perception of FLSG and PBG 4. Observed changes at HC level 5. Information on nutrition and immunization 6. HEF utilization 7. Recommendations
Focus group discussion tool	1. Background information 2. Common health-seeking information 3. HEF knowledge 4. Experience with HEF utilization 5. Changes in quality of care in the previous six months 6. Recommendations

Data Collection and Analysis

A total of 60 IDIs and 14 FGDs were conducted as part of the Midline between June and December 2018, and 47 IDIs and 26 FGDs as part of the Endline between July and August 2019. *Table 5* provides details of the number of IDIs and FGDs conducted per respondent type in each round of data collection.

TABLE 5. Number of in-depth interviews (IDIs) and focus group discussions (FGDs) conducted at Endline and Midline, stratified by respondent type

Type of respondent	Midline	Endline	Total
OD Director (IDIs)	8	8	16
HC Chief (IDIs)	18	13	31
HW (IDIs)	34	26	60
Community (FGDs)	14	26	40

IDIs and FGDs were conducted in Khmer language by local researchers and recorded for analysis purposes. Each IDI and FGD involved two staff: one moderator who led the interview/discussion and asked all the questions and one note-taker. During the Midline round, data collection was directly conducted by two of the authors (Sreytouch Vong and Ponnary Pors) who also contributed to the study design and tools. During the Endline round, data was collected by a team from Angkor Research and Consulting. To ensure the quality of the Endline data, the study teams were trained on the key aspects of SDG, the impact evaluation and the qualitative study and the tools to be used. For the Endline round, a four-day training was run with the enumerators focusing on the semi-structured tools including field practice. To support the quality of the data collection process, supervisors were in the field with the interviewers throughout the whole data collection process.

Transcription and Translation

All IDIs and FGDs were transcribed verbatim in Khmer from audio recordings and reviewed to check for missed or misheard words. Transcripts were then translated to English for analysis, using notes to support the task, aiming to convey the real meaning of the source language. Each translation was reviewed to ensure comprehensibility, appropriateness, and accuracy. To ensure the quality of transcripts and translations, two members of the World Bank team (Chean Men and Chanrith Prom) conducted extensive quality control checks on the transcripts, comparing them against recordings, and comparing translations against the original transcription. Microsoft Word was used for transcriptions and translation.

Analysis of FGDs and interviews

Data was analyzed following the Framework method (Gale et al., 2013). First, the analysis team produced a list of codes (descriptive conceptual labels) based on the preliminary screening of the transcripts, the SDG results chain, and the research aims and questions of the impact evaluation. The framework was then further refined through discussion between the two main authors (Miguel Pugliese Garcia and Chean Men) and consultation with the wider research team, with close guidance from the principal investigator (Sebastian Bauhoff) and SDG task team leader and co-investigator (Somil Nagpal). This step was used to ensure the relevance, clarity, and consistency of the codes to be used by the two analysts. The framework contained codes organized into categories by thematic proximity. These discussions led to the working analytical framework.

The working analytical framework was then applied to the transcripts following a combination of deductive and inductive approaches. The process involved categorizing the information in the transcripts into the pre-determined codes and recording and organizing any new codes emerging from the data. As the analysts read through transcripts, new codes were shared and discussed with the research team in an iterative process, adding new codes to the framework and refining its structure as needed. As the analytical framework was applied to the transcripts, qualitative data was charted into the framework matrix; and a spreadsheet organized with the codes and categories developed. In

the matrix, each theme was presented in a column, and each respondent in a theme. Quotes from a given respondent and theme were introduced at their intersection in the spreadsheet.

At this stage, the research team decided to chart the qualitative data in the form of relevant quotes from the text rather than summaries of its content, as suggested in Gale et al. (2013). This approach was followed to minimize the loss of information when the data was interpreted and to support the consistency of the intepretation. The intensity of themes was determined by how respondents expressed their ideas on the identified themes, looking for nuances in their statement. The frequency of each code was also recorded to differentiate sporadic reports from common feedback. All the relevant information in the transcripts was sorted into the framework matrix.

Using the data in the framework, the analysts compared and contrasted information between respondents, codes, and categories to explore the data further. In this process, they aimed to identify patterns, interrogate the SDG theory of change, explore the consistency of the information emerging and map connections between categories to explore relationships and causality. The analysis was an iterative process in which the analysts worked with other team members to move from descriptive findings to more elaborate, interpretative outputs. In this process, the analysts assessed the evidence behind every theme, considering the consistency, quality and frequency of the data presented, and assessed negative cases and unexpected findings. The process of comparing codes and categories produced a list of themes, interpretive concepts or propositions that described or explained aspects of the data. Findings were continuously discussed and cross-checked among the analysts, to ensure common understanding and consistency. Regular check-ins with the co-authors as well as with other contributing team members were undertaken routinely, also discussing any questions or areas where the authors needed further feedback or contextual knowledge. Findings were also further confirmed through consultation with the teams in charge of the SDG implementation and the members of the overall impact evaluation. Findings were also synthesized in different ways, including a comparison between Midline and Endline findings, among respondents receiving PBG versus those not having received it yet and based on key respondent characteristics, with a special focus on groups of interest (women, indigenous groups and HEF beneficiaries). Any relevant differences along these domains are presented in the findings and discussion in their corresponding themes.

The findings of the study are presented in a narrative that includes quotes illustrating different reports, key information and providing context to the information. Graphs and tables were used to summarize and compare findings and present interactions between different findings such as SDG outcomes and community perceptions. The analysis team used NVivo 11 and Microsoft Excel in the analysis process.

Ethics

Ethical clearances for this evaluation study were obtained from Cambodia's National Ethics Committee for Health Research (NECHR). Participation in the study was voluntary and with informed consent.

3.

Results

Results are organized thematically according to the larger topic of conversation (i.e. implementation, outcomes, etc.), the SDG theory of change outcomes and whether they belong to supply-side (IDI) or demand-side respondents (FGD). Each section presents results organized thematically with quotes to illustrate them. Midline and Endline findings are presented together in each theme, with specific mentions in the relevant cases where they differed from each other. A summary of themes and additional quotes of interest related to these themes can be found in the *Appendix 2*.

Sample Characteristics

IDI Respondents

Overall, the Midline interview sample (*Table 6*) included a somewhat higher number of men (58 percent) than women (42 percent); however, the proportion of men was far greater at the level of OD Director (83 percent) and HC Chief (91 percent), while women constituted the majority of the respondents at the HW level. Most of the OD and HC respondents were OD Directors (83 percent) and HC Chiefs (91 percent) themselves, rather than their Deputies, while most HWs interviewed held positions as midwives (47 percent) or accountants (26 percent). HWs who reported being cashier or accountant in a part-time capacity also worked in a different role providing care, often as midwives. OD Directors were usually doctors or medical assistants (33 percent each), with one to four years of experience (50 percent) or 15 or more years of experience (33 percent). Most HC Chiefs were nurses (36 percent primary, 45 percent secondary) with 15 or more years of experience (55 percent) followed by one to four and five to nine years of experience (18 percent each). HWs were normally midwives (53 percent primary, 16 percent secondary) with ten or more years of experience (53 percent), followed by one to four (32 percent) and five to nine (16 percent) years of experience. All respondents were normally placed in rural ODs (67 percent) or rural HCs (73 percent HCs and 89 percent HWs) and were roughly equally distributed between Phases 2 and 3, and across the five provinces where the Midline study was conducted: Banteay Meanchey, Kampong Chhnang, Kratie, Pursat and Tbong Khmum.

TABLE 6. Characteristics of Phase 2 and Phase 3 in-depth interview respondents at Midline

		OD		HC		HW		Total	
		#	%	#	%	#	%	#	%
Sex	Woman	1	(17)	1	(9)	13	(68)	15	(42)
	Man	5	(83)	10	(91)	6	(32)	21	(58)
Official title	Director	5	(83)	10	(91)	-	-	15	(42)
	Deputy Director	1	(17)	1	(9)	1	(5)	3	(8)
	Accountant	-	-	-	-	5	(26)	5	(14)
	Cashier	-	-	-	-	3	(16)	3	(8)
	Nurse	-	-	-	-	0	(0)	0	(0)
	Midwife	-	-	-	-	9	(47)	9	(25)
	Vaccination Assistant	-	-	-	-	1	(5)	1	(3)
Profession	Doctor	2	(33)	0	(0)	0	(0)	2	(6)
	Medical Assistant	2	(33)	0	(0)	0	(0)	2	(6)
	Primary Nurse	0	(0)	4	(36)	4	(21)	8	(22)
	Secondary Nurse	1	(17)	5	(45)	1	(5)	7	(19)
	Primary Midwife	0	(0)	0	(0)	10	(53)	10	(28)
	Secondary Midwife	0	(0)	2	(18)	3	(16)	5	(14)
	Dentist	1	(17)	0	(0)	0	(0)	1	(3)
	Vaccination Assistant	0	(0)	0	(0)	1	(5)	1	(3)
Years of working at OD/HC	1 to 4	3	(50)	2	(18)	6	(32)	11	(58)
	5 to 9	0	(0)	2	(18)	3	(16)	5	(26)
	10 to 14	1	(17)	1	(9)	0	(0)	2	(11)
	15 or more	2	(33)	6	(55)	10	(53)	18	(95)
Implementation Phase	Phase 2	3	(50)	5	(45)	8	(42)	16	(44)
	Phase 3	3	(50)	6	(55)	11	(58)	20	(56)
Urban/Rural	Urban	2	(33)	3	(27)	2	(11)	7	(19)
	Rural	4	(67)	8	(73)	17	(89)	29	(81)
Region	Banteay Meanchey	1	(17)	2	(18)	4	(21)	7	(19)
	Kampong Chhnang	1	(17)	2	(18)	3	(16)	6	(17)
	Kratie	1	(17)	2	(18)	4	(21)	7	(19)
	Pursat	2	(33)	3	(27)	4	(21)	9	(25)
	Tbong Khmum	1	(17)	2	(18)	4	(21)	7	(19)
Total		**6**		**11**		**19**		**36**	

The Endline interview sample (*Table 7*) was more skewed towards men. Men made up 78 percent of the total sample: 100 percent OD Directors, 85 percent HC Chiefs, and 69 percent HWs. All OD respondents were at the level of OD Director, while 85 percent of HC respondents were Directors and 15 percent their Deputies. Most HWs held the position of vaccinator (42 percent) or cashier (35 percent). As in the Midline sample, HWs who reported being a cashier or accountant also worked often in their main job as midwives. All OD Directors were either doctors (85 percent) or medical assistants (15 percent), and normally had either one to four years of experience or 15 or more years of experience (43 percent each). Most HC Chiefs were nurses (15 percent primary, 69 percent secondary) or midwives (15 percent) with one to four years (29 percent) or fifteen or more years of experience (62 percent).

All respondents were normally placed in rural ODs (71 percent) or rural HCs (69 percent HCs and 77 percent HWs) and were slightly skewed from Phase 1 (24 percent) to Phases 2 (30 percent) and 3 (46 percent). Respondents were equally distributed across seven provinces: Banteay Meanchey, Kampong Chhnang, Kratie, Pursat, Ratanakiri, Pursat and Tbong Khmum.

TABLE 7. Characteristics of the in-depth interview respondents at Endline

		OD		HC		HW		Total	
		#	%	#	%	#	%	#	%
Sex	Woman	0	(0)	2	(15)	8	(31)	10	(22)
	Man	7	(100)	11	(85)	18	(69)	36	(78)
Official title	Director	7	(100)	11	(85)	-	-	18	(39)
	Deputy Director	0	(0)	2	(15)	-	-	2	(4)
	Accountant	-	-	-	-	1	(4)	1	(2)
	Cashier	-	-	-	-	9	(35)	9	(20)
	Nurse	-	-	-	-	1	(4)	1	(2)
	Midwife	-	-	-	-	2	(8)	2	(4)
	Vaccinator	-	-	-	-	11	(42)	11	(24)
	Vaccination Assistant	-	-	-	-	2	(8)	2	(4)
Profession	Doctor	4	(57)	0	(0)	0	(0)	4	(9)
	Medical Assistant	2	(29)	0	(0)	0	(0)	2	(4)
	Primary Nurse	0	(0)	2	(15)	8	(31)	10	(22)
	Secondary Nurse	0	(0)	9	(69)	11	(42)	20	(43)
	Primary Midwife	0	(0)	0	(0)	4	(15)	4	(9)
	Secondary Midwife	0	(0)	2	(15)	3	(12)	5	(11)
Years of working at OD/HC	1 to 4	3	(43)	2	(29)	6	(86)	11	(24)
	5 to 9	0	(0)	1	(8)	11	(42)	12	(26)
	10 to 14	1	(14)	1	(8)	4	(15)	6	(13)
	15 or more	3	(43)	8	(62)	5	(19)	16	(35)
Implementation Phase	Phase 1	2	(29)	3	(23)	6	(23)	11	(24)
	Phase 2	2	(29)	4	(31)	8	(31)	14	(30)
	Phase 3	3	(43)	6	(46)	12	(46)	21	(46)
Region	Banteay Meanchey	1	(14)	2	(15)	4	(15)	7	(15)
	Kampong Chhnang	1	(14)	2	(15)	4	(15)	7	(15)
	Kratie	1	(14)	2	(15)	4	(15)	7	(15)
	Pursat	2	(29)	2	(15)	4	(15)	8	(17)
	Ratanakiri	1	(14)	2	(15)	4	(15)	7	(15)
	Takeo	1	(14)	1	(8)	2	(8)	4	(9)
	Tbong Khmum	0	(0)	2	(15)	4	(15)	6	(13)
Urban/Rural	Urban	2	(29)	4	(31)	6	(23)	12	(26)
	Rural	5	(71)	9	(69)	20	(77)	34	(74)
Total		**7**		**13**		**26**		**46**	

Most HCs sampled at Midline reported catchment areas (*Table 8*) with 10 to 19 villages (45 percent), although this information was not collected in about a third of them (36 percent). During Endline, the percentage of HCs with 10 to 19 villages increased to half (54 percent), followed by catchment areas of less than 10 villages (31 percent). The size of Midline HCs was equally distributed between 1 and 5 employees (27 percent) and 6 to 10 employees (27 percent), although this information was missing in almost half (45 percent). During Endline, most HCs had 6 to 10 employees (62 percent) and more than 10 employees (23 percent). Most Midline HCs were 10km to 25km from the farthest village in their catchment area (55 percent), although information was missing in 36 percent HCs. Among Endline HCs, most were between less than 10km and 10km to 25km (38 percent each). Most Midline HCs had a catchment area populated only by Khmer people (64 percent), Khmer and Cham people (18 percent), one HC with Khmer, Cham and Vietnamese people (9 percent) and one HC with missing ethnicity details (9 percent). In the Endline sample, most HCs had a catchment area with only Khmer (31 percent) or Khmer and Cham people (46 percent) and one HC had Khmer, Cham and Vietnamese people (8 percent). In addition, 2 HCs also had indigenous people (15 percent).

TABLE 8. Additional characteristics of the health center catchment areas sampled for in-depth interviews

		Midline Phases 2 and 3		Endline all Phases	
		#	%	#	%
Number of villages covered by HC	<10	1	(9)	4	(31)
	10 to 19	5	(45)	7	(54)
	20 or more	1	(9)	2	(15)
	Missing	4	(36)	0	(0)
Number of staff working in the HC	1 to 5	3	(27)	1	(8)
	6 to 10	3	(27)	8	(62)
	More than 10	0	(0)	3	(23)
	Missing	5	(45)	0	(0)
Distance to farthest village from HC (km)	Shorter (Less than 10 km)	1	(9)	5	(38)
	Medium (10 to 25 km)	6	(55)	5	(38)
	Larger (26 to 48 km)	0	(0)	2	(15)
	Missing	4	(36)	0	(0)
Ethnicities covered in HC catchment area	Only Khmer	7	(64)	4	(31)
	Khmer and Cham	2	(18)	6	(46)
	Khmer, Cham and Vietnamese	1	(9)	1	(8)
	Indigenous people	0	(0)	2	(15)
	Missing	1	(9)	0	(0)
Total		**11**		**13**	

FGD Respondents

The Midline FGD sample (*Table 9*) included 9 FGDs with 92 respondents, plus one additional FGD where participants' details were not available. On average, each FGD had 10 participants.

Women were much better represented in the FGDs than in the IDIs, as the composition of the FGDs was more within the control of the study team. The Midline FGD sample included 75 women (82 percent) and 17 men (18 percent), distributed among FGDs only with women (20 respondents, 22 percent), only with men (8 respondents, 9 percent) and mixed (64 respondents, 70 percent). All of the FGDs included HEF beneficiaries, 75 in total, comprising 82 percent of all respondents. Respondents in their thirties were slightly more prevalent (23 respondents, 25 percent); other respondents were distributed among people in their twenties (15 percent), forties (18 percent), fifties (15 percent) and aged above sixty (17 percent). About half of the respondents (50 respondents, 54 percent) were from a rural location and all were more or less equally distributed across Phases 2 (41 respondents, 45 percent) and 3 (51 respondents, 55 percent).

Respondents had a similar geographical distribution across the provinces of Banteay Meanchey (17 respondents, 18 percent), Kampong Chhnang (22 respondents, 24 percent), Kratie (12 respondents, 13 percent), Pursat (18 respondents, 20 percent) and Tbong Khmum (23 respondents, 25 percent). Most lived in villages with either "*good*" or "*paved*" roads (57 respondents, 62 percent), rather than "*difficult*" roads (13 respondents, 14 percent). All reported having a private provider in their area and most had a pharmacy (80 respondents, 87 percent). Data from one FGD in Phase 3 was not collected.

TABLE 9. Characteristics of focus group discussion respondents sampled at Midline*

		Number of FGDs		Total respondents	
		#	%	#	%
Sex	Woman	-	-	75	(82)
	Man	-	-	17	(18)
Sex Distribution	Woman only FGD	2	(22)	20	(22)
	Man only FGD	1	(11)	8	(9)
	Mixed FGD	6	(67)	64	(70)
HEF beneficiaries (through IDPoor or PAC)	Yes	9	(100)	75	(82)
	No	0	(0)	17	(18)
Age groups covered	15-20	1	(11)	1	(1)
	21-30	8	(89)	14	(15)
	31-40	8	(89)	23	(25)
	41-50	6	(67)	17	(18)
	51-60	8	(89)	14	(15)
	61-80	6	(67)	16	(17)
	Missing	1	(11)	7	(8)
Education		Not collected	-	Not collected	-
Occupations in FGD		Not collected	-	Not collected	-
Ethnicities in village	Only Khmer	9	(100)	92	(100)
Urban/rural	Urban	4	(44)	42	(46)
	Rural	5	(56)	50	(54)
Implementation Phase	Phase 2	4	(44)	41	(45)
	Phase 3	5	(56)	51	(55)
Region	Banteay Meanchey	2	(22)	17	(18)
	Kampong Chhnang	2	(22)	22	(24)
	Kratie	1	(11)	12	(13)
	Pursat	2	(22)	18	(20)
	Tbong Khmum	2	(22)	23	(25)
Road type	Good/Paved road	8	(89)	57	(62)
	Dirt road	0	(0)	0	(0)
	Difficult road	1	(11)	13	(14)
Distance to nearest HC (km)		Not collected	-	Not collected	-
Private provider in the area	Yes	9	(100)	92	(100)
	No	0	(0)	0	(0)
Pharmacy in the area	Yes	8	(89)	80	(87)
	No	1	(11)	12	(13)
Total		**9**		**92**	

*Participants in one Phase 3 FGD were not included in the above statistics due to lack of detailed data.

The Endline FGD sample (*Table 10*) included 26 FGDs with 133 respondents. On average, each FGD had 5 participants.

The sample included 101 women (76 percent) and 32 men (24 percent), distributed among FGDs only with women (76 respondents, 57 percent), only with men (22 respondents, 17 percent) and in mixed groups (35 respondents, 26 percent). About half the FGDs included HEF beneficiaries, 80 in total, comprising 60 percent of all respondents. Respondents in their thirties were slightly more prevalent (27 respondents, 20 percent), and otherwise distributed among people in their twenties (14 percent), forties (13 percent), fifties (14 percent) and aged above sixty (13 percent). However, age data was missing in about a third (38 percent) of the respondents. Most respondents had primary education (38 respondents, 29 percent) or were illiterate (29 respondents, 22 percent) although a third did not report this information (52 respondents, 39 percent). Most FGDs had respondents who worked as farmers (23 respondents, 88 percent), factory workers (7 respondents, 27 percent) or construction workers (2 respondents, 8 percent) or informal workers (2 respondents, 8 percent).

Most respondents (93 respondents, 70 percent) were from a rural location and were skewed by design with Phase 1 (27 respondents, 20 percent) being a smaller number compared to the intervention and control districts in Phases 2 (46 respondents, 35 percent) and 3 (60 respondents, 45 percent). Respondents were similarly distributed across Banteay Meanchey (21 respondents, 16 percent), Kampong Chhnang (18 respondents, 14 percent), Kratie (21 respondents, 16 percent), Pursat (25 respondents, 19 percent), Ratanakiri (20 respondents, 15 percent) and Tbong Khmum (21 respondents, 16 percent). Takeo was less represented (7 respondents, 5 percent). Most respondents lived in villages with either "*good*" or "*paved*" roads (97 respondents, 73 percent), rather than "*difficult*" roads (15 respondents, 11 percent). The roads were also 2 to 5km from the HC (44 respondents, 33 percent), 6 to 10km (24 percent), rather than 2km or less (25 respondents, 19 percent) or more than 10km (22 respondents, 17 percent). Most reported having a private provider in their area (88 respondents, 66 percent), and half had a pharmacy (64 respondents, 48 percent).

TABLE 10. Characteristics of focus group discussion respondents sampled at Endline

		Number of FGDs		Total respondents	
		#	%	#	%
Sex	Woman	-	-	101	(76)
	Man	-	-	32	(24)
Sex Distribution	Women only FGD	14	(54)	76	(57)
	Men only FGD	5	(19)	22	(17)
	Mixed FGD	7	(27)	35	(26)
HEF beneficiaries (through IDPoor or PAC)	Yes	15	(58)	80	(60)
	No	11	(42)	53	(40)
Age groups covered	15-20	2	(8)	2	(2)
	21-30	10	(38)	18	(14)
	31-40	14	(54)	27	(20)
	41-50	11	(42)	17	(13)
	51-60	9	(35)	18	(14)
	61-80	7	(27)	17	(13)
	Missing	7	(27)	51	(38)
Education	High school	-	-	3	(2)
	Secondary	-	-	11	(8)
	Primary	-	-	38	(29)
	Illiterate	-	-	29	(22)
	Missing	-	-	52	(39)
Occupation present in FGD	Farmer	23	(88)	-	-
	Factory worker	7	(27)	-	-
	Construction worker	2	(8)	-	-
	Informal worker	2	(8)	-	-
Implementation Phase	Phase 1	6	(23)	27	(20)
	Phase 2	8	(31)	46	(35)
	Phase 3	12	(46)	60	(45)
Region	Banteay Meanchey	4	(15)	21	(16)
	Kampong Chhnang	4	(15)	18	(14)
	Kratie	4	(15)	21	(16)
	Pursat	4	(15)	25	(19)
	Ratanakiri	4	(15)	20	(15)
	Takeo	2	(8)	7	(5)
	Tbong Khmum	4	(15)	21	(16)
Urban/Rural	Urban	8	(31)	40	(30)
	Rural	18	(69)	93	(70)
Road type	Good/Paved road	19	(73)	97	(73)
	Dirt road	4	(15)	21	(16)
	Difficult road	3	(12)	15	(11)
Distance to nearest HC (km)	2 or less	5	(19)	25	(19)
	2 to 5	9	(35)	44	(33)
	6 to 10	6	(23)	32	(24)
	>10	4	(15)	22	(17)
	Missing	2	(8)	10	(8)
Private provider in the area	Yes	17	(65)	88	(66)
	No	9	(35)	45	(34)
Pharmacy in the area	Yes	12	(46)	64	(48)
	No	11	(42)	51	(38)
	Missing	2	(8)	12	(9)
Total		**26**		**133**	

SDG's Implementation

SDG Awareness

Most OD Directors, HC Chiefs and HWs in all phases were aware of SDG and viewed it positively. All respondents were long exposed to FLSG and were able to place it in SDG; most also knew about PBG. Some Phase 3 respondents (where PBG had not rolled out) sometimes equated PBG to FLSG. On the subject of SDG, responses were normally linked to the objective of SDG.

> *"There is another component called PBG based on performance when the assessment is done, and one more is the Fixed Lump Sum Grant offered to the health center"* (OD2 Phase 1 Endline)

> *"This fund supports office supplies. It helps us manage aid materials such as incinerator, WC, and other repairing materials"* (HW12 Phase 3 Endline)

Among Phase 3 Endline respondents, the majority of HWs and HC Chiefs had been introduced to PBG by their ODs. They either had conducted preliminary assessments or were preparing the HCs for it:

> *"According to the guideline, we hear that an assessment plan will be conducted this August. They'll come to assess and prepare for receiving the SDG calculated with the quality of service"* (OD7 Phase 3 Endline)

> *"[The OD] says that if we do good service, then when they do the assessment and the score is good, we will receive the PBG"* (HW5 Phase 3 Endline)

Understanding of SDGs

Respondents at management levels (that is, HC Chief, OD Director), normally provided more detailed information on SDG, describing its composition (FLSG and PBG) and features such as direct transfers:

> *"The 62028-budget is provided directly to HCs and hospitals"* (OD1 Phase 1 Endline)[5]

A few respondents had more trouble differentiating PBG from other sources and connected it directly to the FLSG (skipping PBG) or confused it with HEF:

> *"No. Strictly speaking, the performance-based grant was shared with all staff, and the SDG incentive was not given to staff"* (HW9 Phase 2 Endline)

> *"Yes, I only know about 62028. I only know that"* (HC2 Phase 3 Endline)

For PBG incentives, most HC Chiefs in Phases 1 and 2 were able to give detailed information on the distribution of the incentives, while those in Phase 3, expectedly, had a more general idea of the purpose of incentives:

> *"We spend 80 percent on staff and other 20 percent is allocated for supplying the service in the HC"* (HC4 Phase 1 Endline)

5 The FLSGs are often understood in the Cambodian health facilities and among health administrators by the corresponding budget code- 62028, hence the reference to this number.

"Overall, the PBG, let me tell you, it depends on performance score too. For the package, we get 100 percent, but our performance (budget) isn't required to spend 100 percent. Thus, we receive only 80 percent. The 20 percent is in the bank account. What is the 20 percent for? They said [it's] for buying medicine, medical needs. We need to withdraw the 20 percent for spending. So, we didn't lose the budget. And another 80 percent is for the performance of all staff" (HC11 Phase 1 Endline)

Perceptions of SDG

All respondents considered SDG to be useful to their work and welcomed it. Often, they described SDG funding as essential to the activity of their HCs:

"Normally, when we have a budget, we can do everything. We can develop our institution. Sometimes, we have some ideas or initiatives but without any budget we cannot do anything. If we compare now to when we hadn't received the budget, we see a change" (OD1 Phase 1 Endline)

HWs and HC Chiefs consistently emphasized the importance of FLSG for the activities of their HCs. They often illustrated this by listing the goods and services they purchased with these funds:

"That budget will be very good for us to develop our HC because of what we can have, and so that we do not get stuck" (HC10 Phase 2 Endline)

"The budget 62028 [FLSG] is spent on material supply. We mostly buy delivery equipment, medicines. To sum up, we spend on buying things that we lack and to repair broken equipment. Besides materials, we don't spend much on other things. We spend mostly on materials for the HC" (HC1 Phase 3 Endline)

Accordingly, HC Chiefs and HWs pointed how FLSG took on a central role in avoiding shortages of drugs and consumables at the HC and that the national budgets were insufficient to cover these expenses. OD Directors agreed with this assessment:

"62028 budget is for shortage of equipment at the HC such as equipment for patients" (HW16 Phase 1 Endline)

"It helps support a big part that the national budget cannot supply on time or is not enough for the operation of the HC or the hospital such as lack of drugs" (OD3 Phase 3 Endline)

PBG was seen as a measure to incentivize or motivate staff to improve performance and work harder. Assessments were considered fair and useful tools to learning and improvement, while PBG incentives were welcomed by HWs and HC Chiefs in all three phases. Information on these results is presented below in terms of SDG outcomes under improved monitoring and supervision and through increased motivation and morale of HWs:

"Encouraging the staff is very important… and urging them to be more attentive to their work is the encouragement we have given them since 1999 (….) Well, after we finished the 'contracting-in' project, then, it became essential because when we had always received encouragement, and then suddenly it is no longer there. That would be taken as a discouragement" (OD1 Phase 1 Endline)

"I think this assessment is good for the ministry and for the whole country, they want us to have willingness to work and do anything to make our HC change its appearance to be beautiful and have clients coming to receive good service. Moreover, when we do good and get the rank, we will get the fund allocated to the HC. Staff would get money which motivates them" (HC9 Phase 3 Endline)

Implementation Challenges

FLSG Budget Allocation Criteria

The FLSG budget allocation criteria were sometimes identified as a problem by respondents of all types. The criteria for FLSGs considered the catchment area (in terms of two tiers, by population size) but did not account for the type of services provided at the HC or their specific circumstances. Some examples given by them included people coming from other catchment areas and outbreaks, and this often seems to be an issue raised by former district hospitals that were now operating as HCs, and had large facilities to manage:

> *"I want to increase the FLSG because my center is the former district hospital. Thus, the expenses were met mostly by the 62028… it received a small amount. When we divide the expense, it is not enough for what we spend every day"* (HW11 Phase 1 Endline)

> *"When I went to another HC, I saw that they received 2 million each month, but their size was small. And mine received only 1 million, but I have a big HC. Just by hiring the staff and buying the materials, it is all spent already … what they receive is because their population is large, but my HC's activities are many"* (HC12 Phase 1 Endline)

> *"The population size is small, but our activities are large, so the materials and needs are also high. In fact, my HC is more active than other HCs covering over 10,000 people. So, it is difficult when the population size is small, but activities are large with high expenses. As a result, there is a shortage of funds"* (HC2 Phase 3 Endline)

As a result, some HCs had trouble covering their essential expenses, while others would struggle with leftover money- the latter is especially the case with health posts recently upgraded to HCs:

> *"For example, when the disease load is high we use up all of that budget… last month, there was widespread dengue fever, many transfer…, so sometimes, it is too little to support the HC"* (HW11 Phase 1 Endline)

> *"I think that the budget 62028 is small so it can cover only the population in our area. In reality, the clients are not only from our catchment area, but also from other areas so the budget for necessary materials is not sufficient"* (HW4 Phase 1 Endline)

> *"In fact, ours is such as a small center… it was just changed from a health post and we have a small number of staff. They can't provide many services. So, they don't know how to use their budget. In short, they don't have too many expenses for the center. So, it makes the budget spending small as well… For example, the center is a small center but they get a budget up to 6 million because the population is high and there are only three staff… there is only one baby delivery room, one Director room, one vaccination room. The staff can only perform limited services"* (OD2 Phase 2 Endline)

Timeliness of Payments

Respondents in different ODs and HCs provided different views on whether they faced challenges in receiving the SDG funds. OD Directors and some HWs and HC Chiefs observed that they did not experience any challenges:

> *"They send the budget regularly, no problem with the money flow"* (OD2 Phase 2 Endline)

> *"No challenge because [the budget] is transferred on time"* (HW1 Phase 3 Endline)

However, several HC Chiefs and HWs reported that the payments were often irregular, sometimes delayed for up to a trimester:

> *"That budget is not coming fast… long time"* (HC12 Phase 1 Endline)

> *"We can say, at the end of September, the money is received… and the fourth trimester is the problem… it is possible also that new year, the new trimester, the end of the year, can be late. For the first trimester… not yet received, it is received in the second trimester. When the second trimester arrived, not received in that trimester too"* (HC7 Phase 2 Endline)

> *"The challenge is that it should come at the beginning of each month, if at the end of the month it is difficult to work"* (HC10 Phase 2 Endline)

For some respondents, this was a minor issue, while others explained that delays disrupted their activities. HC Chiefs explained how irregular payments challenged their ability to plan expenses and face unexpected payments and emergencies. These challenges related more to being able to use FLSG rather than to PBG incentives:

> *"Frequently, the challenge seems not to be serious, it was just a little problem, for instance, of delay"* (HC4 Phase 1 Endline)

> *"The challenge in the HC is of the budget arriving late. Sometimes, it does not reach the HC for four months"* (HC2 Phase 3 Endline)

> *"We suggested to the OD or superior to conduct supervision more frequently or give the budget more regularly and not be late. Then we can use it to support the activities in in this HC because it's hard when we run out of budget"* (HW4 Phase 3 Endline)

These delays sometimes force HCs to improvise with other sources of funding. These sources include HWs' and HC Chiefs' money and through "*borrowing*". There also seems to be an erroneous assumption that each quarter's budget needs to be spent in that quarter itself:

> *"It's like in a trimester… suppose they drop the money to us in March, we can spend it only in March. We cannot spend it in January and February. So, we are not allowed to spend, we can spend only when the money is transferred into our account. Before that happens, we spend money from our pocket first, from January to March, then we are paid back when the money is released. Nowadays, we spend only when the money is transferred like in March for March"* (HC10 Phase 2 Endline)

> *"During medicine shortage, we cannot buy them on time because the money comes late (…) At the end of the second quarter in June, the budget for the second quarter is received, therefore, during that time we lack budget. We sometimes borrow money before the budget is given; when we receive the budget, we repay"* (HC1 Phase 3 Endline)

Challenges at Start of SDG

At the start of SDG, some HCs were unfamiliar with the spending guidelines which led them to commit mistakes in how they spent FLSG funds. Some respondents missed having further training before starting in order to understand the guidelines. This confusion may have been compounded by changes in the guidelines since the last training of HCs took place:

> *"The first Phase had some difficulties because when the project guidelines change, we have to deal with a new pricing policy and the knowledge of the staff are also reassessed, and everything is new. As such, it's a bit difficult"* (OD1 Phase 1 Endline)

> *"I want to say that the first trimester year 2018, same as the third trimester… it's so difficult, because after they taught us about the old announcement we had done as per instruction, but then new announcement came. It was different… I struggled with it"* (HC10 Phase 2 Endline)

> *"Yeah, in the beginning I also wondered about the expenses; I was not trained on how to spend, and I was also afraid that some documents were incorrectly made related to expenditure budget because the budget as advised by a superior was to spend on a few consumable materials that I used every day"* (HW8 Phase 3 Endline)

These initial challenges with understanding the spending guidelines improved with time. The role of ODs supporting this process was often emphasized:

> *"The OD, especially the accountant reached out to supervise every month. Thus, they go and see; so, they observed the lacking points and changed it immediately"* (OD2 Phase 1 Endline)

> *"We are not accountants, so we need to ask them and we need to copy one set of documents, the original we keep at our place… we take all the copy documents to their place. If there is any problem, they give feedback, and we correct it accordingly"* (HC10 Phase 2 Endline)

New tasks linked to SDG reporting were also reported as a challenge. HWs had to start conducting tasks they had not been trained in. This took additional time for them to learn the tasks and led to additional errors:

> *"There is a challenge related to the structure of our HC because it is a small entity. That's why it does not have an accountant. There is only a cashier who was assigned but has not studied for this role"* (OD1 Phase 2 Endline)

> *"Sometimes, a nurse is assigned to work as accountant. Sometimes, they don't fully understand it yet"* (OD6 Phase 2 Endline)

> *"We only have problem with reports. When we check and compare between each report, there are some errors and differences from OD's instructions. Because of occasional errors, we correct the report many times"* (HC1 Phase 3 Endline)

These responsibilities were at times in addition to their previously assigned roles which proved quite challenging for HWs especially in the initial period as they learnt these new administrative and financial management skills:

> *"She works as a midwife. But she is also responsible for the budget, even the NSSF grant or health equity fund. She is handling all of them"* (HW9 Phase 2 Endline)

> *"There is change because I am more diligent and more active. I don't go home often. While there is lots of work, I always sit in place to complete all of the work… Don't let our work pile up…. Today's report has to be completed, we do not delay it for tomorrow, don't let our work obstruct, and must follow our rules - for example, if staff is on his/her standby duty, she/he must be on 24-hour standby - not be absent. The activity increases more than before"* (HW4 Phase 3 Endline)

FLSG Spending Guidelines

When asked about challenges faced in using SDG, respondents commonly and consistently reported having problems with the spending guidelines, which they perceived as too "*narrow*" and "*restrictive*". As one HC respondent explained, "*the scope in using it is too small*":

> *"It would be nice if there's some improvement to budget line so we can have better access to it to spend on things"* (OD1 Phase 1 Endline)

"The quality is linked to the meeting, and at that committee meeting we cannot withdraw that money to have a management committee meeting, VHSG meeting to publicize and receive the feedback from the citizen" (HC12 Phase 1 Endline)

Respondents pointed that they often need to make expenses that are not covered in the guidelines, but are essential for them to provide good quality care and respond to emergencies:

"I think that I should not keep a hold on the budget to spend based on the budget category, but use it as needed. OD thought that this did not comply with the guideline of the ministry. However, [the] OD said that it was not like that, we can spend based on needs for example, in case of emergency intervention, we did not have money so we had to use that money to pay" (HC12 Phase 1 Endline)

"This budget package is good, but we cannot spend it based on the needs like preparation for care. We need to prepare for care a lot" (HC2 Phase 3 Endline)

"There is the budget and it is difficult to spend. Sometimes, we need something besides what is mentioned in it" (OD6 Phase 2 Endline)

Of the expenses not allowed by SDG guidelines, respondents often highlighted the limitations to spend on infrastructure as "*very strict*".

"… expand the type of expense for us to develop because nowadays, regarding infrastructure, this budget cannot be used. And every day, we need to improve the infrastructure a lot" (OD2 Phase 2 Endline)

In the respondents' view, spending on infrastructure was often essential to provide good quality of care. For instance, many respondents highlighted the needed to use it to ensure access to basic utilities such as water, electricity, and waste disposal. There was limited appreciation of the provision of "*repairs*" that needed to be publicized and understood better:

"…my building was broken before. There was an explosion of the electrical wire, it requires a big expense. And there was no budget allocation for that, like repairing the electrical system, it was difficult for my HC…" (HC3 Phase 2 Endine)

"If they want to pay for repairing, sewage, water tank and sanitation, office, and equipment, it has limitations… Purchase of papers and printers is not allowed. The costing covers only printing documents like that!" (HC5 Phase 3 Endline)

According to this line of reasoning, many respondents complained that they could not repair or improve their sanitation infrastructure. Some pointed out how the spending limitations prevented them from achieving the standards they were required to have:

"To say, we cannot change the restroom, when we need to change as per their standards. We cannot change; we do not have the ability to change. We cannot use this budget to change. If we want to change, we ought to build a new [restroom]. We cannot build a new one as it is not allowed. We can only buy materials" (HC2 Phase 3 Endline)

"We have many challenges on this point, like toilets, they require the toilets to be bigger. They require say, mirror or shower head for showering. Our toilets are small, so we cannot do that. They only allow us to repair, but we cannot build a new one from this budget, and this also applies to the toilets. They ask us to repair, and in a room, there should be a restroom and a hygienic toilet. Our restroom is of a lower standard" (HC5 Phase 3 Endline)

Some respondents also reported the poor conditions of their HC's buildings and how they were in need of repairs and improvement. These improvements were aimed, first, at practical aspects, for instance repairing roofs against the rain or improving the floors to avoid mud and flooding during the rainy season. Second, improvements were aimed at improving the aesthetics of the HC, to become more appealing to users with the objective of attracting them.

"They do not allow us to withdraw. Now, the doors are damaged by termites. We take them out, so there is not enough user fee. We have little revenue, so we need this budget to help, but we cannot withdraw this budget to spend. So, it is a difficulty that they set what we spend on eligible items" (HC2 Phase 3 Endline)

"We cannot spend that money to make a concrete floor or for dumping soil to avoid having mud" (HW20 Phase 3 Endline)

A few respondents also highlighted limitations in other areas besides infrastructure. Sanitation workers were viewed as an important component to achieve good hygiene in the HC. However, they could not be paid with SDG funds:

"And we must motivate the cleaners as well because they need to keep hygiene in each room around, in the building and outside the building. Because every day we need the cleaner, we find creative ways to obtain budget, because the ministry hasn't allowed the HC to hire a cleaner. Therefore, the budget obtained every day is a small share from the other budgets in order to set the spending right to their budget category; so, we use the budget for supplying the cleaner. So, please, eh, if possible help, to the SDG part add the budget for the cleaner just 400,000 riels per month, that's enough" (HC4 Phase 1 Endline)

"They don't let us to hire a cleaner from, this budget. (…) In my case, I just want to be allowed to hire a cleaner" (HW6 Phase 1 Endline)

Similarly, some saw the importance of using the funds to ensure access to transport in their HC:

"As I said from the beginning, the money is important; we spend rightly. For example, if our motorbike has a flat tire, or we change its inner tube; can't use the money" (HW16 Phase 1 Endline)

"Yes, like the plan is to spend on other things … but if accidentally, the car breaks down. We need to withdraw to attend to this urgently because we don't have another budget" (OD2 Phase 2 Endline)

Perceiving that the narrow guidelines limited their spending on essential services of their HC, some HC Chiefs felt compelled to use SDG to pay for expenses that were not allowed:

"If it doesn't fit in the spending categories, we tend to spend as a favor. This causes problems with audit team" (HC4 Phase 1 Endline)

"If we spend this budget as what we're told, it will not work well. When we need to spend, we do not comply with their restriction. The restriction is wrong… for example we are told to spend 1,000,000 riels on water items but we can't use all the amount for only water. We can spend on it only 800,000 riels and spend the remaining 200,000 riels on something else. If we spend much on one thing, we can run short for other things that can be necessary" (HC1 Phase 3 Endline)

Other HCs expressed concern about spending incorrectly and the consequences it may bring:

"We cannot use that money to spend on anything else beside the needs, cannot spend on other needs…. Thinking about the expense, [we are] afraid that the expense might not be under the budget allocation" (HC3 Phase 2 Endline)

"For the budget 62028, we observed that some HCs did not dare to spend because the budget is so small and there is no national budget for the major spending categories. Some amounts were not spent so there are some budget leftovers in the hospital and the HC as well. If we make payment, we are afraid of making mistakes and insisting for a refund" (OD3 Phase 3 Endline)

As a solution, respondents consistently supported the inclusion of new items in the new guidelines to make them more flexible and address the HC needs:

"For me, it's nothing extravagant, only want to continue to provide these funds to improve health care services. I want the spending list to be bigger and wider, for example, for changes toward cleanliness, repairs to the roof, fences, repairing the building, fencing the hospital perimeter in order to attract and gain trust from those who would use the service" (OD1 Phase 1 Endline)

"I want to have a budget category (for environmental improvement) and want to have any other additional points added to the 16 line items" (OD6 Phase 2 Endline)

"SDG should strengthen the availability of the expense, not narrow it much. That is, to use that budget freely toward clearly spending on the need of the facilities" (OD3 Phase 3 Endline)

Money withdrawals

Some HC Chiefs across phases explained their challenges to withdrawing larger amounts from the bank. To operate with these funds, they had to divide the amounts into smaller quantities, a process that led to more work and more errors:

"It's difficult because the budget that HC withdrew is limited. If the budget is more than 4 million, we can't withdraw to support the HC. We must split it in percentage and transfer to the bank so that the bank transfers to each account of the staff" (HC4 Phase 1 Endline)

"When receiving that budget put into the account, it does not mean we receive all, we need to withdraw little by little" (HC12 Phase 1 Endline)

"We cannot withdraw all of the amount at a time, so it is difficult. In a year, sometimes there is no amount leftover in the bank account. There is only a small amount leftover, as we withdraw it for payback (...) one million Riel is only allowed to be withdrawn once per month, we cannot exceed the amount" (HC9 Phase 3 Endline)

Challenges conducting assessments

Discussing PBG assessments, HC Chiefs and HWs highlighted several barriers. Some HCs reported that the current system of phone calls was poorly set up to reach HC users for feedback, as their populations were rural and had bad signal, did not usually have phones, or did not answer their phones:

"With regard to the clients' satisfaction, we still have not completed all calls. We have a lot of gaps because connection service system of mobile phones is weak in here. Whenever the assessment team calls for interviews, clients can't be reached (…) for example, five phone numbers of clients were randomly selected, however, only one or two lines could be reached and our scores were also deducted" (HC4 Phase 1 Endline)

"Yes, they interview customers. They have their phone numbers but most of our people are elderly; youngsters mostly go to Phnom Penh; and most elderly people who bring the kids here, most of them don't have phone number" (HC10 Phase 2 Endline)

"When they did assessment, there was only one problem, they did assessment by asking for patients' phone numbers" (HW25 Phase 2 Endline)

The timing of the assessment visits was also sometimes considered an obstacle. These visits did not account for routine HC activities such as outreach or training activities, and sometimes were done when some of the HWs were out. For smaller HCs, this put too much pressure on the few remaining HWs who were left to reply to the assessments:

"During the assessment, there are challenges like in the past few days, I arrange for my staff to go for outreach activities, go for a meeting, and only a few staff stay here. When they come for the assessment and can't meet the staff, who do they assess? This is a challenge" (HC12 Phase 1 Endline)

> *"Sometimes, they came to the center at the end of working hours or when staff members had returned home, so they did not meet any staff member, so they said it was not good"* (HW25 Phase 2 Endline)

Also, during the visits, a few respondents perceived that it was incorrect to test HWs on services they were not in charge of providing. As a HW illustrated, "*some people can get randomly selected for a clinical vignette that does fit their skill while some do not get the vignette that fits their skill*."

> *"The OD also assigned midwife to examine the patients; I mean the midwife can provide health consultation, but she does not have the time to perform it as she is almost always overwhelmed in maternity services"* (HC9 Phase 3 Endline)

> *"Sometimes the midwives are drawn to be responsible for vaccination, and when asked about vaccination, the midwives know little about it"* (HW19 Phase 3 Endline)

A challenge common to some OD Directors was trying to conduct the preparatory visits for the assessments, as they perceived the budget was not enough to cover the cost of the visits. This was mentioned by Phase 3 respondents only:

> *"For the preparation, we have some staff to visit the HC and most of them can find the documents through the computer. The obstacle is the lack of money for them to visit"* (OD4 Phase 3 Endline)

> *"For assessment outreach, training with no budget, budget must be allocated, then we can take the left amount to divide in order to know what to continue to do or divide to other staff or to prepare other process"* (OD3 Phase 3 Endline)

SDG Outcomes on Quality of Care and Availability of Services

Increased Availability of Essential Equipment, Supplies and Consumables

Across all three phases, SDGs, and especially the FLSG fund, played a key role in the purchase of drugs, consumables, equipment and supplies. Drugs were the most frequently mentioned purchase, followed by consumables, equipment and other items such as cleaning supplies and soap, and ink and paper for printing. Thanks to the FLSG, HCs perceived that "*supply isn't allowed to lack*".

> *"In the past my HC was considered to be the weakest HC (…) we started to receive the 62028 budget, I started to improve and do many things. Now the OD Director said that my HC seems to be much better than other HCs"* (HC12 Phase 2 Midline)

> *"I know we spend on what we lack - medical drug, disinfection materials and hygiene materials such as the soap, plastic bags and what we need for the hygiene and the expense on the vaccine section"* (HC3 Phase 2 Endline)

> *"I think it is good. Since we have the money our HC is more active and looks beautiful. [We] buy Oxytocin, some new materials for delivery if they get old. We can buy something that we need"* (HW3 Phase 3 Midline)

Across the three phases, FLSG funds were also used to pay for transport. The money was used to collect people in situations of emergency, thus improving the coverage of HC services. In addition, this money was sometimes used to pay for referrals to other facilities when needed and to pay for gasoline for VHSGs to meet in the HC. On some occasions, the HC would pay to bring poor patients in remote communities to the HC:

> *"And it can be utilized for emergency rescue. In the villages, we need transport, we can transport them"* (HC4 Phase 1 Endline)

> *"Sometimes there are poor people, people who don't have money, so we can call ambulance, or if we don't have money for refuel, we could withdraw this budget"* (HW13 Phase 3 Endline)

Respondents of all types and across all phases highlighted the central role of FLSG to compensate for existing barriers in the health system, such as a limited national budget and frequent drug shortages. More specifically, HC Chiefs and HWs explained how FLSG money was crucial to maintain stocks and provide an adequate and constant service. FLSG funds allowed the HCs to "*strengthen [their] service*".

> *"For example, I lack the budget to buy the medical drug when the ministry cannot transfer the budget to us on time. So, we can use that money to buy the medical drug for the health service in our center"* (HC3 Phase 2 Endline)

> *"And the delivery services are also good because we have stable budget, have enough medicines such as medicines to treat preeclampsia that we don't have before. For all maternity supplies, we can withdraw money"* (HC2 Phase 3 Midline)

> *"There were a lot of shortages in the past such as shortage of supplies in facility. That time, we didn't have money, it was a challenge. If we don't have money, we cannot buy. Since we have that money, we can buy enough just like medicine, in general terms, all supplies in facility for all patients is good"* (HW17 Phase 3 Endline)

Improved Use and Functionality of Available Infrastructure

SDG funds, especially FLSG, were recurrently used to repair and improve the infrastructure of HCs. As one OD highlighted, "*The infrastructure changed a lot*". Respondents in all categories and phases pointed that using SDG funds to pay for goods and services was essential to ensure that the facility infrastructure was in good condition to be used. The expenses included both minor repairs and renovation to secure access to water, electricity, sanitation, transport, waste disposal, and adequately functional wards:

> *"Some HCs had worked very hard to repair and improve their facilities by using money from user fee, from 62028 budget and help from other generous donor"* (OD5 Phase 2 Midline)

> *"[We] spent on hygiene, medicine and repair, such as repair incinerator and small repairs like repairing the bed"* (HC8 Phase 3 Midline)

Respondents frequently highlighted the use of SDG funds to improve access to sanitation in HCs. This improvement was achieved by developing and repairing infrastructure, purchasing consumables and services to ensure hygienic standards in the HCs, and being more attentive to these aspects in their HC. In the words of a HW, these changes led to "*organizing the HC to be cleaner and better than before*".

> *"We have improved a lot since February. Because we have clean water system, bathroom for patient to take a bath. We have good sterile toilet; not difficult as before, overall"* (HC11 Phase 1 Endline)

> *"We now have good toilet, place for hand washing, and even now we have a pumped well. It is so important that we have clean water to use in the facility"* (HC7 Phase 2 Midline)

> *"After having this assessment, the toilets are clean with tap water. They have water system and good soap with hand towel like that"* (HC9 Phase 3 Endline)

To improve hygiene, SDG funds were used to improve waste disposal by sorting and destroying waste adequately. Respondents reported paying for maintaining their infrastructure (that is, incinerators) and the supplies needed (for example, sharp boxes, bins) to achieve this:

> *"Within the last six months, the assessment team found that waste was properly sorted into color-coded waste bins and plastic bags as per the instructions of the ministry"* (OD1 Phase 1 Endline)

> *"I see many improvements regarding garden and infrastructure like garbage storage at the backyard"* (HW21 Phase 2 Endline)

> *"With budget they have, they can buy several trash bins and put in all the places, and with different colors. They even buy trash bins with labels on them, such as for medical waste, contamination, chemical waste, and sharps boxes which they put in different places. There is container in the delivery ward to put placenta in"* (OD3 Phase 3 Midline)

In addition to improving utilities and hygiene, respondents noted other improvements in the HC buildings such as improvements aimed at creating an environment that was both adequate to provide care (for example, avoid rain and floods from entering the HC) and aesthetically constructed to attract customers.

> *"Yes, first the HC's surrounding was forest in the past, so we get low score. Since there is motivational budget, we have allocated a day like on Thursday to clear the forest and do cleaning of the surroundings; then we get better score"* (HC11 Phase 1 Endline)

> *"We have health rubbish bin, needle rubbish bin, waste bin; we have painted wall, we have shed for motorbike parking where concrete slab has been laid; we have more restrooms and two more beds"* (HW25 Phase 2 Endline)

"We have filled up the land and repaired the floor with tile floor to prevent the rainwater flooding the building, and it made it easy to clean, before it was difficult to clean" (HW10 Phase 3 Midline)

Other respondents emphasized how FLSG was essential to ensure a functional infrastructure in their HCs. These funds compensated for shortages and enabled HCs to adhere to standards:

"We have money to buy gas, pay for water supply, electricity. If we are depending only on user fees, it won't be enough, couldn't afford" (HC10 Phase 2 Endline)

Improved Financial Autonomy

For the first time, HWs and HC Chiefs reported receiving and managing SDG funds directly in their HC bank accounts. Operating within the limits demarcated by expenditure guidelines, HCs were able to spend the money according to their needs and circumstances. In essence, "*OD doesn't get involved with that*".

"The OD, he doesn't have to… just manages to transfer money to the bank account of the HC" (HC4 Phase 1)

"Before we needed to request the OD, but now we have budget package; we can buy by ourselves if there are shortages" (HW5 Phase 2 Endline)

"The HCs and the hospital have autonomy to decide what they want to use the money for on their own. We (OD Directors) don't have the right to instruct them that strongly" (OD3 Phase 3 Midline)

These views were echoed by OD Directors. Their role was limited to reviewing the expenses reported by HCs to ensure correct reporting, compliance with expenditure guidelines, and to provide feedback:

"When the HC needs spending, he (OD Director) just reviews the document of the HC if it is complete or not, if something is incomplete, if the management is right about the spending category or not" (HC4 Phase 1 Endline)

"They spent themselves. We just went to review and made report. We reviewed if it was right or not; If the report was sent to, it's overspent or incompletely or differently from the spending category" (OD7 Phase 3 Endline)

In addition to being able to decide on their expenses, HC Chiefs and HWs praised the autonomy they enjoyed over SDG funds as it provided them with an easier, faster way to get the goods and services they needed to operate HCs. Respondents spoke about the advantage of making purchases faster and spending less time requesting for money from the OD for minor expenses:

> *"…Some medicines are out of stock or come late. We can solve the immediate problem until the medicines come to the facility which is on the 25th of the month"* (OD5 Phase 2 Midline)

> *"When we have budget package, it means that our HCs are self-sufficient and don't need OD to spend money on our behalf. We can spend ourselves according to the guidelines that they give us. Well, we are responsible for ourselves (….) we can buy immediately, we don't need to wait"* (HC10 Phase 2 Endline)

According to respondents in all three phases, the combination of improved financial autonomy and faster access to funds allowed HCs to become more flexible and responsive to their specific needs. It also improved HCs' ability to respond to emergencies in their communities, such as dengue outbreaks or floods. As one OD explained, these changes "*help meet the need in time*":

> *"I received the money on time to prevent the infectious disease (…) our government informed about the lack of medical serum, so when the money is received I decide to take that money to buy because I am here. My HC here, in [the Province] has only me to treat the dengue fever affecting more than 200 people; in here, no one dares to treat"* (HC12 Phase 1 Endline)

> *"When money is needed urgently, we withdraw money to serve an emergency"* (HC10 Phase 2 Endline)

Improved Monitoring and Supervision

Respondents reported receiving supervision from the ODs, though the reported frequency of supervisions was variable between respondents.

> *"The OD frequently carries out outreach every month"* (HC4 Phase 1)

> *"They come every month for supervision"* (HW5 Phase 2 Endline)

> *"OD come for evaluation once in every two months"* (HC10 Phase 2 Endline)

HC Chiefs and HWs in Phases 1 and 2 seemed to be well informed on the content of the external assessments. They described processes to supervise documentation (for example, of expenses), registers, tasks, and the knowledge of HWs:

> *"First they carry out outreach our performance, scoring us according to eh (…) the quality of care service, good infrastructure, for instance and the second is involved with technical system, knowledge of the staff, and the third part involved with the interview of client, the satisfaction of the client"* (HC4 Phase 1 Endline)

> *"The assessment was really detailed, the equipment materials, the quality of checking up the patients, checking the phone of those who come to get the service and the hygiene; after totaling the score, the money was deposited accordingly"* (HC12 Phase 1 Endline)

Some ODs in Phase 2 Midline and Phase 3 were already told to prepare for assessments in advance. During Endline, Phase 3 HCs were either preparing or had already gone through some sort of assessment, even though the formal assessment processes were yet to begin:

> *"The OD told us to prepare the room, to follow everything according to the guidelines, to properly conduct antenatal care, to conduct birth spacing and delivery correctly according to the standard guidelines (…) I heard that they would come to assess (the HC) about hygiene and they would ask about (medical) lessons and we*

must know them all. They will observe the delivery. They will check the registered book, birth spacing book and delivery book. They will ask about delivery, post-delivery, postnatal care and follow up the baby after delivery" (HW3 Phase 3 Midline)

"We prepare ourselves, both with the knowledge and doing. Whenever they come to assess, they will ask a lot of questions. They observed everything around the HC, including toilets and room" (HW9 Phase 3 Midline)

"For only these six months, it involved much preparation work, preparation for QI. For these six months, OD officers were a little bit busy and had more activities than before as well as the outreach of strengthening the thirteen HCs" (OD7 Phase 3 Endline)

Assessments were generally perceived as "*accurate and fair*" and respondents observed their formative nature. All respondents viewed results as a good representation of the quality of the HC. HWs welcomed the assessments because "*the assessment is for us to be good, not assess for us to be failed*":

"I think it is right based on our knowledge and ability. If we want to get more, we must work harder" (HC11 Phase 1 Endline)

"This will let us know whether the quality of service that we have is strong or weak" (HW14 Phase 1 Endline)

Assessments were perceived to be the key to learning and improvement, and therefore essential to achieve quality improvement. As one HW remarked, "*we will not know what is lacking unless we are assessed*". Assessments provided information that later is used for coaching. HWs got feedback on their performance to understand the amount of incentive received. The concept of feedback and on-site coaching built into the assessment process helped the perception of the assessments being seen as a constructive activity, aimed at their improvement:

"We never thought that they come to control or blame us (…) they come to improve us, and what they advised us that is what we follow; do as their advice" (HC4 Phase 1 Endline)

"When they finished the evaluation, they had a meeting with the staff, and they give the feedback to us" (HW13 Phase 2 Endline)

"They do supervision to test the knowledge and daily work of workers, to see whether we work properly, or we don't work. They strengthen the capability of our workers in all sectors" (HW4 Phase 3 Endline)

Some ODs in Phases 1 and 2 also reported processes to collect and discuss evidence with HCs to back their scoring.

"So if they have any dissatisfaction, it would be against the HC that gave them such low scores, but since the assessment was face-to-face, they would be told of their flaws instead (…) When we get the scores, we can see who did their job best by looking at the differences" (OD1 Phase 1 Endline)

Improved Managerial Capacity

Respondents in all three phases pointed to several aspects of SDG that had contributed to managerial capacity in the HCs and the ODs. In the HCs, the introduction of SDG funds, roles and processes increased communication within the HC and with ODs. Within the HC, decisions around how to spend SDG funds were now normally discussed and shared between the HC Chief and the staff. This allowed HC Chiefs to make more informed decisions about spending priorities in the HC and plan in advance with their staff as a team:

"Overall, all sections such as delivery, contraceptives, for instance, all come because when we have meeting, not exceeding eight people join. Less than eight people, the decision is not 100 percent. When we have to spend the budget, we need to have a meeting first [to decide] spending on what; need to do something; so, the decision-maker must wait all comments; when all comments are ok; that is, we are ok also" (HC11 Phase 1 Endline)

> *"We have a meeting with the HC Chief, the Deputy Chief, the accountant, the cashier and all the staff; we have at least two-thirds of the total staff. If the item is big in terms of expense, we have a meeting to discuss, but if the item is in small amount, then we don't need to hold meeting"* (HC14 Phase 2 Midline)

> *"We discuss in a group meeting; to determine what we need as priority. So, we made the decision first before we start. We cannot decide on our own on what we want, but we have to ask each other first. But sometime, I decide on my own because I know what is high priority"* (HC6 Phase 3 Midline)

The role of accountant and cashier also supported communication inside the HC, as several SDG-related tasks required them to work together. They provided their specific skills to support administrative processes:

> *"For example, the midwifery sector may lack scissors, medical clamps. The staff in that sector need to write on the paper to request after checking up those documents. The Director signs, then it moves it to the teller. After the Director signs, the accountant checks and signs and we leave it with the teller. So, we can withdraw the money to buy the materials"* (HC3 Phase 2 Endline)

HCs were impacted by improved financial autonomy. Having more ability to decide on their expenses, HCs planned their spending in advance, adapting to their circumstances and preventing stock outs.

> *"We have a reserved budget for our HC as if there is a shortfall, we will use it to fill any gap in urgent needs. In the past, we had less reserved budget and when we needed it urgently, sometimes the budget for HC was not available. While the FLSG is available, we have an appropriate reserved budget in our HC and we can use it for filling any gaps"* (HW11 Phase 1 Endline)

> *"In the past, when PHD or OD wanted to implement any activities, they come to do it themselves, without knowing our needs. They just gave it to us, and sometimes we could not even use it. But now we have the money to buy supplies ourselves and we know what we need"* (HC10 Phase 2 Midline)

> *"Before, lack this, lack of that like that. Sometimes, they came to get medicines asked them to buy oneself like that. And now, when knowing that we lack something, we buy to keep in advance because get this budget to use"* (HW13 Phase 3 Endline)

HCs and the ODs also reported better communication between themselves, as the latter took a more active role in providing guidance, coaching and supervision. NQEMT and assessments created clear objectives that were common to both. Mobile messaging applications such as Telegram played an important role in facilitating the communication between them.

> *"We have good interaction between the HC's staff and the OD and OD Executive Committee (…) for the assessment, we interact, speak with respect toward each other, speak nicely (…) we welcome the good interaction with the staff"* (HW11 Phase 1 Endline)

> *"It's not difficult because now we have new technology, we send our document via Telegram (…) now, it's ok, we can communicate by Telegram wherever we are"* (HW10 Phase 2 Endline)

Because of the requirement for better documentation of processes and more data, assessments contributed to informed decision-making in the HCs and ODs. This improved reporting was also due to the use of SDG funds and the increased financial autonomy that they brought with them:

> *"They pay more and there is proper attention to the administrative procedures, so it becomes easier to find stuff"* (OD1 Phase 1 Endline)

> *"There are changes to preparation of documents, we put them in an orderly manner, preparing documents according to their fields, year, month, in a comprehensive manner for the assessment"* (HW23 Phase 1 Endline)

"For me, the first change is the documentation like HEF. There is the receipt. Before, we've never had that" (HC3 Phase 2 Endline)

Assessments supported the dual role of OD management. First, they provided them with measurable objectives to guide the supervision of HCs. Second, they provided key information on HC performance that helped the ODs coach and manage the HCs according to their needs. As one OD Director remarked, the assessments worked as "*our experience, our compass*".

"First, we make our HC organize well following the assessment because the assessment is based on the guideline so that the HC functions correctly due to the assessment, so that the health service in our HC has quality" (HW11 Phase 1 Endline)

"It is good to promote the quality of service at the HC or the hospital, to have the assessment. Searching for the gaps it helps to sort them out" (OD5 Phase 2 Endline)

"If we did not have evaluation, then the staff would not know about their duty, about the problems that we face, or what should be done to continue the next month" (HW2 Phase 2 Endline)

Improved Perceptions of Quality of Care and Competencies by HWs

SDG assessments, increased supervision, and coaching contributed to improving HC Chiefs' and HWs' understanding of quality of service and how to improve it in their HCs. NQEMT and supervision provided HCs with a list of objectives on what needs to be done to improve quality. Using these tools, Chiefs and HWs were able to improve their knowledge and guide their actions "*step by step*".

"I think it is good because it makes us upgrade our knowledge and gives more confidence (….) Yes, I think it is fair and gets reflected in the service quality and makes each staff highly knowledgeable" (HW10 Phase 1 Endline)

"For the vignette, this is good because it requires health staff to have good knowledge. Since assessment applied this vignette, it helps our staff to understand better, more clearly on their knowledge and skill. They know how to examine a patient from head to toe. Midwives can inspect the pregnant women more effectively. The most important vignette is on the obstetric emergency care; this is really the best, which pushed the staff to work hard and improve themselves" (HC13 Phase 2 Midline)

"This assessment, I think it's good because first when we do the test, we can know what we're lacking (…) like me, I'm in the field of vaccination, but came across IMCI[6], they ask about IMCI like first when the kid enters, what to ask, how to ask about the background information" (HW19 Phase 3 Endline)

By measuring their performance against a benchmark, HCs and HWs were able to understand what they were missing. Feedback from ODs also played a key role in helping them understand what was missing:

"In the past, we only worked on a simple basis, but we didn't know how far our knowledge had reached. And when there were assessments of our service quality and knowledge, we realized that when we left our learning for so long and we didn't apply it in practice, it meant that we did not know it" (HC11 Phase 1 Endline)

"It (the assessment) makes us aware about what is the first thing we have to do to the patients" (HW10 Phase 2 Endline)

"Sometimes, we could not see what was lacking in our knowledge. They (OD) strengthened our ability, firstly on the care, understanding the checklist. So, when we remember, we can talk to patients and they trust us, can

6 IMCI refers here to Integrated Management of Childhood Illnesses, one of the area for clinical competency testing through clinical vignettes under the NQEMP (https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/child-health/integrated-management-of-childhood-illness/)

check up them accurately, asking them for some information. Sometimes, they don't tell us until we ask" (HW 13 Phase 2 Endline)

Phase 3 Endline respondents preparing for assessments or going through them recently also reported increasing their knowledge on how to improve:

"We were advised to check patients according to its steps, for example, in the past, we had a lot of gaps relating to asking the history of physical examination. We asked their history but asked a little, sometimes just look at the patients' faces to diagnose and give medicine to them. With regard to current assessment, we know about the patient examination, what steps do we need to take? For example, we ask their history and relevant information, ask about their physical examination, know what to check? Then we do proper classification, and proper treatment with the right counseling" (HC8 Phase 3 Endline)

"Because of the external assessment and because we have not interviewed them directly, we reminded them, especially the midwives of the documents regarding the baby rescue that we provided to them" (OD4 Phase 3 Endline)

The combination of clear objectives, guidance, assessment, and feedback steered HWs to work on improving their knowledge and changing their behaviors to achieve better quality of care. As one OD mentioned, "*each staff tries to study harder*":

"We work even harder, pay more attention. Additionally, after the assessment, we know what we are lacking and we can work on that" (HW23 Phase 1 Endline)

"The latest assessment, we got 80 percent; but previous one, we got 73 percent. The assessment score of our HC has increased steadily, from 59 percent to 70 percent to 73 percent, and now 80 percent, which resulted from our hard work" (HC13 Phase 2 Midline)

"They convince on the point that we have the skill. So, we strengthen ourselves. So, we learn, do it properly to lead us to the development in the future. If they don't assess us, we don't know. We don't prepare. So, we are not ready mentally. So, we don't try hard" (HW4 Phase 3 Endline)

The role of ODs in this process was key, as they provided feedback on the assessment and coached HC Chiefs and HWs on how to improve. In the words of a HW "*the OD is the one to pave the way*":

"We guide them in any way to help them strengthen their capacity because that plan is aimed to strengthen the capacity of the staff in providing service and following lessons" (OD2 Phase 1 Endline)

"When lacking knowledge in some point in time, OD will come to reexamine the lacking points, and train the HC staff" (HC11 Phase 1 Endline)

"For me, I think it is good. Sometimes, we don't do right all the time. When the OD comes to teach and tell which is wrong and how to make it right. They guide us this or that is wrong. So, if they don't come, we don't know about our mistakes" (HC9 Phase 2 Endline)

Health care that adhered to objectives of SDG and feedback resulted in HWs increasing their clinical knowledge and changing their behaviors in several areas. HWs were perceived as knowing and following more guidelines. HWs were considered "*more knowledgeable*" and "*more capable*". Some also reported that HWs were more confident on their skills than before.

"Their (HWs) knowledge is seen good, much better because they studied hard every day. They have their lessons which each assessment team provided; day-by-day they study constantly. That make their knowledge increase after we made the assessment" (HC4 Phase 1 Endline)

"For example, when they came for interview, I passed pediatric section. What we did before, is not correct on principle. We thought we did it right, but when it came to evaluation, there were some missing points, so they asked us to improve" (HC10 Phase 2 Endline)

"If patients have a fever, we now check their temperature. If they have diarrhea, we will ask how they have diarrhea, how many times they have had diarrhea, then we examine the skin. It is different from the past when if patients had diarrhea, they would just be given medicine" (HW13 Phase 3 Endline)

Changes in quality were not only limited to the clinical care provided by HWs. Respondents of all types and phases discussed being more aware about hygiene and waste disposal and how that changed their behaviors.

"The organizing, it is better than before, and our hygiene, it is better than before, and the knowledge of the staff has increased more than before" (HW12 Phase 1 Endline)

"Before, the wastes were thrown away anywhere, don't know which package is for the dry waste or pointed things or infected things or other things. Now, after we start doing the assessment, there are specific bins for each waste and we know that the burning items shall be in which bin and pointed items shall be in which bin and the infected things shall be in which bin" (OD5 Phase 2 Endline)

"In the past, for example, our toilets did not comply with the given standard which required separate men and women toilets, faucets with running water, wash basin, soap and towels. The HC must be cleaned regularly. It is not perfect but there is no rubbish around it" (HC8 Phase 3 Endline)

The push to adhere to national guidelines also may have encouraged HCs to use their budget to purchase the goods necessary to provide good standards of care. Some respondents reported having better understanding of how to use their funding:

"First, we use equipment to listen to infant's heart. First, we have only stethoscope and that was enough. Now we spend budget to buy more. We have oxygen equipment for women when they give birth" (HC11 Phase 1 Endline)

"After we got the budget, the overall hygiene in the HC has seen significant changes. Uh, we have bought hand sanitation materials and we bought all of those with the budget (…) Sanitation and labor are done by ourselves, and we also hired a worker to take care of sanitation" (HW24 Phase 2 Endline)

Some respondents reported that non-governmental organizations (NGOs) aligned with the quality-improvement goals set by the assessments, providing support to ODs and HCs to prepare for the assessments and also coaching them, which served as useful reinforcement of the SDG system and demonstrated how partners had aligned with the NQEMP.

"University Research Company (URC) also have assessment related to delivery and they gave incentive for this" (HW17 Phase 2 Midline)

"We have URC that come to train us to prepare for the assessment. They did the practice of assessment two times already" (HW30 Phase 2 Midline)

"Before they finished their project in Kratie province, Save the Children helped us with the assessment tool. Save the Children had given us ideas to better prepare according to the assessment too" (OD3 Phase 3 Midline)

"University Research Company is coming every quarter to provide training and help us prepare for assessment" (HW11 Phase 3 Midline)

Part of NGO support to HCs to prepare for assessments involved trainings:

"University Research Company informed us about the Assessment and helped us to prepare for it. URC helps a lot to improve the maternal and child service" (HC1 Phase 3 Midline)

"Sometimes the OD invites us for a training workshop, then the staff that received training relay their knowledge to other staff. In the meeting, we raise issues and information that we have learned from the training" (HC9 Phase 3 Midline)

"URC (University Research Company) always comes to teach us every three months, and they keep observing us to see whether we can do it or not. When we have delivery case, they (URC) come to observe us. They want to see whether we follow the flow that they have taught us or not. When we do ANC check-up, they want to see whether we provide complete examination or not" (HW3 Phase 3 Midline)

Quality of Services, Improved Attitude and Behavior toward Patients

Assessments and coaching created objective measurement of areas of improvements and improved HW's understanding of how patients should be treated when providing good quality care. Objective assessments also introduced stronger expectations on how HWs should behave towards the patients and "*make the staff change their habits"*:

"In the past, midwifes did not monitor women comprehensively but now they do it more comprehensively (…) because the OD explained and instructed them, or our partners trained them. After the trainings, they are more attentive" (HW23 Phase 1 Endline)

"Before they spoke to patients abruptly, the staff were not friendly to the patients. When there is evaluation on ability, moral norms, the staff are more friendly to the patients. They speak to patients gently, with soft words, for instance, for questioning" (HC11 Phase 1 Endline)

Respondents across all types and phases widely reported a range of changes in HWs' treatment of patients. As HWs summarized it, "*now they are serious*" and have switched from "*bad to good habits*". One example of behavioral change among HWs that was often reported was the switch from directly giving drugs or skipping procedures to conducting the necessary consultation and checks:

"We pay more attention to the patients. When they arrive, we monitor their blood pressure, weigh them, do temperature check, monitor their pulse and heart rate" (HW23 Phase 1 Endline)

"We see there is a change with staff attitude with patients. In the past, when the patients come, the staff only asks about their name, where they come from and what sickness they have. But now the staff have to do complete examination of patients, they have to touch, listen and talk to the patients directly" (HC10 Phase 2 Midline)

"There is change. Like in the midwife section, we are trying to make the appointment with the women after they deliver the baby. But they don't come. Now, we are trying to explain to them that seven days after delivering a baby, they need to come for a check-up. Fourteen days after check-up, come again. When the baby reaches one month and half, the mother doesn't bring the baby for vaccination. For the mother, we tell them about family planning and contraception. We explain to them (…) and ask for the patient's phone number (…) to make it easy for communication later. For example, the kids in need of vaccination don't come. We need to call them" (HC3 Phase 2 Endline)

"Before, the consultant rarely measured the blood pressure. Old people who had headache, we did not know whether they are overweight or skinny (...) If the patient was fat, they would say the patient had high blood pressure. Now, we know it can be high blood pressure, so we measure the blood pressure first" (HC9 Phase 3 Endline)

In addition to providing more thorough checks to meet standards of good care, HWs also reported being more communicative with users. This included explaining to them about disease, the care they receive, and their treatment. HWs also highlighted spending more time teaching mothers about their pregnancy and how to care for their children - this advice covered areas such as breastfeeding and dangers signs.

"For example, when children come for vaccination, we ask them about their medical history to know whether or not they are sick, or whether their mother is sick. We explain breastfeeding, and how to take care of the infant after injection or the adverse effect after vaccination" (HW23 Phase 1 Endline)

"The change is that we educate them [patients]. We ask them questions, like I said before, related to the ANC, related to how to take care of their health. So, they can tell us how to take the iron supplement (...) which food they should eat, which food they should avoid, what they should they do in daily life, notice danger signs; I can see they remember a lot. Before, we don't educate them that much" (HW13 Phase 2 Endline)

"We have improved on many things, including staff behavior, verbal communication and working hours. We are afraid to do anything wrong with the patients, even if the patients themselves say bad thing about us. We have to keep enduring this abuse because our duty is to help the people" (HC6 Phase 3 Midline)

"We see that the midwives now give consultations to pregnant women and the contribution of Health Equity Fund which gives the money to the pregnant women when they come for the check up" (OD4 Phase 3 Endline)

Another change often reported was an improvement in how "*respectful*" and "*friendly*" HWs were towards users. A few respondents also highlighted treating users from indigenous communities better:

"Their attitude has changed a lot. Even if they are tired, their words, speech and movement are more friendly than before" (HC4 Phase 1 Endline)

"We learn how to speak politely with them and assist them when they need our help to go somewhere or when they want us to bring them somewhere" (HW14 Phase 2 Endline)

"There has been a change on staff behavior, because in the past, they were unfriendly to clients. Now they have improved, speaking friendly and respectful to patients" (HC9 Phase 3 Midline)

Increased Motivation and Morale of HWs

Respondents across all types and phases commonly reported their interest to achieve better scores in their assessments. Some of these respondents provided further insight into the reasons responsible for their interest in improving their assessment scores. These reasons could be divided into incentives that were connected to monetary rewards (i.e. financial incentives), and other external and internal reasons not of a financial nature such as attention of superiors, respect among peers or a sense of duty toward their job and patients.

"When there is the performance assessment, those workers including the hospital Chief or the HC Chief, the staff work hard to progress at their workplace. Firstly, to get the score and secondly, to attract the customer" (OD2 Phase 1 Endline)

"Related to quality of care, the money only helps like when we receive the budget of 62028 and the PBG. That helps our staff change their behavior and enhance the quality of care" (OD5 Phase 2 Endline)

"We knew how well we performed, or that our score was more or less based on our performances. If we were scored low, we would try to perform well to get the budget including recognition of our good performance. If we were not assessed, we would not know how well we perform" (HW4 Phase 3 Endline)

Financial incentives

Within financial incentives, PBG-linked incentives were the most recurrent theme. Respondents in Phase 1 and 2 Endline commonly connected their interest to achieve better scores in their HC assessment, with at least a partial interest in receiving more money from PBG.

> *"Another change is that it helps us work on our flaws and we are determined to work harder to reach our target. We are also committed to address our flaws to get 100 percent in the next semester. We have already seen the money package, so we will try to get"* (HW23 Phase 1 Endline)

> *"That budget helps strengthen the service in our HC and second, helps increase the knowledge of our staff (…) [They are] trying to study, memorize the lessons"* (HC3 Phase 2 Endline)

The motivation to achieve greater incentives was often connected to staff working harder and changing their behaviors. As a HC Chief mentioned, it "*makes the staff put in more effort in working*"

> *"If there is incentivization and competency test, all our staff will make an effort. I also hold meetings to motivate them about the character of our service quality"* (HC11 Phase 1 Endline)

> *"When there is the assessment, and the knowledge of receiving the incentive, it makes our staff have the motivation to work"* (HW6 Phase 1 Endline)

> *"First, good effect is about strengthening staffs to remember JD to provide service to clients. Moreover, staffs try to work hard to get more PBG"* (HW1 Phase 2 Endline)

Some respondents also linked PBG incentives to HWs' satisfaction with their job compensation. This in turn motivated them further. As an HW remarked, "*they're satisfied because they get the money. It encourages the staff*".

> *"When we have that PBG for the HC, they receive the score and they are happy with the additional budget"* (OD2 Phase 1 Endline)

> *"Yes, we are happy to work full time, because we have budget, we don't care much about money shortages at home anymore"* (HW25 Phase 2 Endline)

Respondents in Phase 3 Endline were also aware of the PBG incentives and expressed their support for them:

> *"I think this assessment; it is good if it is the assessment for HC so that we will have scores. Then we will get budget from 60 percent to 80 percent based on the assessment scores. I only know this much because they have not done assessment yet, so we don't know"* (HW22 Phase 3 Endline)

> *"I heard of it. They did tell us, but we do not know how much it is at this stage. We don't know what kind of money that we will receive. They told us that if the result of assessment is good, they would give more money to improve the health facility"* (HC1 Phase 3 Endline)

Phase 3 respondents also described other financial incentives such as salary and user fees being a source of motivation:

> *"We speak kindly to patients, if not, then they would not come anymore to use the service. They pay user fee, so the more they come the more money we earn (…) We are more motivated than before; with more income, the motivation increases"* (HW10 Phase 3 Midline)

> *"When the income is high, the staff is willing to work. Like last month since the revenue grew, employees were happy as well"* (HC2 Phase 3 Midline)

Non-financial Incentives

In addition to financial incentives, respondents in all three phases commonly mentioned other sources of motivation in their jobs that were not related to their income. For example, the combination of clear rules, expectations, feedback, and enforcement around quality were mentioned by HWs. These influenced them to change their behaviors and improve their care to patients. Both HC Chiefs and ODs were reportedly active improving and enforcing good behaviors:

> *"The OD has given us warning that for the midwives if their assessment score falls to 15 percent or 20 percent they would stop the midwives from their work immediately. If the midwives cannot perform the delivery and save the patient from danger, then they should not practice delivery. Although my HC is located far away, my midwives had a high success rate when they were assessed on the clinical vignette (part of the HW assessment)"* (HC13 Phase 2 Midline)

> *"The attitude of the staff has changed, because if they do not behave appropriately, they have to take the responsibility for their actions. On the staff uniform, there is a name tag of the staff; so if they behave inappropriately with the patient, the patient can take their name and make a complaint. Then we would take immediate action on it"* (OD7 Phase 3 Midline)

> *"Attitude toward patients - I think that has improved. Every month, the manager always holds a meeting, and he always raises the subject of making our attitude improve with patients"* (HW3 Phase 3 Endline)

Some managers and HWs emphasized the importance and potential effects of users' perspectives expressed publicly or through existing feedback channels:

> *"The community's representative is the Chief. He is the Chairman of the Board of Directors, managing the CSC HC. We at the OD cannot really oversee everything so he will be our auxiliary instead. Whenever there is a problem, he shall tell us. He also complained a lot about the staff. But whenever there is a meeting and we make him review our activities, there's only compliments to the staff"* (OD1 Phase 1 Endline)

> *"Those patients that came for delivery, I have met and talked to 70 percent of them. I asked them about what they feel about the service, and especially about the midwives. The information I gather from the patients, I bring it up for discussion in the meeting"* (OD6 Phase 2 Midline)

> *"So, we are careful at all the times. When patients come and feel unhappy, waiting for the physician for long, they write a letter and put in a box to be opened at the district hall (…) a thing showing that quality has to improve so we are careful with all things. Because nowadays citizens aren't foolish as before- if they have an issue, they make a complaint; they may post on Facebook"* (OD7 Phase 3 Endline)

The interest to improve the assessment score was also mentioned beyond financial gains. Respondents identified scores as a measure of one's ability and hard work thus representing one's image among peers and supervisors. As a result, HWs were keen on doing a good job to avoid the embarrassment of a bad score. As a HC Chief highlighted, "*money is not a lot, but the reputation is important*".

> *"When their scores decrease, they start feeling embarrassed and start working hard; they work hard and their scores start increasing again"* (HC4 Phase 1 Endine)

> *"For those who do not know much, we motivate them to think about their ability and reputation, or honor"* (HC11 Phase 1 Endline)

The desire to not be embarrassed was further compounded by a sense of competition between HCs:

> *"Each center makes more effort because generally we, in each trimester, show them the result. Amongst 15 HCs, they compete with each other because they want the high scores. So, they need to work hard to build the capacity, build their infrastructure to get the higher score, competing with each other"* (OD2 Phase 1 Endline)

"So, we keep trying because we are afraid that people may say our center is the weakest during the meeting. It is shameful" (HC6 Phase 2 Endline)

The links between poor performance and embarrassment was shared and possibly encouraged by ODs from the very start of the assessment.

"Only if the HCs pass, they will have the reputation; so when there is the assembly at the ministry to choose the model HC, they give a medal and give the incentive. So, we spread the word further to encourage more effort and believe that there will be more changes" (OD3 Phase 3 Endline)

Among non-financial incentives noted by HWs, were the improvements they observed in their workplace. These included better infrastructure and better access to equipment, supplies and consumables. HWs felt supported by the health system, and appreciated that improvements made their HCs a more pleasant place to work in and created the conditions to provide care of good quality:

"When we get that budget package, our staff have the heart to work. It's like the budget encourages the staff. Because we have the budget package our staff also think that when working, (they) have the encouragement from the governments because of the budget package" (HW11 Phase 1 Endline)

"We feel very happy because when clients come to receive service, we have all supplies and equipment to provide good service; we have supplies and medicine. So, we feel at ease. What we need, we can get" (HW9 Phase 3 Midline)

"Yes, because we have this budget. Not having this budget, not for our personal spending, but we are happy that government provide us so we are happy that, if we lack of something, we can withdraw this budget to buy to fill up gap" (HW26 Phase 3 Endline)

Some respondents also emphasized their commitment to doing a good job because this was their duty:

"There's not really a whole lot about, we are just self-motivated" (HW24 Phase 2 Endline)

"We had a meeting among all the staff, informing them that if we want to go forward, we have to do this together, do it for our institution, and not for any individual person. We have to consider that the institution does not belong to any individual, but to all of us, not just staff with official duties but also all workers, and even the gardeners" (OD3 Phase 3 Midline)

"First, they think it is important for the future, when other people come to assess (the HC). So they need to work hard. Second, it is their job. When there is new policy/instruction (from higher level), we need to follow" (HC8 Phase 3 Midline)

Challenges Limiting Performance and Motivation

Several respondents from all categories and phases reported being concerned about their ability to improve their score. For example, some respondents emphasized staff shortages as a constraint to achieve better scores in assessments:

"We have only one midwife so when people come and do not find her, they stop trusting [the HC] and stop coming" (HW7 Phase 1 Endline)

"We are also low on staff. We just have so many things to do. Some would understand us, and some will not" (OD1 Phase 1 Endline)

"I mean that we had enough staff in my HC, but there was still a shortage, in particular doctors and staff too. Most of them are contract staff. In fact, there are only seven staff in my HC while our quota is for 10 persons. We don't want to hire staff because we don't have enough money" (HC8 Phase 3 Endline)

Some HCs were especially under stress due to dengue outbreaks. The lack of resources to face the increase in cases made it impossible for HCs to keep providing the quality of care they were expected to:

> *"Before for our activities and services in January, February, March, it does not matter until the dengue fever exploded. Then we had at least 30-40 patients. This facility has no space for patients to stay. Regarding hygiene, we cannot do it well because there are so many patients and there is only one cleaner. There are many buildings so cleaner cannot do it well. That's why the assessment in the second trimester is lower. So, there must be changes"* (HW14 Phase 1 Endline)

> *"We have big challenges in our health facility related to the explosion of dengue fever. So, we need drug supply such as IV. First, when we need it in large amounts, it runs out of stock. Second, the materials run out of stock such as blood tester. So, it is very tricky"* (HW16 Phase 1 Endline)

Shortages inevitably led to higher workloads, which increased working hours and likely hampered the motivation and ability of HWs to provide care of good quality:

> *"Insiders (HC staff) complained that our HC was so bad because staff did not feel satisfied as there was too much workload. In fact, too much work caused them to make more mistakes"* (HC12 Phase 1 Endline)

> *"(…) like before they came to do the evaluation, the staff only work half day which is in the morning, but right now I tell them to work from morning till evening"* (HW8 Phase 3 Endline)

In addition to staff shortages, HCs ability to improve their performance was constrained by the ability of some of their staff, some being elderly, to learn their assessment.

> *"Our efficiency level isn't high; we don't remember well; we don't know well; the lesson was also given. But we don't have time to read because we not only work in HC but also do farming"* (HW16 Phase 1 Endline)

> *"Normally, staff do not want to fail with respect to the assessment; never want themselves to be weaker than others. So, they work very hard. But sometimes even if they work hard their capacity is only at this level, so no matter how hard they work they would not reach it. It is different from staff in the city where they are more educated; rural staff has limitations. For the rural staff, if there are too many things in the Tool, they are not able to catch up"* (OD6 Phase 2 Midline)

> *"When they can't answer, we, the OD need to call them to ask why they don't know the answer so that we can teach them. They said they are old and could not remember the lesson"* (OD5 Phase 2 Endline)

Increased Availability of HWs at Health Facilities

Respondents broadly reported that their HCs had staff available round the clock. This was consistent across all three phases. As one HC Chief remarked, they now had staff on standby duty "*24 hours on 24 hours*". This was referred to as an important change in the last six months:

> *Yes, the staff have become more friendly and respect working hours by coming on time as well as reporting for duty at 7:30am and leaving at regular time, as 24-hour standby duty is for both daytime and nighttime just in case a problem occurs"* (HW10 Phase 1 Endline)

> *"There has been improvement in terms of staff reporting for duty at the HC. This is better than before. When patients go for delivery, the staff was there on their duty; there were two to three midwives there"* (OD3 Phase 3 Midline)

More punctual staff enabled longer opening hours as respondents in all three phases agreed that patients complied more with their entry and time off hours:

"There is still a gap. Standby duty is available, but it is not regular, in particular standby duty at 6am or 7am or on holidays. However, it is now more improved than before" (HC13 Phase 1)

"There has been an improvement in working hours, they (HWs) come to work at 7am. If they do not arrive by 7 am, they are marked as absent" (OD6 Phase 2 Midline)

A few respondents mentioned that this change was connected to motivation, the assessment and the PBG incentives. HWs' punctuality and standby duty were monitored, directly or indirectly, by HC Chiefs, ODs and the community:

"In the past, we had a very bad attitude regarding working hours; but now if we come to work at 8am, we are marked as late, and the HC Chief would give us warning" (HW17 Phase 2 Midline)

"Previously we did not work full time, but now we work full time, so we get incentive" (HW25 Phase 2 Endline)

"It was related to staff motivation. They come to work regularly and more punctually than before" (HW3 Phase 3 Midline)

"Standby duty was also regular. We were advised that we had to be on standby in the workplace because we were afraid that when patients come, our staff would be found to be absent and would complain about us. It was also good that we were advised much. Staff were still on 24-hour standby even when there was no any supervisions or assessment. However, supervision or assessment kept on reminding us" (HW16 Phase 1 Endline)

"(…) We consider coming to work as our duty because we are the Directors, so we have high responsibility (…) responsibility related to the community. When they come to the center and don't see the standby staff we must assure them and accept an inquiry on their absence" (HC6 Phase 3 Endline)

Combined Effects of SDG-induced Changes

Describing changes in their HCs during the last six months, some respondents explained how changes did not happen in a vacuum - several changes took place simultaneously. In their opinion, the combined effect of these changes impact quality and utilization.

"Yes, the number of patients increase because they see that our center is clean, has friendly service, and the medicine is sufficient" (HW23 Phase 1 Endline)

"Everything from the infrastructure, availability of the medical equipment, pharmaceuticals, and knowledge of all staff combined are needed to reach the final target of improving services" (OD1 Phase 1 Endline)

"Within the last six months we have seen changes such as the cleanliness. I had told them but they did not pay attention to us earlier; but the last time, I saw the cleanliness, no rubbish and there were rubbish bins for different types of rubbish by color and the staff tried to study the lessons provided to them. The injection is as usual as we do. There was no change. The birth delivery increased significantly because there are staff on 24-hour standby duty and all these were the contribution of the Performance-Based Grants" (OD4 Phase 3 Endline)

SDG Effects on the Utilization of Public Health Services

Increased Utilization

HWs and managers reported an increase in the number of people attending their HCs in the last six months. This increase was shared across the three phases:

> *"The service that shows the most increase compared to other services is outpatient consultation"* (HC14 Phase 2 Midline)

> *"Yes, in the past, we had fewer patients. But now, we have many more patients"* (HW28 Phase 2 Endline)

> *"More patients come to seek care here"* (HC1 Phase 3 Endline)

A few HC Chiefs and OD Directors also kept track of the attendance in their HC and provided numbers to back their view:

> *"Yes, there is an increase. Previously, there were five or six people, or eight people, but now this has increased to 30 or 40 people [attending the HC]"* (HC4 Phase 1 Endline)

> *"Yes! currently, there are many people who access our services. In the past, there were only 200 or 300 clients at triage. During this month, we significantly served nearly 600 clients, a number that we've never reached in the past"* (HC7 Phase 2 Endline)

The increase in footfall at HCs was usually concentrated in maternal and child health services:

> *"For some indicators such as the baby delivery, ANC and external medical consultation, I can see that it (the number) has increased"* (OD2 Phase 1 Endline)

> *"I observed there is an increase in ANC, immunization and delivery. These are services where the numbers increased a lot"* (HC1 Phase 3 Midline)

> *"Related to delivery, there seemed to be not much increase, but for ANC services, there is an increase. Our ANC service is better than other facilities, that is why people from other coverage areas come to use our service here, so it makes our ANC service increase a lot"* (HC6 Phase 3 Midline)

Factors Contributing to Increase in Use of Public Services

SDG Outcomes in HCs

HWs, HC Chiefs and OD Directors connected the increase in utilization of their HCs to several of the changes they observed in the last six months, financial protection schemes, outbreaks, and legislation. The change at HCs that most often was perceived to increase utilization in the last six months was the increased availability of HWs in HCs. According to respondents, the presence of a HW has encouraged people to come:

> *"Nowadays, the people talk good about our HC. They say that the HC is now really good because every time they come, there are staff available to help right away. At the HC, there are staff available at nighttime to provide delivery service. Before it was very difficult to call or find the staff at night. Now there is a lot of change"* (HW17 Phase 2 Midline)

> *"Previously, when people who came to get the service had to wait for so long, they were always upset, Lokrou! Now the medical practitioner comes to work already? So, when we do that [enforce staff punctuality], the people are satisfied"* (HC7 Phase 2 Endline)

> *"When they come to our center, they always meet us. We do not have to advertise. Our clients go on to advertise for us"* (HC2 Phase 3 Midline)

Respondents, mostly HWs, also highlighted how the improved availability of drugs has improved user satisfaction eventually leading to more people coming to the HC:

> *"Yes, our medicines and equipment are now sufficient. The medicines supplied by Central Medical Stores aren't enough but we can supplement them by using the user fee and the 62028-budget. As such, it makes people feel satisfied with our services because we have sufficient medicines"* (OD1 Phase 1 Endline)

> *"Since we have this 62028 budget we have enough supplies and consumables, and even have modern equipment. So when the patients see that we have modern equipment, they like to come and use the service"* (HW11 Phase 3 Midline)

Infrastructure improvements were also often cited as a source of satisfaction for users, who were more likely to visit after seeing the improved conditions at the HC. Improvements in the HC's hygiene were particularly emphasized in their accounts:

> *"We improved the surrounding of the HC. We have electricity for the HC at night and make the walking path accessible. Now we have patients come to deliver at night because we have electricity and clean toilets"* (HC5 Phase 3 Midline)

"[The assessment] makes our center's service good in all areas and all service users come when they see that the place is modern; the bathroom is clean, and up to standard" (OD7 Phase 3 Endline)

HWs also saw their improved care and attitude as having a positive effect on community members.

"Good, because we are attentive to patients, check them properly, those who come to get the service are satisfied, they look forward to receive the service the next time" (HW12 Phase 1 Endline)

"Presently, the staff behavior has changed, they are very friendly and show a welcoming attitude to patients. This helps to convince women to come for their delivery and get ANC at the HC, which is increasing every month" (HC9 Phase 3 Midline)

"There are many service users… yes! Because they have confidence in us too" (HW4 Phase 3 Endline)

Financial Protection

In combination with changes in the HCs, financial protection schemes were also perceived as central to the increases in utilization. Suply-side respondents featured HEF (also called '*IDPoor card*') prominently, but also other schemes like the National Social Security Fund (NSSF) and the 1,000-days scheme. Based on their experience, respondents described several episodes in which utilization increased since free care and subsidies were either in place or known by users. In line with these statements, an increase in HEF beneficiaries was often mentioned when discussing changes in the utilization of the HC:

"There were a lot of people who accessed services in our facility because they understand the IDPoor card. If they visit for prenatal care and vaccinations, they will be also provided some allowances" (HW23 Phase 1 Endline)

"I have seen the numbers of card users increase to more than 200, because they have more information about benefits of using it" (HW21 Phase 2 Endline)

Outreach and Others

Some respondents reported providing outreach services including education to increase utilization. There were some references to using additional resources to conduct outreach, however, there was limited information on how much it had changed since the introduction of SDG. The role of outreach services in improving utilization by educating poor users about HEF benefits is presented in the next section of this report:

"Previously, they always said to one another that lets not go, the service of a private hospital is faster. Now, they seem to have changed; there is dissemination meeting with SDG findings informed to the management committee. We have monthly meeting telling staff to inform the villagers that our service has been improved and asking them to come. The village or commune chief also promotes the HC to the villagers" (HW10 Phase 1 Endline)

"For vaccination, it has increased a lot because we had a lot of outreach activities. The majority of people come to the HC to get the services. Maybe in two to three years, we will not need to do outreach activities anymore" (HC8 Phase 3 Midline)

Some other factors external to the health system were sporadically mentioned as contributing to the utilization of HCs. These included dengue outbreaks, Cambodian migrants coming back from Thailand and a law forbidding deliveries at home:

"In each center, we think that there has been a challenge this June. We were faced with dengue fever (…) So, it means that patients generally increased; although we have limited staff and were exhausted, the HC still functions well" (OD7 Phase 3 Endline)

"R: Yes, the number of clients (women) was more than before. {I: Why did they come to receive the service more than before?} R: First, they wanted to do their business here. Second, they accompanied their husbands and stayed here [at the border]. Third, they crossed the border to do business in Thailand and could check up their health here. In fact, they visited for ANC in this HC and they could go back to work in Thailand" (HW4 Phase 3 Endline)

"Related to the clients, we see that for women patients in the delivery field there is increased demand for a midwife as we have banned the delivery of baby at home" (OD3 Phase 3 Endline)

Challenges to Increased Utilization of HCs

Some HCs did not experience an increase in utilization of health services in the last six months. These experienced either ups and downs, no change, or decrease in utilization in one or more services. For instance, some experienced a decrease in outpatient departments:

"The demand for ANC was similar to the past, and did not keep constant. For example, it was sometimes lower or higher. {I: So, you mean that it's still similar} R: That's right. it was not constant, sometimes, there were four to five or two to three clients who accessed ANC service in each month" (HW19 Phase 1 Endline)

"There is no obvious change in utilization rate. It is about the same, not much increase but also no decrease" (HC10 Phase 2 Midline)

Respondents across all phases and types reported challenges that limited the utilization of their HCs. For instance, distance, weather, and access to transport were mentioned as reasons:

"It's far away if the distance is more than 10 km. So when we visit the locals, many people come and join because it is too far for them to go to the center. When we go there, many people will come" (HW23 Phase 1 Endline)

"Some patients live far away and cannot afford transportation, so it's hard to come to the HC. If they hire a motorbike, it costs more than buying medicine. So, traveling is so costly. If the HC is near their home, they come. This is their challenge. If we sponsor their transportation, more people will come. They're not only poor, but also lack transportation" (HC1 Phase 3 Endline)

Communities' preferences for higher-level facilities played a role, with some women prioritizing certain hospitals for delivery and for serious conditions:

"They (users) don't want us to forward, they would go to a higher level directly. Because if anything is wrong with the delivery, it's easier for them [at the hospital] to help" (OD1 Phase 1 Endline)

"They think it's good to come here because they know the benefits related to child delivery. For some others, they're afraid that this HC cannot provide good care, so they seek care somewhere else" (HW21 Phase 2 Endline)

"Mostly, in this area, if they do not deliver the baby at the HC, they go to the [Provincial hospital]" (OD3 Phase 3 Endline)

In the case of NSSF and HEF beneficiaries, this decision was possibly determined by free care and transport subsidies that let them access the provider they wanted:

"Yeah, it dropped [the number of deliveries] because of the NSSF support card. Yes, it can be used anywhere including at the HCs, national level hospitals, provincial hospitals, referral hospitals(...) So people with the card, especially civil officials [use it]. The card holders would not use [our] service, they would try to go to a higher level [hospital] because it's all the same – free" (OD1 Phase 1 Endline)

"Today, there is NSSF card, and people who work at a factory have NSSF cards. They get permission from the manager to get the service, especially for ANC, for which they come every month. There are more women who come for ANC than we expected. They had ANC more than four times, over than what is required. They came to check their health every month up to their delivery" (HW9 Phase 3 Midline)

"Based on their ideas they also mention, holding this ID they go to the big hospitals, they do not come to us (…) I have heard this from the other's talks. But for our side, it is ok, they said that [HC] is still small and convenient to go, but it is at the referral hospital, they just keep us apart because we have the ID" (HW8 Phase 3 Endline)

HC utilization was also restricted by community members who preferred to use private providers instead of public HCs:

"Sometimes, the patients use other services. We can't persuade many of them to use our service because there are many private services (…) The citizens have money and they go to use this or that service, the private service" (HC3 Phase 2 Endline)

"[Utilization] by outpatients has decreased from 700 to 300 per month. Delivery also decreased because some are going to Siem Reap and other private clinics because the road is better. The only service that is increasing is ANC, especially for migrant workers" (HW11 Phase 3 Midline)

"In addition, I thought that even people who wanted to test their blood, could not be served unless there was inpatient service in here. In fact, HC provides only medicine and there is no blood test lab and inpatient service. If they are referred to the hospital, they will not agree as they need to stay at the private clinics near their homes" (HC8 Phase 3 Endline)

Financial Protection: HWs' and Managers' Perceptions

HEF's Role in Increasing Use of Public Health Facilities and Services

Respondents in the health system reported an increase in the number of HEF beneficiaries coming to use their services at HCs:

"For example, related to the HEF card holder, only 10 or 20 people with HEF cards holder. Later, it increased because people understood more" (OD5 Phase 2, Endline)

"There has been a lot of change because before, people who had equity funds had less access to services, but now people who have equity funds come to get service at our place" (HW3 Phase 3, Endline)

In the view of respondents in the health system, this increase in HEF users was achieved through a combination of improvements in their facilities (described in the previous section of the results) and the benefits HEF provided. Asked about the benefits that HEF beneficiaries enjoyed in their HCs, HWs and HC Chiefs often described the most common benefits of the fund. In the first place, respondents highlighted the ability of HEF beneficiaries to access services without paying a service fee. In the words of a HW, "*they come to get the same service as other but don't need to pay money*". NSSF beneficiaries' access to this benefit was also known:

"For the patients, they don't spend the money" (HC6 Phase 3 Endline)

"We do not charge them but pay for them for all HEF and all services like contraception and childbirth delivery. We provide all services for free" (HC9 Phase 3 Endline)

"If they have a poor card or an equity fund when they come to a public facility anywhere, they don't have to pay the bill" (HW3 Phase 3)

Transport benefits were also commonly mentioned. These were distributed across two types: free transportation to refer patients to hospitals, and covering expenses of patients travelling to the HC or hospital:

> *"Sometimes, they are seriously sick, then HEF can help them a lot including the travel fee, the transfer, all exemption, so there are many benefit for them"* (HW11 Phase 1 Endline)

> *"When we refer them to hospital, car fee is free as well as hospital fee"* (HC10 Phase 2 Endline)

> *"Because they hold equity cards, they get money for travelling"* (HW25 Phase 2 Endline)

> *"First, they use free service. Second, they have the transportation money for their return"* (HC3 Phase 2 Endline)

HWs and HC Chiefs were also aware of NSSF cash incentives received by women visiting health services to be used for key maternal and child health services. On their first visit, mothers get a Wing account in which cash transfers are deposited whenever the key visits take place in accordance with doctor's appointments:

> *"They get [NSSF] benefits from the government such as delivery allowance and incentives"* (HC11 Phase 1 Endline)

> *"When a pregnant woman passes the interview successfully, she is given a Wing card (electronic payment card). Payment can be made following the instructions. For example, what amount she gets per ANC visit; what amount she gets for baby's vaccination; what amount for delivery (…) what amount she gets for duration of her baby until the age of two years"* (HC10 Phase 2 Endline)

> *"That allowance is from NSSF fund they provided from 1st of June. During ANC, they have an age mark. If it is less than 12 weeks, she would get 40000 riels once, then from 20 to 24 weeks, she would get a second allowance of 40000 riels. Then, two more times, 40,000 riels each when the fetus is 32 weeks, and then from 37 to 38 weeks, she would get one more allowance"* (HC13 Phase 2 Endline)

HEF beneiciaries also mentioned receiving these cash transfers. As with the NSSF program, cash transfers were perceived to be useful to encourage women to come to the facilities "*so they receive money as well as they are healthy*". In two cases, respondents described how women in their area combined benefits from NSSF and HEF to make the most of both programs:

> *"For the ones who have the HEF card, they always received the budget. During pregnancy until the baby is two years old, they always received over 700,000 riels"* (HW7 Phase 2 Endline)

> *"Women with IDPoor card who take their child for vaccination, we give them money by Wing account under a separate Ministry of Health's program"* (HW4 Phase 3 Endline)

Food benefits were far less known among our supply-side respondents. Food allowances were briefly mentioned by some; most specified these were benefits provided only at the hospitals and not the HC:

> *"No, only in hospital. Our HC doesn't have [food allowance]"* (HC12 Phase 1 Endline)

> *"The food allowance [is given], only for hospitalization at the district hospital or provincial hospital"* (HW7 Phase 2 Endline)

Challenges Faced by HEF Beneficiaries and HCs in Trying to Provide HEF

HWs, HC Chiefs and OD Directors described in detail their experiences of the multiple challenges faced by HEF beneficiaries. Some of them also described the measures their HCs and ODs put in place to address these challenges.

Challenges identifying those who should be HEF beneficiaries

Identifying who should benefit from HEF

Respondents across all types and phases highlighted issues related to identifying the correct families as IDPoor, with poor families being left out and others with more means being accepted. As one OD Director put it, "*some families are really poor but didn't receive the card*". According to some respondents, this led to anger in the community when people in need were left out while others in similar or better economic situations were given IDPoor:

> *"Some really poor people don't have both IDPoor card or money so they don't dare access the center. This can make their illness or childbirth more serious or more dangerous. Some of them do not dare to come because of lack of money. This makes them seek treatment at their homes and this can be dangerous as well"* (OD2 Phase 1 Endline)

> *"Some people were criticized for receiving the IDPoor card because they had a lot of cows and buffaloes. In contrast, some people who were poor were not considered eligible for the IDPoor card. This made them feel resentful of the inaccurate issuance of IDPoor card by the village chief"* (HW11 Phase 1 Endline)

Some HC Chiefs explained what they believed were the challenges in identifying the right people:

> *"Another challenge, like I said before, we could not identify and find all poor people (…) They do not have the cards and are actually poor, because when we search for poor people to be registered, they were not present"* (HC1 Phase 3 Endline)

> *"We have difficulty with this card because we need to visit them (the poor). So, we need to do outreach directly and be involved with authorities to verify with commune chief who the really poor are. Sometimes, they do not have either HEF or IDPoor cards"* (HC9 Phase 3 Endline)

HCs make exceptions for the poor

Respondents reported providing assistance to people who could not benefit from HEF (for example, those not having an IDPoor card or a certification from their Chief) and who the HC considered to be in need. In these cases, the HC would provide healthcare without asking for payment because, in the words of an OD Director, "*they needed to be made an exception*":

> *"Sometimes, I see that they are poor, but didn't get the card, but someone who is better off than them, gets the card. I know clearly that they are truly poor, so I have to make an exceptional case for them"* (HC10 Phase 2 Endline)

> *"The problem exists only with those who have no card. Those with no card include a monk, the elderly. When they come, we favor them, and they ask why we don't take the money from them? So, we tell them that our staff do not take [money]"* (HW5 Phase 2 Endline)

> *"For the poor, who don't have money, don't have that card, we favor them, don't ask the money from them but we register their name in HC"* (HW4 Phase 3 Endline)

Challenges to use of HEF benefits

Knowledge of HEF benefits

Community members were sometimes unaware of the benefits that were available as part of HEF. As a result, they would not benefit from them or change their behaviors:

> *"They don't know [about HEF benefits] until we have a meeting with the village committee. We explain to them about the benefit of the card when they bring it to the HC. They can get free health service. If they don't have money, they just bring the card, they can use the health service for free"* (HC11 Phase 1 Endline)

"Some people know about IDPoor while some do not understand. That is why I have said their use is still limited" (HW22 Phase 3 Endline)

Lack of knowledge on how to access HEF benefits

HC users did not always know how to access HEF benefits when they came to the facility. This often led to people not bringing their cards, bringing expired cards, or bringing the wrong card:

"Before, the clients came few times. Now, we guide them to bring the HEF card. Before, even if they had the card, they failed to bring it" (HW6 Phase 1 Endline)

"Yes, sometimes they come without the card with them, come to use the service but don't know where the card is, and sometimes, the name is different from the name on the card" (OD6 Phase 2 Endline)

In the view of the health system workers and managers, patients not bringing their card when seeking care was a major issue that limited beneficiaries' access to HEF benefits. In their accounts, respondents provided rich descriptions of the problem and examples from their own experience:

"A client who had the IDPoor card came to get vaccinated. But she did not have ID card. We told her to get the ID card, then we would provide service to her. I made two appointments with her, but she did not bring the card. Now, we still have not provided the service for her" (HW13 Phase 2 Endline)

"Sometimes, they come to the market and make time to go to HC, so the card is at home. They come to ask for medicine, but they do not bring the card with them, so they are willing to pay the service fee. Hence, we do not know that they have the cards, but we often ask them for it, and they say it is at home" (HC9 Phase 3 Endline)

In addition to not knowing they needed to bring the card to receive benefits, respondents also highlighted that many people did not bring their cards despite being aware it is required. They referred to them as "*lazy to bring the card*". However, the reasons for not bringing the card were unclear:

"Some are lazy to bring their card and when we ask for the card, they say they have it but they didn't bring it with them. So, we continue to educate them about the use of that card, tell them they will get the benefit when they use that card in helping them like this, like that (…) Now they have knowledge. They said that with the card, the medical practitioner doesn't really care about them when they are sick" (HC3 Phase 2 Endline)

"The reason is that they are lazy to use it. Sometimes, they can forget to bring it. They can forget to bring the card" (HW13 Phase 2 Endline)

Some people lack knowledge of the expiration of the card. As a result, they come with expired cards or did not know they can use the service temporarily while they are being re-assessed:

"They use that card without reading, they think that their card can be used for ever; didn't know that their card has expired" (HW11 Phase 1 Endline)

"It doesn't mean that when the HEF card is expired, they can't utilize it. If expired, it can be utilized until they are assessed" (OD7 Phase 3 Endline)

Such patients could not be registered in the HC's PMRS, making HCs lose money from those services:

"The HW who was responsible for data entry, lacked knowledge on the PMRS system, so he collected the code number of patients but did not check them in the system to verify the expired code number. For example, two codes were expired and automatically removed by the system in a week. As a result, the number of data entry and actual count was inconsistent" (HC13 Phase 1 Endline)

HEF education for the community

To address challenges around lack of knowledge on HEF, HCs played an active role in educating their communities. This education took place at the HC and through outreach in the community. In the HC, HWs used the opportunity to speak to people coming to receive health services:

> *"They were advised in a firm tone that they had to know how to use a valuable thing such as IDPoor card otherwise they would be required to pay double the user fee. Later on, they kept it in their mind, and always carried it. This was not only achieved through education but also through the commune and meetings, and comprehensive dissemination [of information] about the card"* (HC12 Phase 1 Endline)

> *"When they come to the center, the staff are friendly and make them understand that when they have card, they can get the service for free and get the medical drug like when they do the check up at another place"* (HC6 Phase 3 Endline)

As part of their outreach, HCs educated people while providing services. They also educated and collaborated with communes to spread the word:

> *"During the meeting with the commune committee, we mention and promote the use of cards so that they understand it clearly (…) We encourage them to promote the use of HEF card in the community. We promote [information] about the quality and benefits of the card"* (HC11 Phase 1 Endline)

> *"First it would be the Chief and second it would be the staff telling them [about the benefits of the card] in general"* (HW24 Phase 2)

As part of this educational outreach, several respondents suggested stronger links with communes and villages to reach people in their catchment area:

> *"The first step, is the head of village - they need to promote, they need to do that clearly, to avoid having complaints like give also to the rich, it's all their relatives, like that, and blame only the medical practitioner"* (HC12 Phase 1 Endline)

> *"We need to know how to get the message across to the grassroots so that the people can understand the utilization of HEF to some extent. Yes, how they can gain access to the HEF, and how to some extent they must pay on their own, and to some extent they can use IDPoor card to access the services at HCs. So, it is we must strengthen all including staff, education, promotion especially cooperation with the local authorities"* (OD7 Phase 3 Endline)

Staff sometimes unaware but training from ODs helped

All respondents except for one HC Chief were aware of free care and transport under HEF benefits. According to HWs and managers, HEF benefits could be used "at the HC and the hospital or the hospital in Phnom Penh". These benefits could also be used in "different provinces" and "throughout the country".

> *"There are many benefits including health service nationwide. It is free of charge for people with the card"* (HW11 Phase 1 Endline)

However, a minority of HWs may not have been fully aware of HEF benefits and may have turned down patients consequently. Some respondents also reported having issues understanding some benefits, and ODs were sometimes called in to provide guidance:

> *"In the past, we didn't know about the benefit of the card so it is hard for us. We didn't know how to spend it"* (HC11 Phase 1 Endline)

> *"[We] faced problems, just like those who didn't know before about transportation fee, we didn't provide them, but after OD called us, we had to pay their transportation fee. We paid them back, it is okay now"* (HW13 Phase 3 Endline)

Challenges to accessing HCs as an HEF beneficiary

Distance

Long distances, lack of transportation and poor roads, and weather conditions posed a challenge to HEF beneficiaries wanting to use the HCs. Despite covering transportation costs, long distances made going back and forth to the HC time consuming and exhausting:

> *"All of them in here are poor so they face difficulty with transportation in this area. They ask a favor for transportation here; for example, they pay villagers for 1 or 2 liters of gasoline. If they are poor, all user fees should be covered and two- way transportation cost should be provided"* (HC4 Phase 1 Endline)

> *"Some people, for instance, have the IDPoor card as well, but they live far; they send (the card) with someone else and ask to be paid for medicine, we can't pay them. For example, I want to be paid for the medicine and have minor illness so send the IDPoor card with somebody. That is a difficulty. We cannot provide them the medicine. So, sometimes, they are angry"* (HW11 Phase 1 Endline)

Discrimination

In the view of some HWs, community members sometimes believed they were discriminated against because they were HEF beneficiaries. This discouraged groups like indigenous minorities to use their cards. Although HWs acknowledged these fears, they claimed they were not accurate:

> *"The first problem was that the patients with IDPoor card always complained because they carried the IDPoor card but were not given much attention from our staff. They do not understand that we are medical practitioners and sometimes, we and our staff need time to have meals ; therefore, we cannot take care of patients very well (…) so they complain to our superiors and ask for clarification. That was also our difficulty"* (HW11 Phase 1 Endline)

> *"In the past, some serious patients did not dare to present their HEF cards when they accessed services in a big hospital (provincial hospital). They were willing to borrow money from other people for their treatment. They felt that health staff would not provide good care if they presented their HEF cards (…), but I felt happy to provide good care to HEF clients in my HC. Yes, I was really delighted without any discrimination. Aunty, I say, please do not hide your card. I will give you 200,000 riels as long as you give birth in here. Then, she says her daughter has the card so she would bring it. Then, she was happy. In fact, she would not bring the card if she was not advised"* (HC9 Phase 3 Endline)

> *"First of all, in the past some individuals or villagers said that they did not have the HEF cards. However, when they felt better, they said they were lazy to bring it because the payment of user fee was so small, only 4 or 10 or 20 Thai Baht equal to 3 or 4 thousand riels. In fact, they felt ashamed in front of health staff or other clients as well"* (HW22 Phase 3 Endline)

In the same vein respondents defended themselves saying that HEF beneficiaries were treated well and fairly:

> *"Generally, we advise the HC not to provide services just for those having the card, but also those that come first can receive the service first regardless of having the card or being able to pay - who come first will receive the service first, either you pay, or you don't pay. But if someone is in a serious condition, we favor him/her to get the service first"* (OD2 Phase 1 Endline)

> *"We do a health check up based on patients' number, not based on the card or based on the money, or IDPoor card holder or payer to have checkup first (…). For the patients who come first, we counsel and check them up first"* (HW11 Phase 1 Endline)

Challenges faced by HCs in providing HEF benefits

Using the Patient Management and Registration System

Some HWs highlighted the challenges of working without the PMRS. The main challenge came from treating HEF beneficiaries who came from outside the HC's catchment area, as HWs did not have information on these individuals in their registers and the IDPoor card they brought only had information on the household head. As one HC highlighted, a large percentage of the women using certain services (for example, delivery) came from outside their catchment area. For these women, they wrote the names and information and sometimes checked their family books; however, this sometimes was unfeasible and often they would have to take the client's word that they are HEF beneficiaries. They would record the user's information and submit to OD for review. If they didn't collect the data, they would not be paid for those services. In some instances, services were not being provided to the person coming.

> *"Yes, it is for us to verify too because the IDPoor card doesn't list down the family members' names, except head of family. Our HC has the record of only the villager living here. But for those coming from outside of the area we face a bit of difficulty. Difficulty may be in seeking medication. We cannot opt to not prescribe them medication just because they are from outside of the area since they have carried the card along to seek the services from us"* (HW10 Phase 1 Endline)

> *"There is a challenge for the HEF. If the center has PMRS system, there aren't many problems because they can use the service regardless of where they hold the card from. But for the center that has no PMRS, it has coverage for their area only. So, besides that, they cannot accept. So, it is also the problem"* (OD2 Phase 2 Endline)

> *"It is difficult for instance if their name is in area (C) and we are in area (A) or (B). So, we cannot find their names. Using HEF is difficult once there is no name in the list"* (HW14 Phase 2 Endline)

Sending others to collect medicines

Some HCs experienced trouble trying to meet users' expectations while providing good care. As they explained, some HEF beneficiaries send someone else to the HC to collect medicines when they felt unwell. HWs had to refuse as they were required to check them first, which led to users' discontent as these persons had to travel to the HC, sometimes from long distances:

> *"Like when they are sick and seek the medical drug. For example, there are three or four sick people and they ask for the drug for the others and the medical practitioner doesn't give them. This is the problem because they don't bring their kids with them and ask us for the drug. So, they complain against us (…) They say the medical practitioners are stingy. They say the people are sick and cannot come. By just asking for the medicine, we don't give them"* (HC3 Phase 2 Endline)

Late funds

Staff in three HCs and one OD Director mentioned that occasional delays in receiving HEF funds made it difficult for them to provide HEF benefits consistently or on time:

> *"That money package is not always available. Some days, the money is available and some others it is not; they (patients) would be angry if they don't get it. So, we cannot tell them in advance"* (HW27 Phase 1 Endline)

> *"Sometimes, for some patients, we don't provide transport, accommodation or food while staying at the hospital as the money is not transferred on time"* (OD6 Phase 2 Endline)

Health-seeking Behaviors

To explore communities' health-seeking behaviors, respondents across all FGDs were asked about where people in their communities generally seek care. Three questions targeted health-seeking behavior of people with and without HEF benefits, exploring the type of provider used, what services were used, and the reasons for seeking care in each.

The conceptual framework in *Figure 3* presents the different reasons why communities seek care in each HC and the overarching factors that connected them. The framework was developed based on FGD respondents' perceptions and actual experiences of health-seeking behavior. Four overarching factors were found to influence the communities' health-seeking behaviors; financial aspects, access and availability of health services, communities' socio-cultural perceptions, and perceptions of quality of service. The framework shows the main reasons for seeking care identified under each component, and how the different reasons overlap with each other influencing the decision to seek care at different providers.

Types of Health Care Providers

The majority of respondents across all FGD sessions reported that people in their communities sought care at public health facilities, most commonly the HC and the RH. Most respondents also reported that people in their communities were well aware of the private services available to them and sought care from different providers, including private clinics, pharmacies, drug sellers, and "*mobile medical doctor*". Respondents could provide the number of their village's providers, mention their names and knew when the "*private medical person also works at the [public] HC*". Several respondents described dual practices where public health providers had a private clinic or pharmacy in their homes or sold medicines from them. Respondents also described cases of HWs going to the client's house to provide treatment, which they referred to as "*mobile medical doctor*". Overall, dual practice seemed to be a common practice accepted by community members. Knowing the staff at the public HC was a reason to go there, or to one of their private practices:

> *"I bought from those who worked at the HC in the village or at home. I sometimes went to HC or sometimes I bought the medicines from the house"* (FGD7 Phase 2 Endline)

> *"It means that he works at the HC and also opens the clinic and sells drugs. That doctor is also working at the center and he also do the serum injection at everyone's house. Just like anybody else"* (FGD23 Phase 1 Endline)

> *"When my son was sick, I took him to the private clinic, but he is the [public] HC Chief, (…) he opens his private clinic"* (FGD8 Phase 3 Midline)

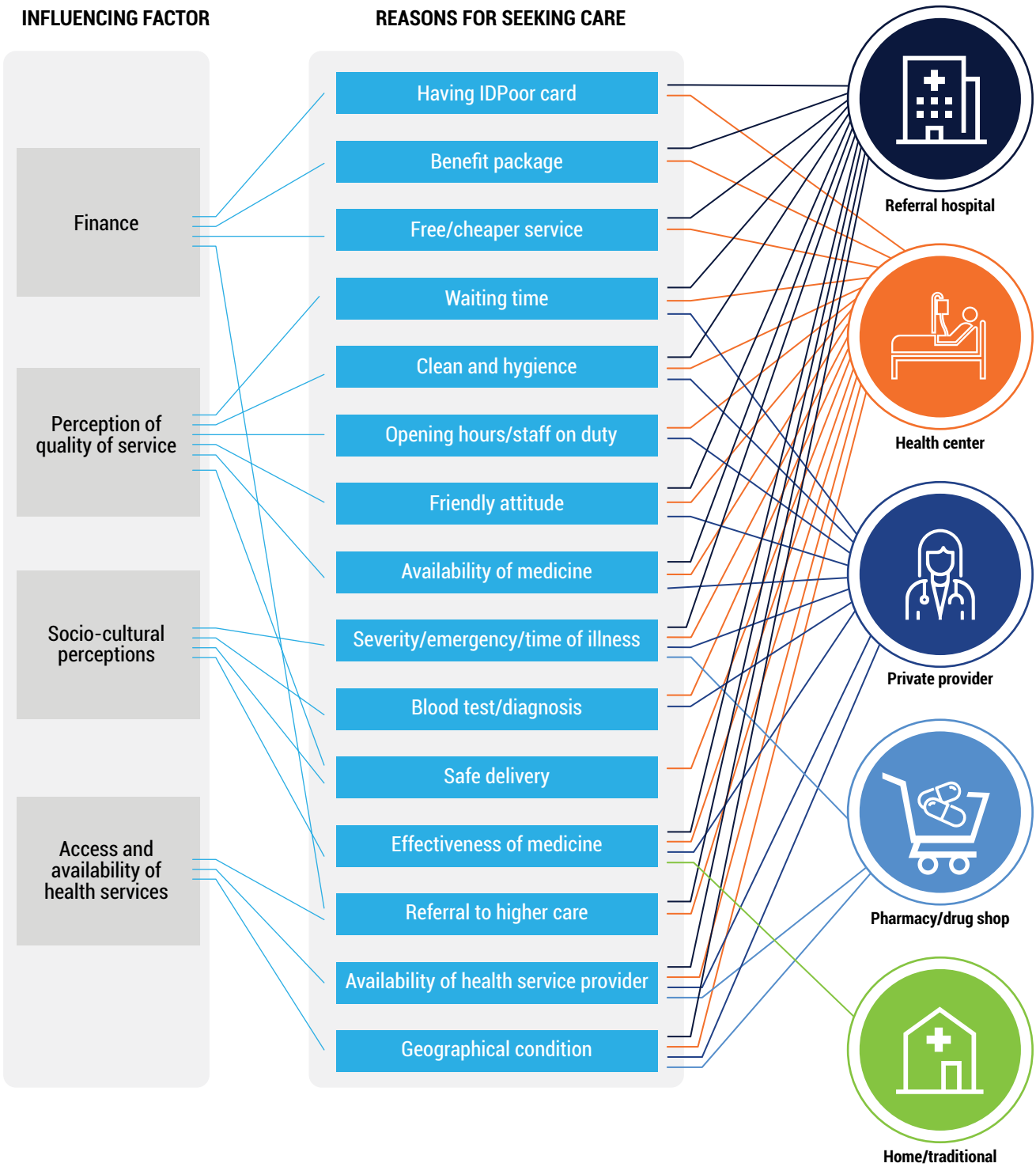
In some FGDs, respondents described how people would commonly combine public and private services based on their availability and preferences. This could happen even for the same condition, if the respondent was not satisified with care received from the first provider:

> *"The private provider in the village, also works at the HC, both the husband and wife work there, but they sell medicine at home"* (FGD9 Phase 1 Midline)

> *" Every day, get serum injection at market and come back home. Go to district but I go to a private clinic. Go there but I am still not recovered; therefore, I go to private clinic too. At that time, I think that go to private clinic first, if anything happen will go to HC"* (FGD19 Phase 3 Endline)

> *"When they are seriously sick, they cannot go to the district hospital on time, they go to the private hospital first. When my daughter had the broken arm, I went there [at the district hospital] for three days, they did not give the treatment well, so I went to the private hospital"* (FGD12 Phase 3 Endline)

FIGURE 3. Conceptual framework of health-seeking behaviors in Cambodia - on the right hand of the framework, the color of each arrow indicates the providers it is connected to.



Respondents across all FGDs purchased medicine without a previous visit to the HC, particularly for illnesses they considered minor. Respondents purchased drugs from a combination of pharmacies, health facilities, local vendors and directly from HWs who worked at the public HC:

> *"In the past, for flu; I bought from those who worked at the HC in the village or at home. I went to our HC and bought medicine from the informal vendors as well"* (FGD7 Phase 2 Endline)

> *"If I have a minor illness, I buy medicines from the physician' house."* (FGD 9 Phase 3 Endline)

> *"For me, I do not usually go to private hospital. If I am feeling not well, I will just immediately go to pharmacy to get some medicine. I don't have to go to my hometown"* (FGD17 Phase 2 Endline)

A few respondents mentioned using traditional services and products. This included purchasing traditional remedies from the market to take after childbirth or for minor illnesses. It also included visiting a traditional healer, such as trational birth attendants (TBAs) or the "*bone setter*" (when they had broken arms or legs). The practice of "*mother-roasting*"[7], or keeping the body warm after giving birth was also mentioned by respondents as a practice in place:

> *"People go to traditional healers only after they return from the medical facility when they have exhausted their means with the medical facility (people speaking at the same time). Only when they have no other choices"* (FGD5 Phase 2 Endline)

> *"There are only physicians and we always reach them if we have any health issues. In case a child's wrist is sprained, we seek the traditional healer. For a minor treatment, there is no need for a master traditional healer, so we treat ourselves with traditional remedy"* (FGD7 Phase 2 Endline)

> *"I use Khmer traditional medicine everyday, it is the herbal medicine provided by Kru Khmer (Khmer traditional healer)"* (FGD4 Phase 3 Midline)

> *"My father-in-law [a Khmer traditional healer]. But people just come to buy when they are sick. He never goes out to sell. She (the patient) asked where could get the Khmer traditional herb after giving birth"* (FGD23 Phase 1 Endline)

Female respondents in Midline and Endline also talked about getting "*therapeutic injections*" after delivery to keep the body warm. This was sometimes a replacement for mother roasting and herbs, although some women combined methods.

> *"When we get out [of the HC after childbirth] and come home, the private doctor injects us and then we pay. The Khmer traditional herb is to make the vein warm. Just to keep our chest warm"* (FGD23 Phase 1 Endline)

> *"I got injection right at home. The [private provider] charged 200 thousand Rile for one week of treatment. It is difficult to lay on the heat [practicing 'mother roasting'], so we get injection, [because it] is easier. But we also do both, laying on the heat as well as getting injection. This is to prevent the blood from discharge too much"* (FGD8 Phase 2 Endline)

> *"After delivering the, baby we drank traditional medicine we bought from the market and also we did the warming by the fire (mother roasting) to make our body stronger. The health staff did not want us to follow this practice [at the health facility], but they told us to get an injection. For people who have money, they can get injection, but for poor people like me, I do the traditional mother roasting and work in the farm to make my body sweat and warm, so that I can feel better. If I did not do the mother roasting, I would be very weak"* (FGD8 Phase 3 Midline)

7 A practice with burning coal placed underneath the bed to produce heat.

Reasons for Choosing a Health Provider

Accessibility and Availability of Health Services

Physical access and time of illness

Respondents across all FGDs in both Midline and Endline discussed physical access and time of illness as factors influencing communities' health-seeking behaviors. Poor road conditions and rain were challenges to access affordable and timely care. Areas situated in the northeast of the country with indigenous people living in villages more than 10km from provincial towns and health facilities, posed a greater challenge for travel and access to health services during the rainy season. The proximity to private clinics was also an important factor influencing people's decision to seek health care at private clinics.

> *"In this village, it is not easy, the foot path is also difficult, road for the motorbike is also difficult, road to the farm is also difficult, and road to [Name] is also difficult"* (FGD26 Phase 1 Endline)

> *"If the road is a long the way from the village, it is very difficult, too many holes. It is ok when we reach the national road. If we want to go HC in province or district it is far, but HC is in the village, and the road is difficult"* (FGD19 Phase 3 Endline)

In our sample, most villages had good roads to health facilities. Some villages were located along the main road and had paved roads which makes it easy for people to access marketplaces and health facilities. Other villages located far from the main road were connected with a dirt road that was in good condition, and were also able to travel from the village to health facilities and marketplace with relative ease. However, during the rainy season, the dirt road gets flooded making travelling by motorcycle or car much more difficult.

> *"It is difficult in the rainy season. In the dry season, it is better than during rainy season when the road is bumpy and flooded. In the dry season, it is easy to go there. The first choice is District hospital. It is easy to travel a long distance on a concrete road"* (FGD22 Phase 2 Endline)

> *"If we were closer to the hospital and was possible to home, the medical doctor would tell us to come and sleep at home"* (FGD1 Phase 3 Endline)

Respondents identified the need for immediate care at night as a reason for seeking private care or directly purchasing medicines from a pharmacy as "*it is hard to go to the HC at midnight*".

> *"If we are sick at night, the HC is not open, then we buy medicine at the pharmacy in the village"* (FGD12 Phase 2 Midline)

> *"I went to the private provider in the village because it was nighttime, and also because I live far from HC"* (FGD 13 Phase 3 Midline).

However, serious illness and delivery late at night prompted people to go to public hospitals, as they perceived that the private clinics would not be open either:

> *"At nighttime, the private clinic doesn't serve. So, only the District Hospital opens at night"* (FGD 22 Phase 2 Endline)

> *"When we are seriously ill and it happens late in the night, we cannot go to the HC. So, we have to go to [Name] hospital"* (FGD2 Phase 3 Midline)

For delivery, some respondents mentioned during Midline that HCs were available 24 hours for delivery, so they could go there:

> *"Public health facility it opens at 8 am and closes at 11 am, then it starts again at 1 pm and closes at 4 pm. But for delivery, it is open 24 hour"* (FDG12 Phase 2 Midline)

> *"Now, their [HC] service is full; you can get the service at any time. Before it was not like this"* (FGD1 Phase 2 Midline)

However, this understanding was not shared across all Midline respondents, and some believed that the HC is not operative at night:

> *"At night, we are afraid that there will be no one there [at the HC]. It is quiet when it is at night. When we called out to the health staff [at the HC], no one was there"* (FGD1 Phase 2 Midline)

> *"It is hard to go to the health center at midnight"* (FGD9 Phase 3 Endline)

Types of services required

Private and public providers were often preferred for specific services, so people would go to either of them depending on what their needs were. Private providers were often preferred for conducting tests and diagnostics, as respondents believed that the public HC did not have the appropriate equipment or personnel to do it.

> *"We went to the private provider for blood test. The HC does not have blood test service. When our child has a fever, they only tested with their hand and gave the medicine. They did not draw blood to test to know what fever our child has"* (FGD2 Phase 3 Midline)

> *"Heavy fever, we go to private hospital directly. Fast blood test and medicine. My mother always went to [Name] hospital and she has the card. [Name] is Private Hospital. She was too sick and needs a check up. She just went to check up but paid at the private hospital"* (FGD9 Phase 3 Endline)

Likewise, people often sought private care for specific services and medicines that they believed were unavailable in the HC, such as intravenous (IV) fluid injections and chronic disease treatment.

> *"With chronic diseases, we only go to private hospitals like my mother goes to only private hospital, never goes to public hospital. Umm! No medicine for diabetes, high blood pressure, if I go to the HC, it doesn't have"* (FGD11 Phase 3 Endline)

Private services were also sought when people wanted to receive the service at their own home. This was especially common with IV fluid injections. Getting an injection at one's own home was considered to be more convenient than getting treatment and entailed less time spent at health facility:

> *"We can call to him to give the injection at home. The physician from the HC"* (FGD7 Phase 2 Endline)

> *"Sometimes, we called the provider to give an injection at home. (…) When the private provider comes and gives injection at home, it is easier to take care of the patient. (…) When you feel weak, no strength in the body, then you can call the provider home to give IV fluid"* (FGD3 Phase 3 Midline)

Public facilities were preferred particularly for ANC and delivery. Respondents in Endline mentioned using the HC for both common illnesses and for vaccination services. Communities delivered in HCs because they perceived them as safe, and preferable delivering at home. In addition, respondents were aware of the policy requiring women to avoid home deliveries:

"We go to the HC for delivery because the health staff told us to go there. The health staff promote the HC because delivering outside the HC might be dangerous" (FGD11 Phase 3 Midline).

"It is also necessary to have a public hospital because when we are pregnant, we need checkup at the HC. Private hospital doesn't check. They always send us to the HC. It is necessary" (FGD16 Phase 3 Endline)

"Nowadays, people do not deliver at home using traditional birth attendants (TBAs) because the TBA are elderly or they have become nuns; so only go to the HC because there they have health staff to deliver and have skills to do it" (FGD8 Phase 2 Midline)

However, some respondents in Ratanakiri district mentioned the use of TBA for delivery at home in the village.

"Most of [us] delivered in the village. If [we] cannot deliver, then we go to the HC. There is a midwife in the village. She was skilled to begin with and the HC had noticed this; they assigned her to be a midwife in the village. This is the culture and habit. Whether they have IDPoor card or not, they still give birth in the village" (FGD3 Phase 1 Midline)

Referral to higher care

In both Midline and Endline, respondents across FGDs in all phases identified the HC as a point to be later referred to district and provincial hospitals. As one Endline IDPoor respondent put it, "*the HC sends us to the district hospital, the district hospital sends us to the provincial hospital*". Based on previous experiences, respondents knew that they would be referred when the HC did not have the means or knowledge to provide specific services. As one respondent stated, "*it is up to the doctor to make the referral. They say, oh this sickness requires referral because we do not have equipment for surgery and so on*":

> *"When I had my delivery by C-section, the HC did not know how to do it, so they sent [me] to provincial hospital"* (FGD1 Phase 2 Midline)

> *"[Name] referral hospital is for serious sickness. Here there are no services to provide treatment for serious sickness. For serious sickness, they refer us to [Name] Hospital"* (FGD1 Phase 3 Endline)

In line with this knowledge, respondents in Midline commented that people would sometimes go through HCs to access care at district and provincial referral hospitals, or even at the national hospital. However, some people in Endline mentioned that they could access hospitals directly, depending on the severity of the illness:

> *"If you are seriously sick, you go to [Name] hospital, and if it gets more serious, they send you to [Name] provincial hospital, and if the [Name] hospital cannot treat you, they send to Phnom Penh…. But before sending you through all these steps, you must first go to the HC, where they make the referral slip to send to [Name]"* (FGD8 Phase 3 Midline)

> *"If we have to go through the referral system, first we go to the HC; but if the illness is serious and they cannot treat it, then they send the patient to [Name] hospital, and if they get worse, then they send the patient further to [Name] hospital"* (FGD4 Phase 3 Midline)

Sociocultural Perceptions

Severity of illness

Respondents across all FGDs in the Endline study reported that people use their communities went to hospitals, especially referral hospitals, when they perceived their illness to be severe. Minor illnesses would lead to seek care at private providers and HCs, that were considered more convenient, or taking medicines directly:

> *"If it is a minor sickness, we go to the HC. If it is serious, we get admitted to the hospital. If it does not work, if the doctor says that it does not work and asks us to stay, we proceed by filling in the papers and getting admitted"* (FGD1 Phase 3 Endline)

> *"If we just take some medicines and are able walk again, we go back to tend our cows and buffalos: as such it is fine to stay at home or just go to the HC. Only if illness is severe would we move up to another level [of care] and go to the provincial hospital"* (FGD6 Phase 2 Endline)

> *"We go to HC for minor illness, but if it is an accident or emergency, we go to district hospital. (…) We go to HC for cough, fever, and other minor illness, but if the staff see that the illness is serious, they would send us to Referral Hospital"* (FGD13 Phase 3 Midline)

Effectiveness of treatment

Respondents across all phases in Midline and Endline perceived injections as more effective than oral medication, leading them to demand injections for faster recovery:

"We will not recover if prescribed only paracetamol, or two or three types of medication, when it's only takes one or two injections to recover" (FGD14 Phase 2 Endline)

"I took oral medicine and was not given injection. They said take oral medicine first, not injection. I took oral medicine many times, but I'm not better. My son drove me by car early next morning to the health facility. I was in severe pain almost died, when I reached the public health facility" (FGD5 Phase 3 Endline)

In line with this vision, receiving an injection was equated to good quality of care. Respondents felt satisfied when they received injections from the health provider as it reinforced their confidence in the service. Respondents mentioned that they received IV fluid injection immediately upon being admitted; and that the health staff were more attentive to changing the drip once it finished which they perceived as being taken good care of by HWs. A respondent of an indigenous population in Ratanakiri district expressed this same sense of satisfaction upon receiving injection: "*satisfied because they do the injection, they look after me, and they give the medicines*". This satisfaction was echoed by other respondents in all phases of SDG sites:

"When we go there, we feel confident. The way they provide IV injection for us. It is everything. They give us medicine and IV injection. When our intravenous drip almost finishes from the bag, we go and tell them, and they come and change it for us" (FGD1 Phase 3 Endline)

"Very good, super good this health facility. I was only feeling dizzy, I felt quite unwell, they connected me to oxygen. They provided IV fluid for me one after another. They brought some medicine to inject for me immediately. (They) injected immediately" (FGD 2 Phase 3 Endline)

In many instances, wanting to get IV fluid injections was identified as a reason for seeking care at private providers:

"So, I would go to the private clinic because they provide treatment and give IV infusion, and then they allow us to go back home, and we don't have to stay overnight there" (FGD2 Phase 2 Midline)

Similarly, some respondents mentioned wanting to be treated with IV fluid injection as a reason to seek treatment at public health facilities, as these were cheaper:

"Also, the cost for IV injection outside is very expensive. In the HC, we only pay the bed fee. So, if we use one IV injection, they only charge for the bed fee" (FGD1 Phase 3 Endline)

"We have IDPoor card, so they don't take money from us. And they give us injection. And (they) allow (us) to sleep there for another three days. (If) we are hospitalized for one week; they give us injection for one week full" (FGD15 Phase 3 Endline)

"Now I also want to have the IDPoor card because I get sick more often so it would be easier to go for injection" (FGD5 Phase 2 Endline).

Besides a strong preference for injections, respondents hold mixed views regarding the effectiveness of the medicines provided in public or private facilities. Based on their previous experiences using healthcare, respondents would consider the medicines in one provider better, and prioritise using them:

"And kidney problem, problem with urination. When I am sick, I go there and take medicine and get better. Generally, I do not get admitted there. I just go and ask for medicine and I get better. I go and ask for more and I get better" (FGD2 Phase 3 Endline)

"It's not because of money. The private facility is near and faster but not effective, so we need to go to public hospital and spend only 2000 riels" (FGD22 Phase 2 Endline)

"Because at health facility I recovered when I took the medicine and when I recovered by taking the medicine, I kept on going to that HC" (FGD24 Phase 1 Endline)

Faster, more convenient services

Some respondents in Phase 2 and 3 in Endline reported seeking private care because it was faster and more convenient. For these respondents the faster services, absence of tedious documentation, and reduced waiting times offset the additional costs of private services:

> *"Many people think alike. People do not want to stay at public health facility. They go to private clinic (…) Private clinic has good medicine. Faster service than at the public one"* (FGD19 Phase 3 Endline)

> *I went to public health facility spending much time on doing document, was referred from one to another; so I asked the taxi driver to drive me to Doctor [Name] at the market. I spent not more than an hour, could get surgery done right away"* (FGD 15 Phase 3 Endline)

Financial Factors

"Those who have money go to a private provider"

Money was commonly quoted by all respondents as one of the factors determining whether they seek public or private care. Community members often perceived private care as preferable for different reasons as described below, however, only "*those who have money*" or "*the rich*" go to private health facility. As one IDPoor respondent said, "*when we have money to afford it, we go to the private hospital. If we do not have money, we go to the district hospital*". This was also the opinion of most non-IDPoor respondents in Endline, who also identified themselves as "*we are poor*":

> *"[They] go to private clinic in [Name] hospital for delivery, because they have more skill staff and equipment. For those with no money, they deliver at HC, but people with money, they go straight to [Name]"* (FGD10 Phase 2 Midline)

> *"Those with no money, they go to HC; and those with money, they don't go there. … If no money, we go to provincial hospital because we have IDPoor card. But those with money, who want fast service, they go to private clinic"* (FGD6 Phase 1 Midline)

"Those with no money go to public health facilities"

Most respondents across all SDG phases stated that "*those with no money*" or "*the poor*" go to the public health facility even if it may not be their preference, as they could not afford private care. In comparison, public health facilities were "*cheaper than in a private clinic*."

> *"I never go to private health services, only to the public health facility. My husband and I went to hospital immediately. We do not go anywhere else [private facility] as we do not have money"* (FGD1 Phase 3 Endline)

> *"All in all, mostly, only the poor go to the public hospital. The people who can afford the treatment do not go there. [Or] they go there, too. But they do not stay there for long. If they do not recover, they go to the private hospital instead"* (FGD12 Phase 3 Endline)

People who lacked financial resources encouraged others to seek medical treatment at public health facilities because it is free; particularly those with chronic illness that required medicine for longer treatment periods.

> *"More and more go as we don't have the money; we go to the public hospital. If we are sick and need to take medicine everyday, we can't go to a private hospital; we only go to a public hospital, like me who needs to take medicine every morning and evening. They said that I can't stop. So it is only public hospital for me"* (FGD25 Phase 1 Endline)

In one case, a respondent from an indigenous population specifically explained that normally their community would be poorer, thus depend more on the public services:

> *"Public hospital is convenient. Private hospital is convenient if we pay. The rich go to private hospital and the poor like me go to provincial hospital, go to the public all the time. Some, the rich like Khmer, Khmer people, the rich, they go to private hospital; for me, I don't go; I just go to the public hospital"* (FGD25 Phase 1 Endline)

Respondents across all FGDs also highlighted the costs of healthcare, even in public facilities. Out-of-pocket payments for health services, bed fees and specific tests and medications were common:

> *"The service depends on the types of diseases and types of doctors. The cheapest service is 400,000 riels. The service fee ranges between 400,000 riels to 1,200,000 riels. The doctor said it depends on whether the disease is serious or not"* (FGD7 Phase 2 Endline)

> *"I have taken my child to the hospital. I spent on the hospital service. I spent on the service and food"* (FGD7 Phase 2 Endline)

People borrowed money from relatives or others in the village to cope with out-of-pocket payments. Respondents in both Midline and Endline studies reported borrowing from the money lender in the village, or even selling properties to pay for health care.

> *"We need to spend on extra things, water and room charge, and also money to the staff to show gratitude, even if you have IDPoor card, but they are very small amounts"* (FGD 7 Phase 2 Midline)

> *"Even if we are poor, we need to have a little bit of money with us. I pawned my cow and sold the land which my mother gave to me to get the money to treat her. … Even then I don't have enough, I have to borrow and pay interest"* (FGD5 Phase 1 Midline)

Changes Perceived in Public Health Services

Community members in the FGDs in Midline and Endline were asked about changes they had observed in public facilities that they visited in the previous six months. Changes could be related to the HC infrastructure and resources (e.g drugs available), the HWs' and their experience receiving services.

Drugs, Equipment and Consumables

Most respondents across FGDs in Endline perceived the availability of drugs to be "*different from before"* and believed that it had improved both in terms of the number and types of medicines they would receive:

> *"Now we explain to them our sickness and they give the medicine and sometime one pack of medicine. It helps us recover faster. In the past, we received only medicine for cold or two kinds of medicine only. It was not effective. But now they give many types of medicine"* (FGD22 Phase 2 Endline)

> *"Unlike in the past, now there are various kinds of medicine for us. We can get more medicine. In short, it has improved a lot since 2019. They gave me six medicines to take now. I received it yesterday"* (FGD8 Phase 2 Endline)

This improved availability and reduced the respondents' need to acquire drugs elsewhere, as they used to do:

> *"Before, we got less medicines than this. So, we needed to go and get more. Because the people requested more types of medicine during the meeting with organization, they fulfilled our request at the HC"* (FGD8 Phase 2 Endline)

Despite these observations, there were also respondents in Phase 2 at Midline that still highlighted issues accessing drugs in their HCs and having to buy the drugs elsewhere:

> *"Sometimes the HC lacks medicine to give to us, and we have to buy at pharmacy. The staff told us that they were out of stock and only two or three of the medicines were available. But how could we wait for the medicine when we are sick? So, we had to buy them"* (FGD10 Phase 2 Midline)

> *"Er, (…) seemed like not enough medicine because many not available, only paracetamol 4 to 10 pills, cold medicine. If we were having typhoid, we get only 10 pills of paracetamol, seems they have nothing else"* (FGD4 Phase 3 Endline)

In addition to the availability of drugs, new and improved equipment was ocassionally mentioned:

> *"Since the national election, there are more medicines and good quality of medicine at the HC. They even have equipment to measure us"* (FGD5 Phase 1 Midline)

> *"It's good because the medical providers provide us enough medicine and they ask if our kids are sick or not. Something like that. And generally speaking, in the past, there were not enough tools. Now they have modern tools"* (FGD9 Phase 3 Endline)

Infrastructure

The majority of respondents in the Endline observed that the infrastructure in public health facilities had improved in the last six months. For example, some respondents in Phase 2 Endline explained that clean water was available at health facilities:

> *"That place has water for washing the towels or clothes. And there are fans on 24 hours and the electricity is on for 24 hours"* (FGD7 Phase 2 Endline)

> *"Their bathroom was big and clean. They pumped water in. Several years before, when I took my daughter for delivery, I had to carry water on my head from the pond"* (FGD14 Phase 2 Endline)

Respondents also perceived that the space availability in the facilities had improved, allowing people to move around and rest. This was mentioned by most respondents in Phases 2 and 3 in Endline.

> *"Our health facility, it has changed quite a lot (…) They have built an extension to the front. To get more space they also filled some more earth to make it far nicer than before"* (FGD2 Phase 3 Endline)

> *"Nowadays, in [Name] hospital, there is space available. Before people gave birth in the same center hall. Now they have space. After we give birth, they send us to the hall at the back. So that hall is not filled to capacity. In the past, there was only place in the center. People had to wait outside. But now there is another hall at the back"* (FGD12 Phase 3 Endline)

Improvements to the road and entrance to health facilities were mentioned by respondents in Phases 2 and 3 of Endline:

> *"The space is good and clean. It is different from the past. In the past there was mud and dirt. Now it is more clean than in the past. They filled it with red soil"* (FGD7 Phase 2 Endline)

> *"They renovated the road, the entrance, and put up a road sign, something like this. The entrance was filled with land so there was no mud, which was more convenient to go inside"* (FGD12 Phase 3 Endline)

In the Midline, the improvement in infrastructure was mostly observed by respondents in Phase 1, however, there was no respondent in Phases 2 and 3 that mentioned any improvement of infrastructure of the HC.

"It's different! The road is good. It is clean and does not have garbage; we saw a concrete pathway to HC and it is more clean inside the building" (FGD6 Phase 1 Midline)

"It's changed a lot! (…), even the way they decorate the building (….) There is a place to wait with seating arrangement. I saw the roof is new" (FGD9 Phase 1 Midline)

Hygiene

Most respondents across all FGDs reported changes with regard to hygiene and cleanliness of the health facilities, which were generally perceived to be "*better than before; cleaner than before*". Clean toilets were a particularly important aspect of hygiene for respondents. Respondents, also observed that the surroundings of health facilities were cleaner and free from trash. These spaces were now and kept by cleaners:

"The HC is cleaner and more spacious. The bathroom is clean. Overall, the center is much cleaner. It was not clean in the past. There was rubbish everywhere in the past. It has been cleaned and there is water and soap" (FGD19 Phase 3 Endline)

"The health providers were very clean and hygienic. Now they have strengthened hygiene, so it is clean. In the morning they cleaned. And they swept clean later. They have detergents for cleaning toilet. They have water to use. Also, soap. The place for delivery was clean. They have designated clean place for themselves already" (FGD14 Phase 2 Endline)

"The HC is clean than before, much improvement, and now they have a waiting room. There is one worker who do the cleaning at the HC. So, it keeps clean" (FGD11 Phase 3 Midline)

FGD respondents in Phases 2 and 3 Endline also highlighted that the HWs engaged patients and caretakers in keeping health facilities clean.

"They call the patient caretakers to the meeting to be clean and help to clean…That is just the education of cleanliness. And the patient caretaker shall be clean" (FGD7 Phase 2 Endline)

"Their sanitation is nice. In the morning, they clean the basket and use a clean bag. They have a trash can and sanitation measures. If we throw trash elsewhere, they will even blame us" (FGD17 Phase 2 Endline)

Despite these improvements, some respondents still mentioned problems with dirty toilets:

"There is difficult only with one thing, that is the toilet. Yes, that is true. I think so too. The only thing I want to see [further changes] is the toilet. When we need to defecate, we have to do it at home. Frankly speaking, if I can request, I would like to request for toilet. The only thing that remains a concern is the toilet (speaking at the same time)" (FGD1 Phase 3 Endline)

[Moderator]: "How about recently, have you been to that hospital? [Respondent 3]: No, heard from those who have just come back, hong nam (toilet)... so dirty, right. [Respondent 2]: ... don't dare to brush my teeth and the places for old people to have a bath are full of moss, no support for walking ... If no caretaker, then is dangerous - might slip and fall" (FGD11 Phase 3 Endline)

HW Attitude/ Behaviour

Respondents across FGDs noted the friendly and welcoming attitude of HWs when patients arrived at health facilities as something different than in the past. Respondents described health staff in the past as rude, grumpy and arrogant, and perceived these attitudes had changed. HWs now took care of patients actively and politely; they did not scold or blame patients; they checked on patients; and were less likely to accept money or presents:

"Yes, I am satisfied. I am satisfied because the medical staff have good behavior and I feel comfortable as the patient. I am satisfied with the way they speak to me" (FGD3 Phase 3 Endline)

"They said don't be afraid now. For example, in the past my sibling took my child, and they didn't want to treat, and they were rude. But now things have changed. Now there is an easy, good physician" (FGD9 Phase 3 Endline)

Some respondents did not refer to changes in behavior, but still noticed that public health staff showed a positive attitude/behavior toward patients in general:

"When I took my daughter for her delivery, there was no problem; the health staff spoke very kindly to us and they took care of her all the time" (FDG1 Phase 2 Midline)

"The health staff were friendly and speak very kindly. They did not shout at us. Like when my wife was sick, she felt weak, the staff gave her IV fluid injection" (FGD4 Phase 3 Midline)

One respondent in the Endline attributed the changes in attitude among HWs to the management of the health facility, in which health staff are under the direct supervision of the Director and are impelled to improve themselves.

[Moderator]: "Ok so uncle, so do you know why the medical practitioners have now changed, like you just said they are more friendly, they give you the meals and travelling allowance? Do you know why they have changed this much? [Respondent 1]: That is because of the management. They are good. They are good so the subordinates are good, too.... So, they correct themselves" (FGD3 Phase 3 Endline)

Respondents in several FGDs in Phase 3 Endline reported that older staff were more experienced, with more knowledge and had better behavior than the younger staff. Older HWs were perceived to be more friendly, to take care of patients, and be more attentive, especially in the case of delivery:

"The IDPoor card holders are rarely treated by new nurses. Like the doctor, who was there long before, they get in. Old nurses talked nicely when I am in there; they were easy, asked how is my granny" (FGD11 Phase 3 Endline)

"Young health staff these days are bad. Old health staff are okay, they know our hardships, ask patient by using good words; but the new health staff, are really bad, don't know anything, said to us this and that" (FGD11 Phase 3 Endline)

Some respondents across all three phases mentioned negative attitude or behavior of health staff during Midline and Endline. This negative perception appeared in four FGDs in Endline and 2 FGDs in Midline. These responses came up mostly among respondents who were not IDPoor, were 15 to 49 years old, and of mixed gender. These respondents felt that HWs would have a tendency to "*paying attention to only those with money; using bad words; discriminating among patients; not showing respect; and forcing patients to buy outside*":

"If you have money, they will be friendly. The physicians there were not friendly. They hesitate, do not take good care of you, like, the rich give 2000 riel, they do service quickly and friendly with the one having money and we, the ones who don't have money; they didn't pay much attention; they just went past" (FGD16 Phase 3 Endline)

"Health staff at district hospital are very rude; they use rude words to patients. The staff scold and speak very badly to us" (FGD10 Phase 2 Midline)

"The younger health staff speak very rudely. I told the health staff that I need to rest because I am in severe pain, I could not walk. Then the young health staff scolded me more and was very angry with me" (FGD2 Phase 3 Midline)

Endline respondents in Phases 2 and 3, observed that social media, like Facebook, could be used as a mechanism to report bad behavior of health staff toward patients. Thus, social media was mentioned as mechanism for people to complain or to regulate behavior of health care providers by making health care staff "*afraid of doing something*

wrong" or "*not daring to use bad words or commit something wrong*". This topic was only raised among respondents in the Endline, but not in the Midline:

> *"Some health care providers are afraid of the patient because we can sue them if they commit something wrong. Patients frequently sued the health care providers"* (FGD19 Phase 3 Endline)

> *"Having a camera to control all the actions; and especially using social media if there are problems"* (FGD22 Phase 2 Endline).

Respondents in the Endline also reported the monitoring process whereby a third party (NGO or OD assessor) asked patients to provide feedback on health staff behavior when they received health care service:

> *"No. For example, the nurses were scared when they heard that the medical organization came to monitor them and ask patients [about their behavior]. They check IDPoor card holders and ask the patients about their well-being. But every time there are sick people with IDPoor card, they take great care of them (…)* (FGD11 Phase 3 Endline)

Clinical Skills and Knowledge of Health Care Provider

Respondents across all Endline FGDs, particularly in Phases 2 and 3, observed improvements in the clinical skills and knowledge of health care providers who were providing proper diagnosis, prescribing tests and examining patients thoroughly. Noting case histories, asking questions and doing thorough physical examinations and receing tests were perceived by respondents as good care provided by HWs:

> *"They paid attention to us, provided treatment, medicines and conducted the examination. They gave the treatment; diagnosed what kind of disease we have. They examined us and took our blood for test"* (FGD3 Phase 3 Endline)

> *"Yes! the services which were provided at the public health facility were proper and they properly asked about our health. They called us and asked us to sit at the table and checked us to see how we were and so on. They opened our eyes and checked our mouth, and we opened the mouth for them to see our throat and so on and then they gave us the medicine afterwards"* (FGD24 Phase 1 Endline)

Some respondents mentioned that in the past they could obtain medicine without being present at the health facility or getting examined by HWs. They observed that now the health provider could not prescribe medicine without seeing the patient, having a proper checkup and measurement.

> *"No. Well, it is true in the past. We could ask a friend to get medicine for us. Like I can ask aunty to ask for medicine for me without myself or my child having to go there. But now, we cannot do that anymore. They have liquid medicine and tablet medicine. They need to check before they give the medicine. And children go to pediatric unit. It was possible before but not now. We must be checked, for example if we have a cold or high temperature"* (FGD1 Phase 3 Endline)

> *"Our HC has space, medicine, uh, so we go there. They have medicine; they take proper measurements like our age, for example, before giving us our medicine. [I brought] my grandchildren there. If I don't, they won't prescribe any medicine for me. When I went there to ask for some medicine for my grandchildren, they said, 'No, granny. You have to bring your grandchild so we can prescribe; otherwise, we cannot give you any' was what they said at the HC. Yes. They have to do a checkup first and then they measure the weight and give us the medicine for something like a fever, cough or things like a cold, or medicine to kill parasitic worms, for example.h, Neakrou!"* (FGD6 Phase 2 Endline)

The Midline did not collect specific information on improvement in clinical skill of providers. Thus, there was only one case in Midline that made a reference to improved skill and knowledge of the health care provider. However,

respondents in Phase 3 made specific reference to the lack of skill and knowledge of health care providers in physical examination or diagnosis as a reason for them to avoid public health facilities. They indicated that the HC did not have the appropriate equipment and that the health personnel did not have the ability to diagnose the disease correctly.

> *"We went to the private provider for a blood test. The HC does not have a blood test service. When our child had a fever, they only tested him with their hand and gave the medicine. They did not draw blood to test to know what fever our child has"* (FGD2 Phase 3 Midline)

Opening Hours and Responsiveness of Services

Respondents had both positive and negative perceptions of the availability of health staff at the HC during the weekend and early opening hours. Some identified improvements in the opening hours of the HCs:

> *"Now, on Sunday and Saturday, there are doctors always on duty. Yes! In the past in public hospitals, no doctors were on duty, but now they are on duty 24 by 7.... The working hours are good. They arrive on time"* (FGD7 Phase 2 Endline)

> *"The health staff work from 8 am to 11 am; and start at 2 pm again. We can go anytime. Now, their [HC] service is full; you can get the service at any time. Before it was not like this. When you get there, the place is quiet"* (FGD1 Phase 2 Midline)

Others had negative perceptions, as HWs came to work late, and the opening hours in their HC were irregular. They expressed dissatisfaction with health staff not being present at HC in the early morning and late opening hours of HC:

> *"We have to wait. They are not quite punctual. We have to wait for the health care providers. Some health care providers are late but not all"* (FGD19 Phase 3 Endline)

> *"I left from my farm around 7 am. It was 8am when I arrived at the health facility. And when I arrived, health providers haven't yet arrived at work"* (FGD14 Phase 2 Endline)

Waiting Time

Respondents perceived that waiting times were "*not long*" and, sometimes, shorter than before These respondents expressed satisfaction with the current times:

> *"Not very long. We line up for a short while, and we got treatment"* (FGD2 Phase 3, Midline)

> *"It's ok [the waiting], they pay attention to us. When we reached the hospital at 3 am and knocked on the door, they woke up; we showed them the card; didn't wait for long"* (FGD4 Phase 3 Endline)

> *"They came to check us immediately, very fast. They provided care to us immediately, so we are quite happy about that. They are not like before, [when] you called them one time, but they just walk here and there busy with this, busy with that, no. No need to wait at the district health facility"* (FGD2 Phase 3 Endline)

Several respondents in Phase 1 of Endline mentioned that the waiting time for service is shorter than in the past, and health staff provided service first to those in critical condition.

> *"It was good because they contacted us. They did not let us wait for long. It depended on whether the disease was mild or serious. When I went to the health facility, I did not take the number. They called me in"* (FGD24 Phase 1 Endline)

"It is faster now because in the past they needed to get the number and I waited for long. But when I went to the health facility, they asked me what disease I had and called me in directly" (FGD24 Phase 1 Endline)

In two FGDs, there were individuals who disagreed with this perception, indicating that the waiting time was too long, this was potentially worsened by a lack of punctuality among HWs.

"They are not quite punctual…. We have to wait for the health care providers. Some people return home because they wait too long" (FGD19 Phase 3 Endline)

"I went there yesterday, people slept on the floor, on the bed. There were many people" (FGD12 Phase 3 Endline)

The Role of HEF Increasing the Use of Public Health Services

Knowledge and Awareness about Financial Protection Schemes – "those with an IDPoor card are really valued..."

Community members were asked about the different types of financial protection schemes related to health services that were available in their community, the source of this knowledge, the benefits and the challenges to benefit from them. Four schemes were identified: HEF, NSSF and the Priority Access Card (PAC) and the 1,000-day. The HEF was the most frequently reported scheme across all FGDs, with many respondents referring to it as "*IDPoor*", "*IDPoor Card*" or "*Poor Card*". IDPoor was perceived as a support to the entire household as "*Poor Card is used for all the family members", and "it has the name of everyone in the family*". NSSF was seen a separate scheme; social health insurance for women working in the factory and only for the individual; "*only has one person's name*". The PAC was mentioned only by respondents in Midline.

> *"The NSSF card is for people who work in factory, and it only for one person. But I also have IDPoor and NSSF card"* (FGD11 Phase 3 Midline)

> *"Like the NSSF, only my wife has it because she works in the factory"* (FGD9 Phase 1 Midline)

The majority of respondents in both Midline and Endline studies mentioned that they had heard about or were aware of IDPoor through the village chief. Chiefs were the main source of information and the way community members could obtain the card.

> *"I've heard that to have the card made, we need a connection with the village chief. The card is only available today because of the former village chief. The village chief only calls certain individuals that should be called for a meeting. Those who have the connection know everything"* (FGD17 Phase 2 Endline)

> *"The village chief came to the house, gathered the people to inform us about the IDPoor card"* (FGD4 Phase 2 Midline)

Some respondents heard about IDPoor from others sources. These included family and friends, others in the village, HWs in the facilities and conducting outreach, other patients at the facilities, and from media like television.

> *"We heard from one another. We heard that it really does not cost any money. For example, if we want to go to Siem Reap and we have IDPoor card, we just show it to them, then it does not cost any money. There is also money for car fare. I heard it from those who have it. If you come, they also give you money to pay for car fare"* (FGD2 Phase 3 Endline)

> *"Village chief told us, [also] commune media, doctor, hospital. Dissemination when they came to visit us"* (FGD13 Phase 2 Endline)

Most respondents in Midline and Endline understood that IDPoor was only provided to poor people and were aware that the card is used to access care at public health facilities.

> *"The poor were selected and decided by committee meeting as poor household or poor to be provided IDPoor cards. Yes. Now the IDPoor cardholders and their relatives or the villagers know that they can go to the hospital for free. Through my own experience, I saw many IDPoor cardholders when I went to the hospital and it was free of charge. The doctor treated them the same as those who paid for the service. Yes, it was all free"* (FGD7 Phase 2 Endline)

> *"No matter what illness we have, when we go there, the medical practitioners do not ask anything, as long as we have the card, they provide us the treatment"* (FGD3 Phase 3 Endline)

Some respondents across FGDs in Endline also mentioned the 1,000-days scheme, highlighting that it provides financial incentives to pregnant women for attenting ANC and PNC checkups, cheme ing, and child growth monitoring until 2 years old. However, respondents mentioned different amounts of money they received and different criteria for getting the money. The incentives from these cheme were provided along with those from HEF, which led some respondents to mix both:

> *"For one-time checkup, they give you 40,000 riels. For two times, they give 80,000 riels. When we go with IDPoor card, don't have to spend a lot. And like, we delivery baby, when you get sick, stay at the hospital, they give you the car allowance. In short, for the cardholders, sleep at the hospital, treatment, they take great care. For every HC, if we have IDPoor card, they said no need to pay"* (FGD11 Phase 3 Endline)

> *"Now, if you're pregnant, they give you 40,000 riels a month. The funds and money that they give you and any other points, let the Neakrou know. In total, uh, the total money we'd get is 2,600,000 Riel for delivery"* (FGD6 Phase 2 Endline)

HEF Benefits

IDPoor benefits to access health care were known, understood and valued by both IDPoor and non-IDPoor respondents. Among beneficiaries, having a card made them feel safe and protected:

> *"[Name] almost died if he didn't have the IDPoor card. He was sick all the time, and he went to [Hospital name] and Phnom Penh for treatment; without having IDPoor card he would not be able to pay anything. He is a poor man with many illnesses"* (FGD10 Phase 2 Midline)

> *"With the IDPoor card, I feel safe. Wherever I go, I would not have to pay money [for health service]. I am very happy"* (FGD11 Phase 3 Midline)

IDPoor respondents in both Midline and Endline studies understood that having the IDPoor card entitled them to free service and a benefit package. The benefit most frequently mentioned were services "*free of charge*", thus they had "*no need to pay*". As one IDPoor respondent highlighted, "this IDPoor card can help those who are poor and have no money. It is free for us":

> *"I have got the card, so no. No payment if the hospital like provincial hospital or large hospital. There is no payment. We get 5,000 riels for a night. And the services like getting medicines or something like that are faster"* (FGD17 Phase 2 Endline)

> *"The benefit of having IDPoor card is that we don't spend when going to the hospital" (FGD23 Phase 1 Endline)*

In addition to free services, respondents across all FGDs mentioned that IDPoor card holders received benefits such as a food allowance for the caretaker and a transport reimbursement:

> *"Let's say we went for staying and get money, get meal fee, something like that, huh? But before we don't get anything, that's changed. That's because we have IDPoor card. If we don't have, we pay for bed fee"* (FGD3 Phase 3 Endline)

> *"Reduce our expenditure. It benefits every day. It is like the money is returning. We get the commuting expense. Commuting expense makes a lot of people go to the center…. Those who stay there get the money everyday. Those who accompany also get the money, 5,000 riels"* (FGD13 Phase 2 Endline)

> *"They are friendly. People with IDPoor card can get money for transportation back home after giving birth. When we bring the card to hospital, we don't need to pay service fee, they also provide food to patient, and they give 5,000 per morning to caretaker. The caretaker spends money on food but is given money to buy food, but the patient eats the hospital's food"* (FGD16 Phase 3 Endline)

Accessing IDPoor, HEF, PAC

Some respondents mentioned the process and criteria used to identify poverty status of the household. This was referred to by respondents as the interview.

> *"Generally, they come to the village and conduct interview. They ask if those people have this or have that and so on. If we have a house and land, they will not give it [IDPoor] to us"* (FGD1 Phase 3 Endline)

> *"The IDPoor card, if given in this village, there's uh, poor people. They will call a group of medical providers to inspect whether they are indeed poor people that aren't able to provide for themselves and are sick without any money or something. They will be issued IDPoor card. However, if those who have house with roofing tiles, they will not be issued IDPoor because they are categorized as non-poor. Older persons with nothing to depend on to take care of them, such people are poor, they will be known in the village. When they do a survey, those that are really poor, those that are also in the same boat, without anything to depend on, having difficult lives ... those are the people to get the IDPoor card"* (FGD6 Phase 2 Endline)

Although some respondents in Endline believed that there was a mechanism in place for poverty identification, others believed that the village chief was the person to decide on the allotment of the IDPoor card. Some respondents mentioned that no interview process took place for them to get the card; it was the village chief who provided the card to individuals and invited them to take a photo.

> *"That day, they didn't ask and interview, but they called and make (it) for (me). The village chief provided it. That day, the last day, they, the outreach workers; they decided and called (me) to make (the card). They called (me) and made it"* (FGD15 Phase 3 Endline)

> *"IDPoor card or that health equity card; at that time, they had not issued the current card since Grandpa [Name] had not yet become the chief of the village. If not for grandpa Un we would not have gotten that card, we would not have known either if they would issue that card or not; or whether the card could be used"* (FGD14 Phase 2 Endline)

Respondents in both Midline and Endline believed the IDPoor identification process to be unfair. This perception arised from being excluded themselves or seeing that some poor people did not get the card, while others better off were seen to have it.

> *"I want to interrupt a little bit. Actually, people who get the card are rich. The poor don't get the card. The real poor didn't have the card. I live with my mother-in-law. My child is blind since birth. We don't have land. We don't have farming land. We only buy a plot of land. We don't have a house. They should give it to people like this"* (FGD16 Phase 3 Endline)

> *"To have it done you have to ask the village chief to do it. Some can't get it. Some people are invited to get the card by village chief. But some have not yet got it. Some people are very poor. Some are widows. Some are homeless"* (FGD25 Phase 1 Endline)

> *"Some people have the IDPoor card even when they have a big house, and their children are rich. But for [Name], she does not have a single child, and lives in a small hut, not able to work, but she did not get the IDPoor card. So, this is not fair"* (FGD10 Phase 2 Midline)

Increased Use of Public Health Services by HEF

Respondents, particularly in Phases 1 and 2 of the Endline, observed that people in their community with IDPoor card used public health facilities more than before because "*they don't charge for service*". Some attributed this increase to a better understanding of HEF benefits. In the past, IDPoor card holders did not understand the benefits and were afraid even to use the card to access services.

> *"I have IDPoor card so I go to HC, they don't charge money and because I have no money…. Before I have no IDPoor card, I go to private provider; now that I have IDPoor card I go to the HC. It is free"* (FGD7 Phase 2 Midline).

> *"Last year, I did not use it. This year, I use it and I always use it. This year, I used it too when my child had a broken arm"* (FGD12 Phase 3 Endline)

Positive Experiences Using HEF

The majority of IDPoor respondents in all FGDs reported that they had good experiences using IDPoor card, they had received fair treatment and were respected by HWs.

> *"Well, frankly speaking, when you bring the card there, they respect ... and they are polite. No problem"* (FGD2 Phase 3 Endline)

> *"I showed them my IDPoor card; and the health staff started to treat me right away. They paid attention to me because I have the IDPoor card. Earlier, the doctor told me that if I came just a bit late, they would not be able to help me. Now they let me stay in the hospital and be treated until I get cured"* (FGD3 Phase 1 Midline)

Respondents stated that the IDPoor card, seemed to have taken away the need for payments and placed poorer individuals on par with those who had money. Others claimed that IDPoor cardholders "*are treated the same as non-IDPoor patients*". In addition, IDPoor card patients were entitled to receive benefits.

> *"I was satisfied that they asked whether or not we had IDPoor card. We answered that we had they moved us to provincial health facility. Some doctors left us waiting for long and they asked whether or not we had the cards. When we had no answer, the doctor made a document for us to take immediately. It was the same for those who had the cards and those who did not have the cards"* (FGD24 Phase 1 Endline)

> *"And now, the health staff are neutral to those who have Idpoor card and those who have money. They don't discriminate against the poor class. With the card, we are faster. There are those without the card who get jealous. Already rich and still want the card. They want that card too. There is a changed attitude toward people with the card"* (FGD14 Phase 2 Endline)

Barriers to Access and use HEF

Expired IDPoor Card

One of the key concerns posed by many of the FGDs respondents was the expiry of the IDPoor card, which was not updated by the IDPoor identification process. While some respondents were aware that the IDPoor card had a validity of one or two years, others did not know the expiry date of the card and only found out when they went to health facilities. This fact was observed in both Midline and Endline.

> *"They said my card expired a long time ago, but another staff said this card is still eligible. It can be used for long time and for all my life, they said like this. But yet another staff said that my card is nearly expired. Not the same"* (FGD9 Phase 3 Endline)

> *"They asked me to pay for the patient bed fee and medicines, 80,000 riels. So I paid for that. The organization asked me if I had the IDPoor, I replied that I did have so they took my IDPoor and they said it was invalid so they issued me a new one and then they refunded me"* (FGD12 Phase 3 Endline)

A Family Member Not Included in IDPoor Card

In both Midline and Endline, respondents across all FGDs consistently raised as an issue that the cards were missing members of the HH, either themselves or from their family:

> *"For instance, my mother has IDPoor card. At the time that they made the card, I was not at home, so my name was not registered in the card. When I got sick, I took the IDPoor card with me, but the health staff in [Name] referral hospital told me that my name was not on the card"* (FGD5 Phase 1 Midline)

> *"I have many kinds of illnesses. The IDPoor card only has my childrens' names on it; I don't have my name on it, so I cannot use it"* (FGD7 Phase 2 Midline)

> *"I took my mother to the health facility. I had to, but they don't accept my card. My mother had a serious illness. The new card, they also didn't accept because they said it didn't have my mother's name, here"* (FGD20 Phase 1 Endline)

Loosing/Forgetting the IDPoor Card

Many respondents mentioned the case of people in the community losing their IDPoor card or forgetting to carry their card when they go to health facilities. This happened especially when they went to the HC for the treatment of minor illnesses, because they felt that the service fee was trivial compared to inpatient care at the referral hospital.

> *"Forgot to bring the IDPoor card, so I had to pay the service fee like everyone else. For minor illness, some don't bring the IDPoor card. But for me, I bring the card all the time when I am sick. I bring the card, because I am poor"* (FGD6 Phase 1 Midline)

> *"Sometimes I forget to bring the card to the HC. But the HC staff know me well because I go there regularly, so they give me medicine and the slip"* (FGD11 Phase 3 Midline)

> *"When we go [to the HC], we need to buy. Afraid that there is no money to buy something to eat when we are at the health facility. Or maybe because it is far. Especially, for me, it is a money issue. Afraid that when we are at the health facility and there is no money to eat"* (FGD2 Phase 3 Endline)

Language Barriers

Indigenous populations in Midline mentioned challenges they experienced while using public health services especially in terms of language barriers.

> *"We are ethnic people and we can't speak Khmer well, so, they think that we are not capable or confident enough to make any complaints"* (FGD3 Phase 1 Midline)

> *"I had been to a public health facility five times, but the health staff paid little attention to our care. [My] son-in-law was taken to [Name] HC, but he was not well taken care of and when [we] took him back home he died"* (FGD3 Phase 1 Midline)

Not Receiving Benefits

Respondents in Phases 2 and 3 of Midline referred to problems of not obtaining transportation money and daily allowance as barriers to the utilization of IDPoor card; but this issue did not emerge in the Endline. Some of the respondents in Midline, Phases 2 and 3, attributed the lack of transportation money and daily allowance to the interruption of HEF due to a short gap when HEF support was not available during which the NGO ceased to be HEF Operator.

> *"In the past, I received the money, when I went to the hospital, they did give me the money. But the last two times that I went to hospital, I did not receive the money"* (FGD5 Phase 2 Midline)

> *"When I went, I did not get the money, but before I did get the money. The last time that I went, I did not get it. I brought the IDPoor card, but I did not get the money"* (FGD2 Phase 3 Midline)

Just one respondent in Endline stated that she did not receive financial support when she used the health care service, even though she knew she was entitled to it.

> *"I just said earlier that they cover our meals and they give us daily allowance, but when I went, there were no allowance"* (FGD18 Phase 3 Endline)

Discrimination

Despite most respondents had positive experiences using HEF, some still reported witnessing HEF beneficiaries being treated poorly by HWs:

> *"The health staffs yelled; especially the new health staff, they yell too much. I was afraid that they cursed at patients loudly. I didn't dare to stay nearby the health staffs"* (FGD11 Phase 3 Endline)

> *"When the patient sat near the female medical practitioner and was told 'my child has a fever', she said, 'do not touch me, I am scared' and laughed. I saw this when I went to [Name] hospital. That girl was sick, so I called her to sit near me if that female medical practitioner discriminates against her. I felt sympathy for her. I was not afraid of getting infected. The doctor is a local, she is arrogant, she hates it. She is rich, she told the patient not to sit near her. I told her not to discriminate against the poor. Please help and give them treatment. We are all humans"* (FGD12 Phase 3 Endline)

Several Endline respondents with an IDPoor card spoke about their experience of not being adequately served by health care workers; however, they added that the experience had occurred in the past, and they received better care afterwards.

> *"Previously, they didn't pay much attention when we didn't have the card, like they didn't take care of us much. They rarely came to check on us when we didn't have the card. They didn't pay much attention because we didn't have much money. [Now] when we use the card, they treat us normally"* (FGD9 Phase 3 Endline)

> *"Before when we had cards, they didn't really pay attention to us. However, now when we use cards, they pay more attention to us"* (FGD9 Phase 3 Endline)

Out-of-Pocket Expenditures

OOP payments were also common across IDPoor respondents. Most mentioned that they needed extra money in hand to pay for things other than those not covered by the IDPoor Card, particularly to buy extra food and materials that they need for inpatient care; and in some cases for the cost of transportation:

> *"We have to spend out of pocket for some things that we need, but for transport and service we did not have to spend our money"* (FGD9 Phase 1 Midline)

> *"I paid out-of-pocket for transportation to go to District referral hospital. I spent a lot of money for travel. I took the Tuk Tuk there and it cost 70,000 riels. Then after they sent me to Provincial hospital, and coming back from provincial hospital, it cost 80,000 riels"* (FGD11 Phase 3 Midline)

> *"We paid for somethings like small supplies and food from outside the hospital. But for service, they did not charge (P-4). I paid the staff US$10 as a token of gratitude because they took care of my daughter"* (FGD5 Phase 1 Midline)

Respondents in both Midline and Endline alluded to informal payments made as part of out-of-pocket payments when using public health services. People were aware that HWs were not allowed to receive informal payments from patients, however, these were seen as a way to receive quicker or better care, and as a sign of gratitude.

> *"I told my nephew to put money in the physician's pocket. So the physician came to check. The physician comes to check only after receiving the money"* (FGD25 Phase 1 Endline)

> *"It is better than before. Before it is a bit difficult if we don't know them. Yet, if we know and have some money, and often give them some money, they will often come to check up on us"* (FGD17 Phase 2 Endline)

> *"I paid the staff 10$ as showing gratitude because they took care of my daughter"* (FGD5 Phase 1 Midline).

4.

Discussion

Implementation: Awareness, Understanding and Perceptions

SDG awareness was good across most stakeholders in the health system. This was expected for FLSG, as respondents were exposed to these funds since the start of the project. Awareness of PBG, especially as distinct from FLSG, was also good in Phases 1 and 2 while some respondents in Phase 3 often believed SDG and FLSG were the same thing. Whereas PBG awareness was less developed among Phase 3 respondents, the study found that all three ODs in Phase 3 had started working to prepare their HCs for PBG, and many HC Chiefs and HWs had heard of PBG either through their ODs or other colleagues. As a result, many Phase 3 Chiefs and HWs were aware of PBG funds, their purpose connected to quality improvement, and aspects such as the 80:20 split between staff incentives and HC costs. This prior knowledge, and evidence of some prior preparation having been undertaken (including informal, preparatory assessments) even before the SDGs were formally rolled out, may have influenced some of the SDG outcomes we discuss below, such as increased motivation of HWs, as respondents already had performance measurement and incentives in sight. Multiple accounts suggest that understanding of SDG guidelines and processes was achieved through an extensive learning process involving training, written guidelines, and recurrent follow-up and coaching. ODs' coaching may have been the most important component of the HCs' learning process and involved individualized teaching of guidelines and processes, and assessment and feedback on their performance and on their finances.

Describing the role that SDGs had played, IDI respondents illustrated how they perceived the funds as a budget to support or strengthen the facility. Respondents welcomed the additional funds and often considered them essential for the good functioning of their facilities. Despite some initial challenges in understanding how to use this money, respondents widely report using SDG funds (especially FLSG) on the lines expected and described in our results chain. This included the purchase of small equipment, supplies and consumables, and for procuring goods and services that could improve the existing infrastructure, such as repair of solar panels or incinerators, paying for gasoline or repair of the toilets and improving hygiene. The role of SDGs in helping avoid drug shortages was often brought up by the respondents. These purchases are further explored when we discuss the SDG outcomes, but their description at the beginning of the interview provided a good sense of how FLSG money was used and why it was considered essential. Some respondents also reported using money for purposes beyond what was originally planned. This normally involved expenses such as improving the aesthetics of the HCs to make them more attractive to patients, repairing their vehicles or providing transport to an isolated patient during an emergency. These payments are further discussed below in FLSG challenges. PBG funds were used to provide incentives to health providers. The use of PBGs for financial incentives was welcomed as a measure to "*encourage staff*", however, respondents were generally less vocal on the importance of these funds. Respondents also perceived favorably the assessments and ODs' feedback and coaching. However, they did not necessarily make the connection between PBG and improvement in outcomes such as improved understanding of quality or punctuality.

Challenges in SDG Implementation

In line with the reported importance of FLSG, most of the challenges highlighted by IDI respondents were linked to the receipt and use of these FLSG funds, especially during the initial period, and not the PBG.

In the process of receiving funds, it was perceived that the standardized FLSG allocation criteria failed to account for key differences between HCs, including which services they provided or their special circumstances. This challenge may have limited the effects of SDG in HCs that may require more funding than others. Having faced budget constraints previously, these HCs did benefit from the additional funds, but were still unable to spend on some infrastructure and goods. Although financial autonomy was improved in principle, the lack of funds could hinder HCs' ability to decide on their budget, for instance to avoid commodity shortages or to respond to emergencies. Likewise, a lack

of regular and timely payments disrupted the activities of some HCs. While OD offices, and some HC staff did not report any issues, several HC Chiefs and HWs reported delays in receiving funds, which constrained their ability to plan ahead and respond to commodity shortages and emergencies. It was not entirely clear whether in these cases the FLSGs were being mixed up with the delays in the regular government budget or if this was an issue with the FLSGs, as these flows happen electronically and at the same time to all HCs. These issues could have also been more pronounced in the earlier years of implementation of the system, when some aspects of the actual implementation of the system were still under development, however the improvement was not clear from our results, thus it is key that implementers ensure that delays are no longer taking place.

Some HCs and ODs reported challenges in using FLSG funds, when they started implementing SDG. HC Chiefs and OD Directors sometimes lacked clarity on what expenses were acceptable, while new SDG-linked tasks challenged HWs, who lacked formal training and saw their responsibilities increasing. These led to initial errors in spending across HCs, during the start of SDG. Qualitative findings echoed those from implementation field visits that had been conducted outside of this study, which had also identified a need for providing more information on the use of funds to HC staff during the initial years. These visits also found that the understanding of accounting and financial management instructions given to the facilities varied and often required further clarification to improve confidence in planning and budgeting. Although the challenges were eventually overcome, they highlight the importance of training and continuous guidance necessary during the initial steps of implementation of any program. In addition to the need for further coaching and training, gaps remained in identifying which HCs should have received more attention and support from the OD.

Among existing barriers, respondents reported problems withdrawing larger amounts from the bank, which made the process more time consuming and prone to error. The respondents perceived the main challenge to using FLSG funds was the spending guidelines themselves. However, several restrictions in the use of SDGs that were pointed out by the respondents seem to be locally instituted practices and these restrictions do not emanate from the guidelines themselves. Respondents across all phases and types consistently described the guidelines as "*limiting*", "*strict*", or "*narrow*". In their opinion, the guidelines failed to account for the circumstances of HCs and banned expenses that were essential to provide quality of care. Chiefs and HWs reported numerous examples where their ability to spend was restricted. Disallowed expenses included items like infrastructure (for example, some utilities and toilets) that were considered ineligible despite being perceived as essential. Similarly, hiring of cleaners who were vital to maintain hygienic standards, could not be paid from the budget. These accounts also highlighted an area of friction between the FLSG design and HCs, concerning the HC building and its surroundings. First, HCs saw building repairs as necessary especially to avoid flooding during the rainy season and to provide a safe space for good quality of care, while it was not clear to them if the FLSG money could be used for such minor repairs to the buildings. Second, aesthetic improvements in the building and the surroundings (such as painting walls, tending gardens) were seen as a means to improve public perception of the HC and attract more users, again an area where FLSG guidelines were not seen as allowing such expenses. Despite differences in criteria, many of HC expenses were linked to HC's understanding of what quality is: often understood by HC Chiefs as keeping infrastructure in good condition, providing access to utilities, patient transportation arrangements and adherence to hygiene standards. Most respondents understood the guidelines but equally felt the responsibility to use these funds to sort their specific challenges, improve quality and increase the number of users. By restricting spending in these cases, FLSG guidelines weren't fully compensating for limitations in their regular budget. On the other hand, HCs could easily use their more flexible resources such as those from user fees and health equity fund income, for areas clearly disallowed by FLSGs, while preferentially using FLSGs for permitted activities. However, not all HCs had sufficient generation of these flexible income sources, nor did all of them understand this arbitrage possibility. Thus, by themselves, FLSG guidelines placed HCs in a difficult position to decide between improving their facility as they wanted to or being concerned about spending incorrectly and being penalized. To maximize the benefits of SDG spending, further discussion involving HCs and ODs should aim to make the guidelines more responsive to the special needs of the HCs. As financial literacy and capacity of HCs improves in due course, the MOF and other decision makers may also be more willing to allow even greater flexibility in how SDG resources can be eligible for a larger set of eligible activities.

In addition to challenges with FLSG eligibility, supply-side respondents identified some areas for improvement in the assessments. Among those assessed, concerns and suggestions focused on how the assessment was conducted. Phone calls were often not an easy modality to reach patients in some areas (particularly rural) – and it was suggested that assessors should introduce a method to compensate for this imbalance, such as selecting "back-up" numbers

to call if the original numbers do not respond. Incidentally, some of these suggestions have already been addressed, wherein assessors now pick a larger sample of phone numbers and also keep trying to reach this larger sample, so that the HCs are not penalized for connectivity and other challenges beyond their control. Other issue was related to the inconvenience of some of the assessment visits, coming when HWs were not available. Improved communication between ODs and HC may help sort this challenge.

SDG Outcomes on Quality of Care and Availability of Services

Using the accounts of OD Directors, HC Chiefs and HWs, we explored how SDG inputs and activities triggered SDG outcomes and assessed the potential contribution of these outcomes to quality. In this discussion, we describe the mechanisms used by SDG to improve quality, both structure (attributes of the setting for providing care) and process (the care provided by HWs) (Donabedian, 2005). We also reflect on what differences between phases and Midline-Endline tell us about SDG's impact on quality.

SDG's main contributions to structural measures of quality in HCs were additional funds and improved financial autonomy. These inputs provided HCs with the means to address long-standing needs and systemic barriers. All HCs consistently used SDG funds (mostly FLSG, as PBGs were primarily used for staff incentives) to purchase supplies and consumables they needed and ensure that equipment was available and in good condition. The curb and end of commodity and medicine shortages was celebrated as one of the key achievements accomplished through these funds. Similarly, infrastructure in all HCs was more functional as they purchased necessary supplies (such as cleaning products, gasoline) and invested in repairs and improvements targeting structures and key utilities. HCs secured access to water, electricity, sanitation, and transport. Good examples of change were provided on sanitation and hygiene, widely achieved through the purchase of cleaning products, ingenous ways to get cleaning support, and improvement of water and sanitation facilities. Benefits achieved through additional funds were amplified by improved financial autonomy. Allowing HCs to spend based on their specific priorities, SDG facilitated a more efficient and autonomous use of resources to improve quality by adapting spending to their needs, priorities and circumstances. Considering these benefits, challenges in the receipt and use of FLSG funds are even more relevant and should be addressed to maximize the effect they have on quality.

Additional funds and financial autonomy also contributed indirectly to improve process measures of quality through adequate equipment, supplies and infrastructure. Thanks to these, HWs had the means to provide care according to guidelines; for example, using equipment they need or providing medicines, and they could do it in an adequate space (with running water, good hygiene and privacy). Besides supporting an adequate setting, SDG supported quality further through three outcomes: improved monitoring and supervision, increased motivation, and improved morale. These led to improved perceptions of quality of care and competencies, attitude and behavior towards patients, increased availability of HWs and improved managerial capacity.

Regarding monitoring and supervision, SDG introduced additional oversight in the form of assessments and ODs' guidance. Despite the implementation challenges described above, assessments were generally seen as a fair representation of the work of HWs and the HC and an opportunity to learn and improve. In the words of a HW, "*it is like the mirror that reflects*". Although it was unclear how much monitoring and supervision increased in frequency, their comprehensiveness and formative role were emphasized. Assessments were perceived as both "*a measure*" to determine performance and "*to help enhance the service*". These changes had a key role in improving quality by clarifying how to achieve it and, as we discuss below, motivating HWs. NQEMT and assessments created clear, common objectives for ODs and HCs and a roadmap to improve quality. For instance, HWs were required to update their clinical knowledge and skills, keep good hygiene standards, and behave correctly with patients. Moreover, assessments, and ODs' guidance and feedback improved HWs' understanding of their work and how to perform better in the future. Although it is not fully clear how much HWs changed their understanding of care or were just

following new rules, they often discussed better quality in terms of upgrading their knowledge and being more confident on their skills, reducing risk for patients and treating them better. Following objectives and feedback, HWs improved their knowledge and competencies, and cared more for hygiene and waste disposal. Likewise, respondents described widely how they improved their care to patients; conducting the necessary consultations, checks or tests, but also being more communicative, respectful, and friendly. Last but not least, HW were more punctual and mindful of standby duty, ensuring the HCs were open 24 hours. These benefits also seemed to have sustained over time. Through Phase 3 respondents, we observed that these changes start with the preparation of the assessments, while Phase 1 respondents showed that improved monitoring and supervision continued adding value two years after its introduction. Across district-level respondents, we also noticed that a limited budget may be a challenge to improved supervision, with several ODs reporting lesser visits than they would have wanted, because they could not afford it. In this context, to the extent the SDGs did enable structured and regular supervision by the ODs, their importance was clearly perceived.

Overall, HWs and Chiefs were consistently motivated to improve their HCs and their assessment scores and perceived changes in several areas such as clinical skills, hygiene of the HCs and attitude towards patients. This motivation may be attributed to different reasons that were both extrinsic (coming from external sources such as pressure and rewards, financial or otherwise) and intrinsic (from the individual, and not dependent on external rewards). These were generally compatible and coexisted in some respondents. Extrinsic motivation was by far the most cited and included a combination of financial incentives, following rules, peer-pressure and competition. Some of these sources of motivation were more present than others, however, it was unclear if they were more important to respondents or simply more evident to them. Among respondents in Phases 1 and 2, we found evidence that PBG incentives motivated HWs to work harder and aim for better scores. Likewise, respondents in Phase 3 who heard about the incentives were also keen on their introduction and were already changing their practices in some places where the assessment was yet to be introduced. An example may be found in how respondents in Phases 2 and 3 linked staff punctuality and standby duty to PBG incentives. Besides PBG, other financial incentives that have already existed even earlier included user fees (a share of which is distributed as staff incentives) and salary itself, which suggest that income was a priority for HWs even before the introduction of PBG (which is understandable given their modest salary structure). Interestingly, we did not find references to other financial incentives in Phase 1 or 2. This suggests that interest in PBG incentives may have relegated them in HWs' discourse.

Besides financial incentives, IDI respondents described a wide, diverse body of non-financial incentives. These incentives were found across all three phases, and individual respondents gave them—indirectly, through the time and detail used in their descriptions—equal or more relevance than financial incentives. Non-financial incentives were likely present even before SDGs. However, some of these may have been influenced by SDG. For instance, rules and expectations on quality and HWs' performance, and their enforcement, were present before SDG. HWs across all three phases were aware that higher authorities (for example, Chiefs, ODs, MOH) expected good behavior toward patients and were mindful that feedback could come to them through different mechanisms. In this context, SDG assessments and feedback from their own supervisors in a regular and structured manner reinforced attention and expectations on HWs' performance by defining them better and measuring them against scores. This way, the introduction of SDG would add additional pressure to comply with correct behaviors and improve scores. This interaction between pre-existing incentives and SDG was more clearly delineated when the respondents spoke about the interaction between their scores and reputation. From HWs' and Chiefs' perspectives, doing a good job is "*not limited to the money, it is related to our honor*". Through the assessment scores, SDG introduced an accepted, comparable and objective measure of performance that put HWs in the spotlight and nudged them to work harder and avoid embarrassment. Furthermore, they introduced (or reinforced) a sense of competition between the HCs. Both avoiding embarrassment and competition were themes clearly observed in Phases 1 and 2, while evidence in Phase 3 was more circumstantial. However, OD Directors in Phase 3 already mentioned this phenomenon even before the PBG assessment had commenced in their ODs. This suggests that feelings of honor and competition would be something ODs use when the assessment is introduced. Some incentives that were mentioned did not involve achieving rewards or avoiding punishment - they were connected to how appreciated HWs felt, how conducive their workplace was and their own sense of duty. In the first two cases, SDG contributed by improving the infrastructure and access to supplies, equipment, and consumables. Exploring respondents' concerns, we identified several barriers to achieving better scores. These were linked to health system constraints, including insufficient HWs, scarce resources, and an aged and inadequately trained workforce. These barriers restricted the ability of HCs to achieve better scores, therefore

reducing the incentives received by HWs and raising the perception that better scores were not attainable despite their efforts. Consequently, these barriers limited the effect of PBG. In addition, increased workload was a source of dissatisfaction to some HWs that potentially dulled the motivating effects of SDG. This is particularly important considering that, if SDG is successful, these facilities will see their workload increase. Without an adequate workforce, some HCs may not be able to face the increased workload and will end up reducing their quality again.

Compared to other outcomes such as improved availability of supplies and consumables, evidence on improved managerial capacity was subtler and required further interpretation in how aspects such as autonomy, trust and empowerment inspired managerial actions, and processes such as regular and structured supervision improved managerial effectiveness. Direct evidence of capacity (or the ability or skill of a manager to use a given amount of resources to achieve better objectives) was limited, likely due to the complex nature of this outcome, with intermediate outcomes that contributed to managers' capacity by providing them with more tools and consolidating good practices. For instance, the introduction of new funds, roles and processes with SDG improved the communication within HCs, which now discussed more their needs and how to use funds. In addition, the new roles of the cashier and accountant provided specific skills that supported the administration of the HC. Our findings suggest that these tasks could be compromised by HWs' lack of previous experience and need to juggle this responsibility with their other obligations. SDG also improved HC Chiefs' autonomy over their budget – making them more proactive in planning their expenses ahead and being more responsive to emergencies. A good example was found in HCs purchasing more drugs or preparing more beds in response to dengue outbreaks. In addition to changes inside the HCs, SDG improved the communication between ODs and HCs. Introducing more guidance, supervision and coaching increased the interaction between them, while NQEMT and external assessments created objectives in common. SDG supported managers by improving their access to information and guiding its use. Through increased financial autonomy and assessments, SDG required more reporting and greater awareness and use of data by both HCs and ODs. Assessments were particularly useful, as they guided ODs and Chiefs' supervision, measured progress, and highlighted gaps for improvement. This data likely helped ODs and HC Chiefs make more informed decisions on coaching and resource allocation. However, the use of data to inform decisions depends on the ability of HC Chiefs and ODs to use it and the evidence supporting their skill to do this was only limited.

The motivation provided by the PBG incentives in Phase 1 and 2 districts is an important finding, as it validates the SDG theory of change. As noted above, the anticipation of PBF also motivated Phase 3 districts to take certain advance actions, though these unfortunately also reduce the likelihood that the impact evaluation detects improvements in Phase 2 areas relative to Phase 3 areas. The SDG appears to have improved extrinsic motivation in HCs and HWs, often in alignment with pre-existing intrinsic motivations. It appears that the assessments provide specific metrics that HWs have assumed to measure their own performance. The analysis also identified several factors that may reduce the effectiveness of the SDG, including limited staff to take on new responsibilities that were introduced with the SDG and limited skills to exercise discretion embedded in the program, e.g., with regards to financial autonomy. These issues could be addressed with additional training and possibly additional staffing or support from ODs.

Assessing Impact on the Supply Side: Comparison of SDG phases

Comparing SDG phases (*Table 11*), we observed subtle differences in some of the outcomes related to assessments and PBG, likely influenced by how long they were exposed to them. Midline-Endline comparisons were complicated, as the Endline explored and probed more in depth the effect of the assessments, but it was possible to assess differences within Endline. Overall, we found evidence across the three phases; however, it was more concentrated in Phase 1 and Phase 2 Endline than in Phase 3. For instance, evidence of increased availability of HWs in HCs was found across all three phases, with some respondents in Phase 3 Endline noting it was an early result of PBG. However, we found more evidence of increased availability and punctuality in Phase 1 and 2 Endline.

> *"There have not been many changes within the last six months as this OD has just been assessed for one month. There was only a change related to 24-hour duty because of availability of the Performance-Based Grants (PBG)"* (OD4 Phase 3 Endline)

TABLE 11. SDG outcomes and external factors likely influencing quality according to IDI respondents, organized by presence in Phase and Midline-Endline

Present across the three phases since start of SDG	Only partially present in some phases	Only present in some phases receiving PBG incentives
All phases	Full presence: Phase 1, Phase 2 Endline Full or partial presence: Phase 2 Midline and Phase 3 Endline No presence or minimal: Phase 3 Midline	Only Phase 1 and Phase 2 Endline
SDG: • FLSG increases availability of necessary equipment, supplies and consumables • FLSG reduces the number of stock-outs in HCs • FLSG is used to ensure access to water, electricity, sanitation, and adequate wards • FLSG is used to improve access to sanitation and hygiene standards • FLSG is used to improve buildings (e.g., roof, floors, walls) and surroundings (e.g., garden) • SDG introduced financial autonomy in HCs • Financial autonomy made purchasing faster and HCs more flexible and responsive to their specific needs and responsive to emergencies. • All phases were supervised by ODs. The frequency and content were unclear • The introduction of SDG funds, roles and processes increased communication within the HCs across all phases • Having financial autonomy, HCs planned their expenses more, adapting to their circumstances and preventing stock-outs • HCs and ODs had more communication between them, with the latter taking a more active role on guidance, coaching and supervision • Checklists and supervision provided HCs with a list of objectives on what needed to be done to improve quality. Assessments provided a benchmark and information on what was missing • HC Chiefs and HWs were more aware of hygiene and reported cleaner HCs • HWs conducted necessary checks and tests, rather than just giving drugs. They also were more communicative with patients, explaining illness, the care they receive and their treatment • HWs became more respectful and friendly towards patients • HWs were motivated by the improvements in the HC including equipment, supplies and consumables, and better infrastructure. • HWs were available in HCs 24 hours a day, with staff being present for standby duty • HWs were more punctual to work • FLSG budget allocation criteria • Challenges spending at the start of SDG • Challenges conducting assessments	**SDG:** • HWs worked harder to improve quality • Respondents in Phase 3 Endline were aware of the assessments and some went through them. However, respondents in Phase 1 and Phase 2 Endline had a more detailed knowledge and went through a learning process not reported in Phase 3 (only Endline comparison) • Information on OD's activities was more available from Phase 1 and Phase 2, possibly due to longer exposure • Phase 1 and Phase 2 Endline reported that assessments and feedback made HWs more knowledgeable and changed their behaviors (only Endline comparison) • HWs and Chiefs heard of PBG incentives and were encouraged to improve their assessment score	**SDG:** • Assessments provided HCs and ODs with data to inform their management. They also provided ODs with measurable objectives and information on performance, to guide supervision and coaching • HWs worked harder to receive larger PBG incentives or started working harder after introducing them
Non-SDG: • Rules, expectations and enforcement of quality and community-feedback mechanisms were present in all phases before assessments. They may have been reinforced by the knowledge of the assessment but were present in all phases. • Phase 3 respondents reported being incentivized by salary and user fees • Phase 3 respondents also reported being motivated by their sense of duty	**Non-SDG:** • Reputation and competition between peers motivated HCs to perform better. Present in all phases, but potentially strengthened through assessments providing scores. • Staff shortages and the ability of some staff to improve limited the ability of HCs to get better scores and limited motivation	**Non-SDG:** None identified.

Another example was that HC Chiefs and HWs in Phases 1 and 2 Endline knew more about assessments and had more feedback regarding their learning process. OD's provided more detailed accounts of how they guided and provided feedback to HCs. Moreover, reports on how HWs improved their competencies and behaviors were more prevalent and affirmative in Phases 1 and 2, which had been exposed to PBGs. These differences existed among respondents despite changes during the last six months, which may not include earlier experiences that HCs had in Phases 1 and 2. On financial incentives, some HWs in Phase 3 felt encouraged about PBG, but HWs in Phases 1 and 2 were clearly found to be working harder to achieve them. Regarding non-financial incentives, reputation was linked to performance in all phases, but evidence suggests that HWs in Phases 1 and 2 were far more eager to achieve good scores in order to earn a good reputation.

Subtle differences—or their absence—in some outcomes do not suggest that SDG did not have an impact on them. On the contrary, our results explain why differences between phases should not be commonly expected. The first reason is that many outcomes were present at the same time in the three phases, triggered by FLSG which had significantly improved the resource situation already, and instituted financial autonomy.

These additional funds, financial autonomy, and new roles and processes supporting communication and reporting had already created positive influence on outcomes such as monitoring, managerial capacity and HWs motivation. The second reason for limited differences was the influence of assessments, feedback and PBG incentives on Phases 2 and 3 starting earlier than expected. Many HCs in Phase 2 Midline and Phase 3 knew about the assessment, were preparing for it and had even gone through an initial, informal round of assessments in anticipation of the rollout of PBGs. In these phases, ODs guided and exhorted HCs to prepare their assessments, giving them details, explaining incentives and monitoring improvement and producing initial changes:

> *"There was a change, for example, dissemination of the work had to be conducted prior to Quality Improvement assessment. In terms of documents, they had to be fully completed and filled in with all the details, including phone number. We also made staff know how to communicate, ask questions, and be friendly to our clients"* (HC6 Phase 3 Endline)

We also observed at Midline that some NGOs supported ODs and HCs in Phases 2 and 3 to prepare and train HWs, monitoring their improvement. As a result of early exposure, HCs started benefiting from the effects of clear objectives, assessments, and feedback at least since Midline. Similarly, many in Phase 3 Endline were aware of incoming PBG incentives, which could prompt them to change their behavior before expected. This combination of early SDG effects likely had a positive effect on Phases 2 and 3 but diffused the comparison between phases. A third reason for limited differences was found in pre-existing circumstances of the HCs and challenges in the implementation. Challenges to improve scores such as staff shortages may have influenced more acutely HCs receiving assessments and PBG (thus, under more pressure) while implementation challenges, especially those affecting assessments, may have limited the differences. Last but not least, other incentives such as pre-existing rules and enforcement around quality, and incentives such as salaries, user fees, concerns about reputation, and sense of duty also played a role in motivating HWs across different phases. However, it is not clear if the effects of PBG incentives are adding or replacing those of other incentives. All these findings should be carefully considered when assessing differences between phases in the quantitative component of the SDG impact evaluation.

SDG Outcomes on the Utilization of Public Health Services

As part of the results chain, it was theorized that SDGs contribute to increase the demand and access to public health facilities at HC level. This increment would be produced by improvements in quality and availability of HC's services, which

would be perceived by communities, and address their needs, challenges and preferences when accessing care. Supply-side respondents across all three phases reported an increase in the number of persons attending their HCs, normally concentrated among ANC, immunization, and delivery services. They linked this increase with changes in HCs produced by SDGs, coupled with financial protection schemes and outreach. However, some HCs did not observe an increase in utilization, experiencing instead irregular ups and downs, no change, or decreased utilization in one or more services.

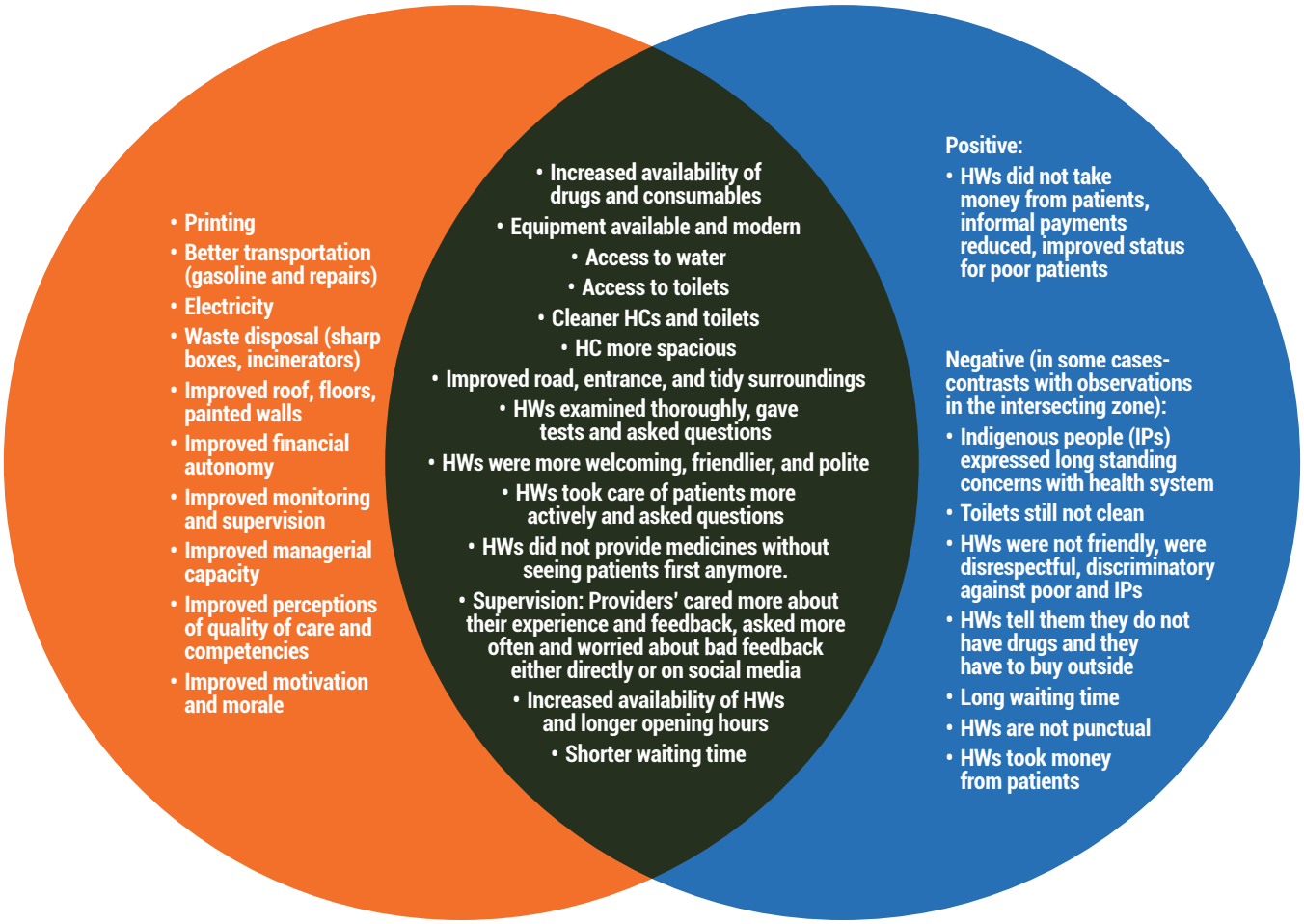
To assess SDG's potential contribution to increased demand and utilization of health services, we first compared SDG-linked changes in HCs with changes perceived by community members. This comparison helped us assess which changes were noticed by the community. As summarized in *Table 12* and *Figure 4,* most of the changes identified by community members were also reported by supply-side respondents and were connected to SDG outcomes. These changes were characterized as easily observable without previous expertise, such as improvements in HCs' infrastructure, hygiene, opening hours, and improved availability of HWs and drugs. They also included changes to which users were directly exposed, such as HW's attitude and behavior towards them. These changes were also emphasized by supply-side respondents as contributing to utilization in their HCs. SDG changes observed by both supply- and demand-side respondents were likely to have a larger role influencing utilization directly (*Figure 4*). Reasonably, features that were not directly visible to patients (for example, waste disposal) or required expert knowledge (adherence to standards and treatment guidelines) were not noticed in the same way. Consequently, changes only perceived by the supply-side may have a role, but possibly this is more indirect. SDG outcomes such as improved monitoring and supervision, managerial capacity and motivation and morale could only be indirectly perceived by users in the way HWs' provided care, their attitude and punctuality. Overall, the large number of SDG-linked changes suggests that visible SDG influence was largely perceived by community members.

About half of the HC changes articulated in both supply- and demand-side responses were connected to FLSG (for example, supplies, drugs and infrastructure) while the other half related to assessments and PBG incentives. As discussed above, the earlier presence of preparations and assessments in Phases 2 and 3 likely started influencing these HCs. Thus,

TABLE 12. Summary of HC changes and negative cases (feedback differing from the main body of evidence) reported by Supply-Side respondents and received by Demand-Side respondents across all three phases

SDG-LINKED OUTCOMES:	
Reported by Supply-side respondents	**Perceived by community**
• Increased availability of necessary equipment, supplies and consumables • Improved use and functionality of available infrastructure • Improved financial autonomy • Improved monitoring and supervision • Improved managerial capacity • Improved perceptions of quality of care and competencies by HWs • Improved attitude and behavior towards patients • Increased motivation and morale of HWs • Increased availability of HWs at health facilities **Highlighted as contributing to increased demand:** • Increased availability of HWs • Greater availability of drugs • Improved infrastructure and hygiene • More thorough check-ups • Friendly and respectful HWs	• Greater availability of drugs • Greater access to consumables (i.e. alcohol, soap, tests injections) • Equipment is available and modern (receiving some services such as x-rays impressed respondents) • Improved access to running water • More space available • HCs were cleaner, especially toilets • Negative cases: Some toilets were not clean • Improved road and entrance to HC • Surroundings of HC were taken care of • Thorough examination, tests and greater attention by HWs • HWs were more welcoming, friendly, and polite • HWs took care of patients more actively and asked questions • HWs did not take money from patients • Negative cases: Some HWs still took money from patients • Negative cases: HWs were not friendly, were disrespectful, discriminatory against poor • Negative cases: HWs tell them they do not have drugs and they have to buy outside • Negative cases: long waiting time • Providers' cared more about their experience and feedback and were worried about receiving bad feedback either directly or on social media

FIGURE 4. Overlap between health center changes reported by Supply-Side respondents (left, in peach) and perceived by Demand-Side (right, in blue) respondents across all three phases, changes mentioned by both are presented in the middle.



we did not find relevant differences between phases. Interestingly, a few community respondents still identified—mostly at Endline—issues in their HCs during the last six months. These included lack of access to medicines, dirty toilets, poor behaviors among HWs, long waiting times and HWs not being punctual. These issues were predominantly reported in Phases 2 and 3, suggesting that a longer exposure to assessments and feedback (that is, Phase 1) may improve these outcomes. However, other factors such as respondents' recall and HC characteristics may also be responsible. Finally, we obtained mixed reports on whether HWs still accepted money from patients, either in the form of an unsolicited "*thank you money*" or even expecting gratification to give them better treatment. This challenge was only discussed by demand-side respondents, suggesting that supply-side either did not consider it a problem or avoided the topic. However, when coupled with improved access through IDPoor cards, respondents also mentioned a reduction in the need for informal payments and also expressing that they were now "*at par*" in status *vis-à-vis* those with money in their pockets, reflecting an important cross-linkage between the HEF and SDG programs.

To further assess SDG's contribution to demand and access, we compared SDG outcomes as reported by supply-side, with demand-side perceptions and priorities described in their health-seeking behaviors (*Table 13*). These priorities included needs, challenges, and preferences that determined users' decisions to opt for public or private care and for type of provider. This comparison helped us understand how SDG outcomes, either perceived or not, addressed the priorities of the communities that the HCs' served. It also helped to assess how HC changes perceived by the community but not reported by supply-side represented some of the long standing unattended priorities. In addition, supply-side respondents also identified enablers and challenges outside of SDG that influenced users' desire and ability to visit HCs. We compared these with health-seeking priorities, to reflect how external factors influenced SDG.

Two SDG outcomes, the increased availability of supplies and consumables, and the increased availability of HWs, seemed the best candidates to influence utilization, as they were noticed by communities and part of their priorities. The increased availability of supplies and consumables improved communities' perceptions of the quality of HC's care, and their capacity to provide different services. It also reduced people's need—and associated time and cost—to purchase medicines elsewhere. Increased availability of HWs, who were more punctual and respected standby duty guidelines after official hours, helped reduce waiting times and keep the HC open for longer hours. These changes are key contributors to utilization, as users often choose private care for faster services. However, the impact of these SDG outcomes was potentially limited by several challenges (*sections D and E, Table 13*). Increased availability did not mean all drugs and consumables were available, and community members were keen on receiving IV injections which are not necessarily the care they need. Only a limited number of services were available for longer hours, and some people still identified waiting times, opening times and cost as challenges.

Some SDG outcomes were linked to changes reported by both supply- and demand-side respondents but were not described as part of health-seeking priorities (*section B, Table 13*). These included increased availability of equipment, improved functionality of infrastructure (such as access to water, toilets, more hygienic conditions), and improved attitude and behavior towards patients (through more thorough exams, being asked questions and being welcomed by friendly, respectful HWs). Despite not being framed within health-seeking, these changes were emphasized by FGD respondents and were important to them. Thus, it is safe to assume they influenced their decisions to use public HCs, although perhaps not as much as access and costs. Communities perceived surviving issues with some HWs behavior and infrastructure (*sections D and G, Table 13*) that could hinder positive effects. Interestingly, the fact that HWs did not provide drugs without a proper check anymore may discourage some users, already used to—or in need of--buying medicines directly for themselves or others.

Supply-side respondents also reported SDG outcomes that were not perceived by users, but still targeted their priorities for seeking health care (*section C, Table 13*). Outcomes such as monitoring and supervision, managerial capacity, perceptions of quality of care or motivation cannot be easily noticed by users. However, they may have had an indirect influence, as they supported quality and access, and focused on services often sought in public HCs, such ANC, delivery, and immunization. Improved electricity and building surroundings weren't mentioned either although they were more visible. However, electricity remains essential for good quality facilities, and so do improvements in the buildings that lead to a supportive environment (for example, to withstand rain and floods). In addition, HWs described how FLSG funds and financial autonomy improved the functionality of referrals and transport infrastructure. This improvement addressed three major priorities in health-seeking: physical access, cost (of transport) and the use of referrals to access upper levels of care. Poor access to services and cost were still large barriers for people to attend public HCs, whereas financial protections schemes (HEF, NSSF, and the 1000-days scheme) and HC outreach were key to increase utilization. We confirmed the importance of these external factors after comparing them with communities' health-seeking priorities. Affordability and HEF subsidies (including transport costs) were the major reasons to choose public health facilities, while distance, weather and transport limited access and influenced some users to use private providers. HCs and communities agreed that many women preferred to deliver in hospitals rather than HCs; financial protection schemes supported this choice. Immunization and dengue were two of the reasons highlighted to visit public HCs and were influenced by HC outreach and outbreaks, respectively. People coming from other catchment areas and returning migrants (*section F, Table 13*) were not mentioned in the FGDs; however, they were still relevant for influencing utilization.

TABLE 13. Comparison of Service Delivery Grant outcomes and external factors reported by Supply-Side respondents, with Demand-Side perceptions and priorities described in their health-seeking behaviors

A. SDG outcomes repoted by supply-side and perceived by community and overlapping with health-seeking priorities	• Increased availability of drugs • Increased access to consumables • Increased availability of HWs (shorter waiting times and longer opening hours)
B. SDG outcomes reported by supply-side and perceived by community (but not overlapping with health-seeking priorities)	**SDG noted by supply- and demand-side:** • Equipment available and modern • Improved use and functionality of infrastructure (water, toilets, hygiene, space, entrance, and surroundings) • Improved attitude and behavior towards patients (thorough examinations, providing tests, asking questions, welcoming, friendly and respectful)
C. SDG outcomes and external factors reported by supply-side that overlap with health-seeking priorities	• Improved monitoring and supervision • Improved managerial capacity • Improved perceptions of quality of care and competencies • Improved motivation and morale • Improved use and functionality of infrastructure (electricity, waste disposal, roof, floors, painted walls) • Improved referrals and transport infrastructure through FLSG funds and financial autonomy (ambulance repairs, gasoline costs, transport costs, response to emergencies) **EXTERNAL** **Enablers:** • Financial protection through HEF, NSSF, 1000-days scheme • HC outreach providing immunization and education to increase utilization • Dengue outbreaks • Law against home delivery **Barriers:** • Distance, weather and transportation • Prefer hospitals for delivery or serious conditions • Prefer to use private health care
D. Factors perceived by community members that overlap with health-seeking priorities but are not part of the outcomes in the SDG results chain	**Enablers:** • HWs did not take money from patients **Barriers:** • Long waiting time • HWs are not punctual • HWs took money from patients • HWs tell them they do not have drugs and they have to buy outside
E. Health-seeking priorities not overlapping	**District referral hospital:** • Go for injuries and illnesses perceived as serious • Go for delivery • Open during nighttime and holidays (services other than delivery) **Pharmacy or purchasing medicines directly:** • Available at their village/near home • Does not require visiting a health provider • Often sold by HWs working in HCs and hospitals **Private care:** • Care perceived better than public • Receive care directly at home • Public HCs do not give the right medicine, or the medicine is not strong • Receive IV fluid injections perceived as better treatment • "***Therapeutic***" injection after delivery
F. SDG outcomes and external factors reported by supply-side only and not overlapping	**EXTERNAL** • Returned migrants or people coming from other catchment areas
G. Perceived by community members only and not overlapping	• Toilets not clean • HWs not friendly, disrespectful, discriminatory against poor

Factors Influencing Communities' Choice of Provider

Communities were normally well aware of the health providers available to them and used both public and private services. Often, the same respondents would select one provider or another depending on the care they perceived to need, and even combine public and private in the same visit. In addition, dual practice was commonplace in the communities; public HWs often combined their role with work in private facilities, owning their own practice or pharmacy, providing care at the patient's home and selling them medicines. Community members were well aware of this factor and used it to their advantage; knowing the HW was a positive thing, while home care and drug-selling activities were convenient for them. Despite HWs' perceptions that public HCs did not sell medicines without consultation anymore, respondents still commonly purchased drugs without being advised by a HW. These drugs were obtained from a combination of pharmacies, health facilities, local vendors and directly from HWs. Compared to other private services, traditional services and products were not used commonly, however, some respondents highlighted practices still in place, especially in locations like Ratanakiri.

Respondents decided which provider to visit depending on the type of care they needed, the services accessible to them, the type of care they needed, their perceptions on the effectiveness of different services and their financial situation. Therefore, understanding the different factors driving the use of each provider was key to understand the ability of SDG and HEF to increase utilization of public facilities.

Access and Availability of Health Services

Respondents' choice of care was often defined by their physical access to the provider, the services around them and whether they may need referral to higher levels of care. The distance to the provider and the condition of the road were sometimes a barrier for our respondents, especially those in rural areas and in Ratanakiri, and particularly during rainy season. These barriers made difficult accessing the public HC, making the private providers (clinics, drugs vendors and pharmacies) based nearby a more reasonable choice, or even the only feasible. Requiring care at night also strongly influenced the choice for a given provider. People generally understood that HCs were only open for deliveries during nighttime, thus they could not be accessed. Also, safety while travelling at night was also a concern for some. As a result, they would seek care in private facilities, purchase drugs directly, or go to the hospital.

Physical barriers normally favoured private providers, who were generally more available and closer to the communities. This availability and closeness could be explained by the large private offer in villages and towns including multiple types of drugs sellers (though not all of them would be formally recognized or qualified). This offer was also reinforced by dual practice, whereby HWs have their private clinic or pharmacies at their own homes. In some cases, it would be an option to use "*mobile medical providers*", who travelled to the village, providing treatment at the patient's home, and selling medicines.

In addition to physical access to providers, communities consider the availability of specific services in these providers. Private providers were often prioritised for services that people considered unavailable in public HCs, such as IV fluid injections and chronic disease treatment, while public HCs would be prioritised for maternal and child health services. The HCs also played a key role as an entry point to the hospitals, as respondents were aware of the referral process to access higher levels of care. People in the community were aware of the guideline and policy requiring women to deliver at public health facilities. This likely was further enhanced by their awareness of the HEF benefit package and the new 1000-days transfer scheme that incentivizes women to deliver at the HC. For respondents delivering at home, further research is required to understand whether their decision is based on cultural preferences or is also combined with other factors such as physical barriers. Although some respondents still engaged in different traditional practices mentioned above, this provice was also particularly affected by physical barriers.

Overall, our results indicate that people seek care from providers that are available, are known in the community and have the services they require, regardless of whether they are working in public, private or both.

Sociocultural Perceptions

Communities' decisions on what provider to use were influenced by how serious they considered their condition, how effective they believed different treatments to be and how convenient they regarded different services. Respondents favoured hospitals (referral, district, province), rather than the HC or private providers, for serious conditions and accidents. For illnesses considered minor, such as fever, common cold and stomachache, respondents used public HCs and private providers. The latter were particularly sought for being (according to some respondents) faster and more convenient. Home services, including injections were also preferred for this reason.

Community perceptions on the effectiveness of different types of medicine and treatment also played a role in the selection of a given provider and service. Respondents across our FGDs supported injections as a form of treatment overwhelmingly, considering them superior (this is, a combination of more effective, faster and other attributes) than oral medicines. Receiving an injection was equated to good quality of care and satisfied people. Providers willing to provide the services regardless of real need are likely to attract more people to their services, although it is unlikely they will be providing adequate care. The provision of injections in public HCs was reported in several cases, but it is unclear how prevalent this service may be, as HW's need to follow specific guidelines for care. For private providers, it is reasonable to consider that communities' strong preference for injections is a strong incentive to engage in a process of overmedicalization. The extended use of IV fluids in our sample strongly supports this theory.

Financial Factors

Affordability was consistently mentioned by respondents across all FGDs as a reason for seeking public providers rather than private. Respondents were aware that the cost of care in a private facility is higher than in the public, but the additional cost was justified to receive services that were considered faster, more convenient, more accessible and exclusive. Generally, it was believed that "*those who can afford*" or "*the rich*" go to private facilities, whereas "*those who have no money*" or the "*poor people*" go to public facilities.

People who lacked the financial resources would consistently attend public facilities instead. Being "*cheaper and free*" was the most common reason respondents across all FDGs gave as a reason for seeking care at public health facilities. For some this may not be their preferred option but the only available to them. This was particularly important for people with chronic conditions, as their treatments would involve longer periods, and could be a major issue for those who don't have access to these services in public facilities near them. Having IDPoor card and awareness of the benefits provided by HEF was also a factor strongly influencing people's decision to seek care at public health facilities. However, for many respondents (with and without HEF), even attending public factilities could be a financial challenge due to the multiple out-of-pocket payments required. In some instances, people even had to borrow money, use lenders, or sell properties and livestock. These accounts highlight how important the decision to access care is for many Cambodians, who need to think carefully how to use their resources and may hesistate using any provider unless it is essential. Within this context, it reasonable to consider that some people may purchase drugs directly or use traditional remedies as a way to limit costs.

Changes Perceived in Public Health Services

As discussed in the section *SDG Outcomes on the Utilization of Public Health Services,* community members noticed multiple changes in public facilities (and especially HCs) in the previous six months. Changes identified included aspects of the HC infrastructure, the drugs, consumables, and equipment available, HW's attitude and behaviour towards patients.

These changes likely contributed to make HCs look more convenient and accessible, and a better experience overall. Most respondents observed there has been an improvement regarding the availability of health staff at the HC to

provide service to the people whenever they come to the health facilities. Respondents across all FGDs in both Midline and Endline expressed a sense of satisfaction with shorter waiting time and responsiveness of health care providers compared to the past. However, it is important to note that respondents in Endline focused more on the waiting time for inpatient care at referral hospitals, while Midline respondents mostly focused on the HC. For this reason, this result needs to be interpreted carefully. Still, factors like the greater punctuality and availability of HWs may have influenced this outcome. As one respondent put it:

> *"Now there are three or four doctors; three doctors and one doctor for prescribing medicine. She wrote [the prescription] quickly. We got the medicine fast. Fast! In the past, we wait ... Yes, a long wait, according to a token number; now there are four or ten doctor"* (FGD9 Phase 3 Endline)

Endline respondents also perceived that HCs have now better drugs, supplies, hygiene, and modern equipment. Infrastructure was also seen as more functional. Infrastructure changes were mostly noticed in Phase 1 during Midline, and all three phases in Endline. Respondents across all believed that HWs' behaviour and attitude toward patients improved; they showed more respect through verbal communication, paid more attention and care toward patients by taking examination and asking questions.

Although the changes observed in the HCs were always positive, some respondents still identified issues that may influence their decision to avoid their HC. These issues were mostly connected to the behaviour of some HWs, waiting times, the lack of some drugs and toilets' hygiene. Negatives experiences with punctuality were found mostly in Phases 2 and 3 at Endline. This may be linked to a larger exposure to PBG in Phase 1; there is no evidence to confirm this connection. These experiences may explain why many are keener on using private providers if they can afford them, however, they were only raised by some respondents, so it is possible that many people's perceptions of public care (e.g. as less convenient, lacking some services etc) are influenced by past experiences and may progressively change.

The Role of HEF Increasing the Use of Public Health Services

Findings from both demand and supply-side suggested an increase in utilization of public health care services among HEF beneficiaries. As presented in the above discussion, HEF beneficiaries used public and private health facilities for different reasons, and it is not possible to single out one factor. This said, affordability was found to be an important reason for seeking care at public facilities, and HEF benefits were seen as a key reason encouraging IDPoor card holders to use public health facilities. This strongly suggests that HEF helped increased beneficaries' use of public facilities. The study observed good awareness and understanding of HEF benefits, and the process to obtain HEF through IDPoor, in most respondents:

> *"We have IDPoor card, so they don't take money from us. And they give us injection. And (they) allow (us) to stay there for another three days. If we have IDPoor card, they give us another 40,000 riels. They give 40,000 riels and baby clothes expense"* (FGD14 Phase 2 Endline)

The key role of Chiefs improving knowledge about IDPoor and HEF was highlighted by both FGD respondents and HWs. The latter, who also played a key informative role through facilities and outreach, emphasized the importance of engaging chiefs in villages and communes further to inform the population and to overcome issues identifying adequate candidates for HEF benefits. The PAC was only mentioned at Midline and not often, although this may be due to the way questions were asked at Endline. In addition to good awareness, our study confirmed that HEF benefits closely targeted several of communities' top priorities when seeking care, namely cost (through free services) and physical access (through transport vouchers). Respondents across IDIs believed there was an increase in the number of HEF beneficiaries going to their HCs. This observation was shared by some communities, including beneficiaries reporting they used it more often thanks to a better understanding of their benefits. In addition, the majority of IDPoor

respondents in all FGDs reported that they had good experiences using IDPoor card. Both demand-side and supply-side respondents highlighted the importance of HEF, NSSF and the 1,000-day scheme on increasing the utilization of public health facilities. Interestingly, ANC, delivery and immunization were the services most commonly reported by HWs to increase. These services are aligned with HEF, but also with financial incentives in the 1,000-days scheme. Overall, the evidence in our study makes safe to assume that HEF had a role increasing the use of services, but the effects of other programmes (including NSSF, the 1,000-day scheme and SDG) make difficult to trace the dimensions of HEF's role. In addition, several challenges may have limited HEFs ability to increase utilization.

Despite evidence indicating a better understanding of the benefits of the IDPoor card in the communities leading to greater use, beneficiaries encountered multiple challenges accessing HEF benefits. For some respondents, some were caused by the lack of effective information on the benefits, and felt it was unclear to what extent some Chiefs have clear knowledge about HEF benefits to accurately inform the community. This could lead to some people missing out on the benefits, not knowing that the cards expire, that they cannot use their households' card (or their partner's) unless their name is included in it. The last case was likely more prevalent in some communities where members migrate or travel often to work in the city or another country. Another challenge was connected to the IDPoor pre-identification process, which some perceived as being unfair because people entitled to the IDPoor card "*have a big house, and their children are rich*". Meanwhile, people that should qualify did not have the IDPoor card. Another important challenge mentioned at identification was the incorrect inclusion of family members in the HH to access benefits.

Once the household had a IDPoor card, beneficiaries experienced different challenges to access health services. Supply-side respondents highlighted that people not bringing the card was a major challenge. When the care required is urgent, this could be caused by people not having the time to travel to their household to get the card or forgetting the card when leaving. In other cases, supply-side respondents mentioned that people were "*too lazy to bring the card*". While this may be true for some people requiring cheap services (especially if the trip to collect the card is equally expensive), the importance of cost for most demand-side respondents indicates that other reasons for not bringing the card may be taking place. Sometimes, people were reticent to use cards, afraid of receiving worse care or be submitted to lengthy procedures. For example, some respondents were influenced by past negative experiences with HWs—these respondents felt they were treated worse because they were HEF beneficiaries. More commonly, supply and demand-side respondents mentioned that many beneficiaries forgot bringing their card to the HC. This could be the result of being poorly informed or rushing to the facility for care without time to think about the card. However, a few respondents in the community also reported that some beneficiaries would be discouraged by the lengthy process of registration and documentation of HEF benefit. To avoid it, they would not use their IDPoor at the HC as the low cost of user fee was worth the time and effort otherwise invested.

Even when people where willing to use HEF benefits, they could face financial and language barriers limiting their ability to benefit from them. OOP expenditures were commonplace among HEF beneficiaries, and the respodents often highlighted the need of "*having extra money in hands to pay for something*", especially when going to the hospital, to pay for expenses not covered by HEF. Although these may have seemed small, their sum could be at times significant for the respondents, which would then borrow from relatives or a moneylender to cope with these payments. One of the expenses mentioned in both Midline and Endline were "*under-the-table*" payments to HWs, although most people observed that this practice has not been an issue for them. People in the community are aware that they are not required or forced to pay the provider for the services; but they do it of their free will in the hope of obtaining better care or as a gesture of gratitude. Language barriers were a challenge for people from indigenous population backgrounds, especially older people who were not fluent in Khmer. These beneficiaries reported that this barrier limited their ability to express their needs or make complaints. The supply-side findings also highlighted some additional challenges that the HC encountered with registering IDPoor card beneficiaries if they came from outside the catchment area, if they did not have the beneficiary's name in the PRMS, if the name of a household member was missing in the system.

Some of these challenges can be synergistically addressed by the SDG system and further innovations. Further focus on HWs care, attitudes and behaviour towards patients may help limit challenges like discrimination and payments. Further education on HEF and other schemes should be a priority both in HCs and during outreach. HWs should collaborate further and follow up closely with Chiefs to ensure the information is conveyed correctly. Opportunities

to leverage technologies and communications to increasing availability of the "*right*" information with beneficiaries should be explored. Alike assessments follow up with HC patients for the score, systems could be in place to follow up HEF beneficiaries specifically. These could act as platforms to share information with them and also to collect useful information on their experience and satisfaction that can be used for troubleshooting.

Study Limitations

This study has several limitations that must be considered when interpreting its findings. The data collection teams faced some challenges finding FGD respondents within certain groups. Respondents aged 15 to 49 were less available, as they were more commonly busy or out of the village working, and older community members were overrepresented compared with the total population. In addition, respondents' exact age was not recorded in about a third of the FGDs. We know that half of these belonged to the 15-49 age range, while the others would be mixed. While older respondents may be less knowledgeable about recent changes in maternal health services, they act as children's primary or secondary caregiver and their feedback provided useful insights into child health services. Respondents from indigenous populations were also more difficult to sample; and a special effort was made to include them at Endline. Another limitation could be sampling bias; all respondents in the study were people willing to spend one or more hours participating in the study. Thus, it is possible that the characteristics of the study respondents are different from those of others not willing or available. For instance, respondents may be more satisfied with SDG, their experience using health services or may live in more accessible households.

To align with the quantitative impact evaluation, the qualitative data was collected at once during a limited time period. This approach made difficult to adjust and refine the protocol over time. This challenge was partly addressed by using Midline preliminary results to inform Endline questions, which were more comprehensive. On the other hand, the comparison between Midline and Endline rounds was limited, as the Midline explored certain areas (e.g. benefits from the assessments) in less detail. Moreover, the enumerators collecting Midline and Endline data had varying levels of knowledge regarding SDG and qualitative methods. This difference influenced their ability to ask the questions and probe, making some interviews more insightful than others. To limit differences, enumerators were uniformly trained, covering SDG, the qualitative study, and qualitative methods, and were given research tools that listed questions and key probes comprehensively. In addition, the analysis team considered any differences in questions and probing when assessing the evidence behind each theme.

Besides sampling, our study was likely influenced by social desirability, with respondents adapting their responses to make them more acceptable and, possibly, more aligned to what they believed more desirable. To limit this, interviewers clarified in each session that the respondents would remain anonymous and encouraged them to comment freely. However, it is unlikely that responses are fully free from bias. For instance, existing legislation punishing home deliveries made more unlikely that women reported this practice in front of others, thus the utility of FGDs for assessing changes in home deliveries was limited. Similarly, HWs would be less likely to report disrespecting patients or accepting money from them. Still, the former point was reported by HWs, while accepting money was captured in FGDs. Respondents may also be keener to emphasize the benefits of the SDGs, if they perceive that the research may influence the continuity of their funding. Finally, responses could be limited by bias from the analysis team. To avoid this bias, the analysts held regular discussions on the results, triangulated them, and checked findings with members of the SDG implementation and evaluation teams.

5.

Conclusions and Policy Implications

Overall, SDG awareness was good across most stakeholders in the health system. Several HCs knew about assessments and PBG since Midline and were preparing accordingly with the help of ODs and NGOs. During Endline, most Phase 3 HCs had already heard of PBG and some had even gone through initial informal assessments in preparing for the rollout of the system, to achieve higher scores when the system eventually covered them. This finding was key to understand differences in SDG impact across phases. Despite some initial challenges in spending, HCs and ODs went through a learning process and became better using and reporting SDG funds, especially FLSG, which gave them more confidence and helped with the autonomy over time. Coaching by ODs was central to HCs in their learning and improvements- demonstrating the importance of investing in this skill. SDG was broadly welcomed across stakeholders in the health system; the FLSG funds were perceived as an essential top-up to PBB and were used accordingly to fill any gaps, while PBG funds were largely seen as a way to motivate HWs, improving their punctuality and effort. The system of regular assessments and coaching and feedback by their supervisors was seen as effective and positive means to learn.

Key implementation challenges were articulated around the use of FLSG and the PBG assessments. Some challenges with standardized FLSG allocation criteria and delays in receiving FLSG funds in some HCs limited HC's financial autonomy. Reviewing the allocation criteria to account for HC's diverse circumstances and exploring and addressing the reasons for delays will be key to ensure financial autonomy. Further information on spending guidelines and financial reporting at the start of implementation could have helped HCs catch-up quicker, but they did so eventually. Importantly, FLSG spending guidelines were still perceived to be too strict; respondents consistently believed that guidelines failed to consider HCs' circumstances and forbid what they considered as essential expenses, thus limiting SDG's ability to compensate for limitations in the PBB budget. Challenges expressed on the assessment process included the mechanism of using phone calls to gather feedback which may face connectivity challenges that were outside the remit of the HCs; other concerns were around the scheduling of the supervisory visits.

SDG influenced quality following several pathways, represented as outcomes in the SDG results chain (see Appendix 1). FLSG funding was broadly and consistently used to increase the availability of equipment, supplies and consumables (e.g. newer equipment, fewer drug and commodity stock-outs, gasoline) and improving the use and functionality of available infrastructure (through availability of water, sanitation, electricity, hygiene supplies etc). These inputs, along with improved financial autonomy in the HCs, helped address long-standing needs and systemic barriers and improve structural quality. Besides supporting inputs to an adequate setting, SDG supported quality further through three outcomes; improved monitoring and supervision, increased motivation and morale and improved managerial capacity. These led to improved perceptions of quality of care and competencies, attitude and behavior towards patients and availability of HWs. Checklists and assessments created clear, common objectives for ODs and HCs and a roadmap to improve quality. Assessments and ODs' guidance and feedback further improved HWs' understanding of their work and how to perform better. Following objectives and feedback, HWs improved their knowledge and skills, cared more about hygiene, had a better attitude towards patients (thorough check-ups, respectful and friendly behavior) and were more punctual and respectful of standby/on-call duty.

SDG increased HWs motivation in three distinct ways. The first was through financial incentives; Additional income motivated HWs in the same way salary and user fees do. However, SDG also linked income to a well-accepted and objective measure which HWs could improve with their own efforts, the assessment score. Moreover, ODs played an active role by coaching HWs, helping them understand how to improve their scores. This made HWs, especially in Phases 1 and 2, strive harder to achieve higher scores. In addition, assessments were linked to HCs and HWs reputation and peer pressure, which also motivated them to work hard and get a good score, to avoid embarrassment. Last but not least, some HWs were also more satisfied because of the improvements in their workplace that could be paid with SDG funds (e.g. FLSG). All these factors enabled better observation of pre-existing rules, meeting supervisors' expectations and improved enforcement of what good quality was and how HWs should behave. Some challenges did persist in HCs, including staff shortages and HWs struggling to learn and cope up with increased expectations, which may limit the effects of the assessment on motivation.

Evidence on improved managerial capacity was more nuanced, with intermediate outcomes that provided managers with more tools and consolidated good practices. These included new funds, roles and processes that improved the communication within HCs and with ODs, and financial autonomy that made HCs more proactive and responsive to emergencies. Assessments were particularly seen as being useful, as they guided ODs and Chiefs' supervision, measured progress, and highlighted gaps to improve. This data likely helped ODs and HC Chiefs make more informed decisions on coaching and resource allocation as they understood these challenges better.

Differences between SDG phases were limited, by design, to outcomes influenced by assessments and PBG. They were the only aspects of SDG implemented in a phased way over 2016 to 2019 (unlike FLSG, which were implemented across all phases together, since 2016). Evidence of increased availability of HWs in HCs was found across all three phases, however it was more intense in Phases 1 and 2 (during the Endline study). Respondents in Phases 1 and 2 also had more feedback on HC Chiefs and HWs learning processes and more prevalent reports of how HWs improved their behaviors. Phases 1 and 2 respondents provided multiple accounts of HWs driven to improve their scores to receive more money and improve their image, working harder, and improving their scores to receive PBG. In comparison, Phase 3 Endline HWs were keen on the incentives but did not appreciate all aspects of the system, as they had not gone through the same process yet. Differences were subtle for several reasons–especially due to an unexpected earlier exposure of HCs in Phase 2 (Midline) and Phase 3 to informal assessments and knowledge of PBG from their

peers that were already implementing the system; pre-existing circumstances such as other financial and non-financial incentives (salary and user fees, pre-existing enforcement of quality, concerns on reputation, sense of duty) and implementation challenges especially on the assessments. Midline-Endline comparisons were also complicated, as the Endline study explored and probed the effect of the assessments more in-depth.

SDG also influenced utilization of public health facilities through several mechanisms, although this influence was moderate and indirect, and was interlinked with the HEF system and other factors. SDGs influenced utilization more directly through increased availability of drugs, reduced waiting times, better availability of HWs and longer opening hours. These were perceived by users and were part of their own priorities and expectations. SDG may also have a smaller or more indirect influence through its other outcomes, which improved quality and, to some extent, emergency transportation. Despite these possible mechanisms, observing SDG's effect on utilization was challenging for several reasons. First, differences between SDG phases on quality were already subtle due to implementation challenges, early exposure to assessments and external factors. More importantly, improvements in quality and availability could increase the use of public health services only partially, as they were only some of the priorities considered by communities. Quality could only be partially perceived by people without expert knowledge or adequate training. Other external factors, described below, also played a role in communities' health-seeking behaviors.

People in the communities reported using both public and private providers, selecting them and moving back and forth between public and private for several reasons. Communities were well aware of the public and private health services available to them and knew the providers in them. Most communities had acess to a range of public and private services of different nature including public HCs and hospitals, but also private clinics, pharmacies, drugs sellers and "mobile medical doctors". Dual practice was a commonplace and accepted in many communities; public HWs combined their role with work in private facilities, owning their own practice or pharmacy, providing care at the patient's home and selling them medicines. Respondents also purchased drugs from a combination of pharmacies, health facilities, local vendors and directly from HWs. Traditional practices were not used commonly, however, some respondents highlighted several practices still in place, especially in locations like Ratanakiri.

Respondents' choice of care was often defined by their physical access to the provider, the services around them and whether they may need referral to higher levels of care. Physical barriers made private providers (clinics, informal drugs vendors and pharmacies) based nearby a more reasonable choice. Requiring care at night also made people seek care in private facilities, purchase drugs directly, or go to the hospital. The ready availability of private providers and pharmacies made them more accessible for people, reducing opportunity costs, while the de facto availability of public providers was lesser as they were often found to engage in dual practice. Some people also prioritised private for services that they thought would be unavailable in the HC, such as IV fluid injections and chronic disease treatment. Public HCs were sought for maternal and child health services and as entry point to be referred to hospitals. Communities' decisions were also influenced by how serious they considered their condition, how effective they believed different treatments to be and how convenient they considered different services. Respondents favoured hospitals for serious conditions and accidents, whereas HCs and private providers where their choice for "minor illness", such as fever, common cold and stomachache.

Affordability was consistently mentioned by respondents across all FGDs as a reason for seeking public providers. Private care was often preferred for being considered faster and more convenient. Being "cheaper and free" was the most common reason respondents across all FDGs gave as a reason for seeking care at public health facilities. Having IDPoor card and awareness of the benefits provided by HEF was also a factor strongly influencing people's decision to seek care at public health facilities. However, for many respondents (with and without HEF), even attending public facilities could be a financial challenge due to the multiple out-of-pocket payments required and may hesistate using any provider unless it is essential.

Findings from both demand and supply-side suggested an increase in utilization of public health care services among HEF beneficiaries. HEF benefits targeted two of communities' top priorities when seeking care; cost (through free services) and physical access (through transport vouchers). Our study observed good awareness and understanding of HEF benefits in most FGDs, and both demand and supply-side respondents agreed on the important role of HEF and other demand-side initiatives (NSSF and 1,000-day cheme) in the increased use of public health services. Interestingly, ANC, delivery and immunization were the services that HWs most commonly reported to increase. Overall, the evidence in our study makes safe to assume that HEF had a role increasing the use of services, but the effects of other programmes (including NSSF, the 1,000-day scheme and SDG) make difficult to trace the dimensions of HEF's role.

An important area of policy implications emerging from this study is the inter-dependencies and inter-linkages across HEF and SDG systems. HEF beneficiaries faced several challenges in accessing and using public health services, some of which could be synergistically addressed by the SDG system. Challenges faced by HEF beneficiaries include the negative experiences they encounter with HWs not providing good attention, or the perceived lack of quality in public HCs. People also missed using HEF for not bringing their cards and being unaware of their expiration. Identifying some of the mutually-reinforcing positive aspects of the SDG and HEF systems are additional policy measures for increasing the utilization of public facilities and reducing unnecessary out-of-pocket costs by this vulnerable group. The increasingly welcoming and friendly attitude of HWs attracts HEF beneficiaries, while HWs see this higher utilization by HEF beneficiaries as an additional supplement to their income, which can reinforce their positive behavior, creating a virtuous circle of improved motivation of HWs and increased utilization by HEF beneficiaries.

Other important policy implications of these qualitative research findings, which are to be read alongside the broader findings of the impact evaluation, include the drill down into operational challenges of the SDG system, that help identify things that should stop, start, or continue. Greater flexibility in FLSG utilization, as the financial management competencies of the health sector improve, is one such example, to "start". The already implemented increase in the sample of telephonic respondents for patient feedback in the PBG assessment is yet another such implication. The importance of coaching by supervisors during their structured assessment visits, is clearly valuable and needs to "continue". The value of a fair and objective assessment system and the importance of credibility and peer-pressure in addition to the financial incentives, are all important aspects to continue strengthening as well.

An area which will require more attention in the future will be to use the SDG modality to overcome equity barriers across multiple dimensions of vulnerability. This includes gender, ethnicity, remoteness, disability and age, going beyond a socioeconomic dimension of equity that is addressed through HEF. Though higher SDG payments are now being made available for HCs in remote areas and those serving indigenous population, this is an area where more policy action is warranted. Strategies to address larger policy and health system challenges will also need to be addressed, as they reduce the effectiveness of the system—these include HW load, clinical skills gap, increasing capacity for accounting/financial management and dual-practice issues.

The study also hints at potential design innovations for the future, to further enhance the impact of the system. One such aspect could be to leverage technologies and communications to support with feedback loops and increasing availability of the "right" information with the beneficiaries. This could also be tried with different options to measure patient satisfaction effectively- coming over some of the limitations of the current phone-call based system. Integration of innovations with good communications that address community perception of public health facilities could strengthen the connection between health facilities and communities, further enhancing the effectiveness of the system. Alike assessments follow up with HC patients, systems could be in place to follow up HEF beneficiaries specifically. These could act as platforms to share information with them and also to collect useful information on their experience and satisfaction that can be used for troubleshooting.

6.

Key Takeaways

SDG Impact

Impact on Quality

- The SDGs, especially FLSG, played a key role improving the availability of drugs, consumables, equipment, and supplies. The FLSG was also used at times (e.g. emergencies and referrals) to pay for transport;
- The FLSG was commonly used to repair and improve HC's infrastructure. These helped securing access to water, electricity, and functional wards. They also improved hygiene and access to sanitation in the HC;
- HCs received and managed SDG funds directly, being abler to spend according to their needs and circumstances. HCs could make purchases faster and were abler to respond to emergencies;
- Chiefs and HWs understood supervisions well, perceive assessments as "accurate and fair" and key to learning and quality improvement;
- Assessments provided information used for coaching, and HWs got feedback on their performance to understand the amount of incentives received;
- The introduction of SDG funds, roles and processes increased communication within the HC and with ODs. Assessments also require better documentation and more data, potentially contributing to more informed decision-making;
- The NQEMT and supervision provided HCs with a roadmap to improve quality "step by step". Measuring their performance against a benchmark, HCs and HWs were able to improve what they were missing. ODs' coaching was also seen as key to this purpose;
- HWs were perceived as more knowledgeable, capable, and confident on their skills. Reportedly, HWs also provided more detailed consultations, and were more communicative, respectful, and punctual;
- Respondents across all types and phases commonly reported their interest to achieve better scores in their assessments;
- HWs reported different incentives, including assessment-linked incentives and reputation, rules and expectations in their jobs, their working environment, and their sense of duty;
- During Midline, some HCs Phase 2 and 3 were already told to prepare, while, during Endline, Phase 3 HCs were either preparing or had gone through some sort of assessment. This may have influenced the IE comparison.

Impact on Utilization

- Respondents often perceived an increase in the number of users concentrated on maternal and child health services, especially from HEF beneficiaries;
- Increased availability of equipment, supplies and consumables, and increased availability of HWs were linked with HC changes reported by demand and supply respondents, and overlapped with health-seeking priorities. Thus, they seem the best candidates to have influenced utilization;
- Improvements in the availability of equipment, infrastructure, and HWs attitude and behavior were noticed by supply and demand-side respondents. These outcomes were connected to HCs' quality and safety, highly valued when choosing provider. This made them the next best candidates to improve utilization;
- Utilization was still highly influenced by communities' health seeking behaviours and barriers to access. In combination with SDG, HEF and other financial protection schemes were perceived as central to the increase in utilization. Affordability and HEF subsidies (including transport costs) were the major reasons to choose public health facilities.

Operational Challenges

Receiving and Using SDG Funds

- The FLSG budget allocation criteria were sometimes a problem for not accounting for the type of services provided at the HC or their specific circumstances;
- Payments to HCs (potentially including FLSG) were often irregular, challenging some HC's ability to plan spending and face unexpected expenses;
- At the start of SDG, some HCs were unfamiliar with the spending guidelines which led them to commit mistakes in how they spent FLSG funds. HC's understanding of the guidelines improved with time;
- Respondents commonly and consistently perceived FLSG spending guidelines as a challenge for being too "restrictive". They pointed that expenses not covered in the guidelines were often essential to provide good quality care and respond to emergencies;
- Some HCs experienced challenges withdrawing larger sums from banks, being forced to withdraw smaller quantities.

SDG Assessments

- Some HCs experienced challenges during assessments because their populations were difficult to be contacted due to poor signal or use of their phones;
- In some cases, the timing of the assessments, or the way people were selected were not well aligned with the needs of the HCs;
- Some ODs in Phase 3 considered the budget insufficient to transport staff for the preparatory visits for the assessments.

Achieving Financial Incentives

- Several respondents identified staff shortages as a challenge to achieve better scores in assessments and a source of concern. Moreover, shortages increased the workload, demotivating HWs;
- Dengue outbreaks, combined with limited resources to face the increase of patients, were also a source of concern.

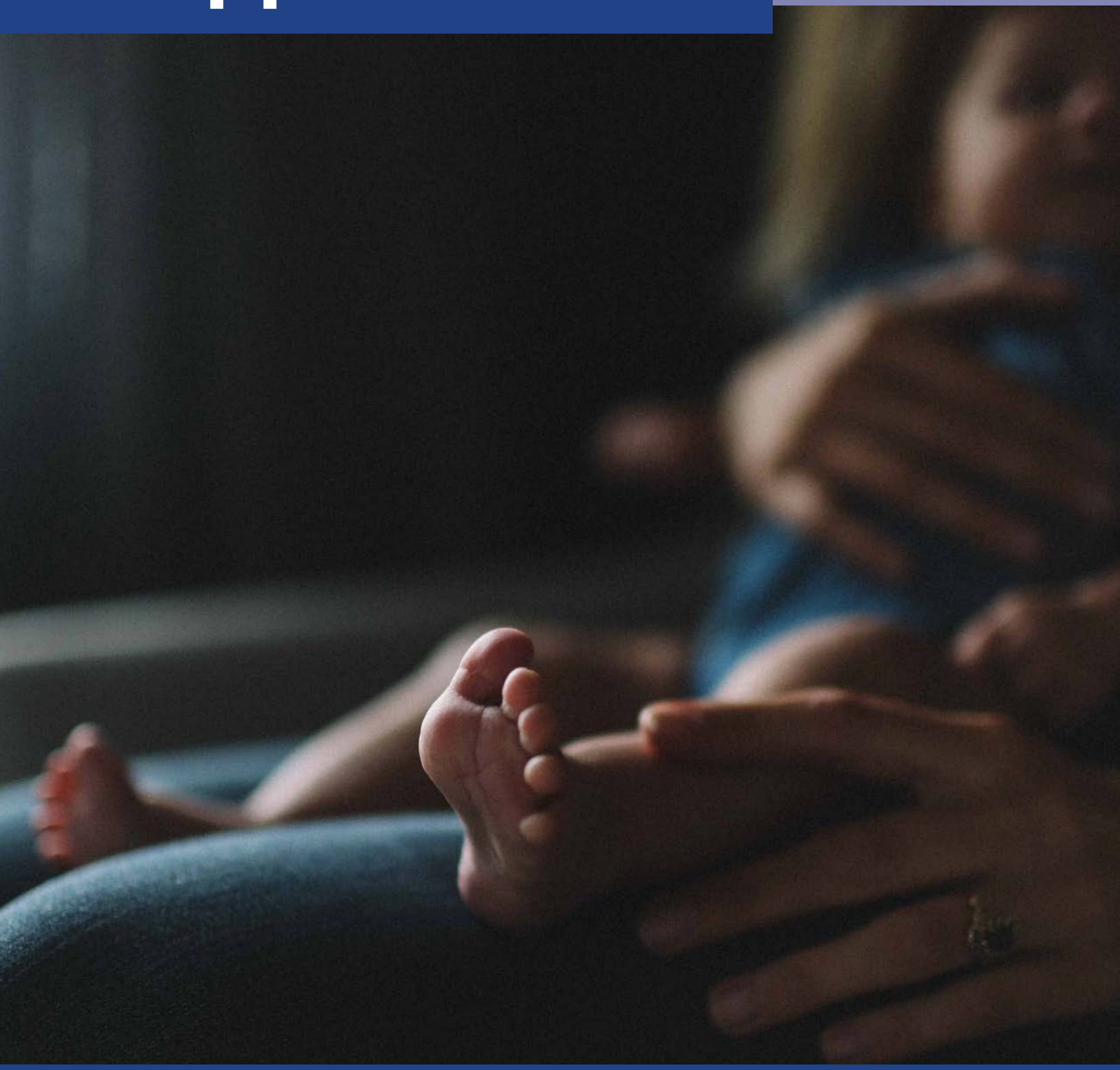
Increasing the Utilization of Public HCs

- Distance, weather and transport limited access and encouraged people to use private home-based services or purchasing drugs directly;
- Some people also prioritised private providers for services that they thought would be unavailable in the HC, such as intravenous fluid injections and chronic disease treatment;
- Cost, waiting times and lack of certain drugs deterred some people from going to HCs, along with the fact that only some services were available for longer hours. Overall, communities perceived that private care was of better quality and preferred to use it if they could afford it;
- A few respondents highlighted delays in HEF funds making difficult to provide benefits consistently;
- Women often preferred to deliver in higher-level facilities.

HEF

- Respondents still reported challenges in identifying families that should receive IDPoor and HEF benefits;
- Community members were sometimes unaware of HEF benefits and how to access them. As a result, some people did not use the benefits, forgot to bring their card or let it expire;
- In the view of some HWs, community members sometimes believed they were discriminated against because they were HEF beneficiaries;
- Some HCs experienced challenges working without the Patient Management and Registration System and having to treat HEF beneficiaries from outside their HC's catchment area.

Appendices



Appendix 1: Service Delivery Grant Results Chain

IMPLEMENTATION				RESULTS	
Level	**Inputs**	**Activities**	**Outputs**	**Outcomes**	**Long-term Outcomes**
Public Health Facility Health Center (HC) & Referral Hospital (RH)	**Equipment** • Development of National Quality Enhancement Monitoring Tools (NQEMT) • Development of structured coaching guides/manuals • Tools for assessments (ICT, mamanatalie, neonatalie) • Bank account at each HC **Human Resources** • Master NQEMT trainers from MOH • Master coaching trainer • Financial management (FM) trainers • ayment Certification Agency (PCA) **Cash** • First assessment visit per-diem for NQEMT assessors from PHD to RH / OD to HC • SDG Funding for HC[8]/RH: a. Fixed Lump sum SDG (FLSG) b. Performance-based SDG (PBG); NQEMT score-linked	1. Cascade Training • NQEMT assessment for PHD/OD • Coaching for PHD/OD • FM for head & finance officer at each HC 2. Quarterly ex-ante assessment NQEMT assessment on: • Financial management • HEF management • Infection control • Vignettes • Neonatalie & mamanatalie observation • Patient Interviews 3. NQEMT score review & joint HC-OD assessor Quality Improvement planning 4. Follow-up coaching visit 5. Quarterly PBG disbursement into bank account 6. Quarterly FLSG disbursement into bank account 7. Independent verification of NQEMT scores	**Human Resource** • Increased number of decentralized trainers and assessors • Increased frequency of testing of HWs' knowledge and clinical skills • Availability of reliable performance score-linked financial rewards for staff (PBG) **Management** • Increased structured supervision • Timely and consistency of funds • Routine administrative management of HEF cases • Routine financial recording & management • Recording of patient opinions on content of care/satisfaction • Development & tracking of QI plans **Infrastructure** • Increased sources of investment on eligible items (FLSG/PBG): • Office supplies, drugs, emergency rescue, medical equipment, minor maintenance and repairing	**Supply-side** • Improved M&E • Improved managerial capacity • Improved financial autonomy • Improved perceptions of quality of care by HW • Increased motivation and morale of HW • Improved HW clinical competency • Increased availability of HW at health facilities • Improved use and functionality of available infrastructure • Increased availability of necessary supplies and consumables **Demand-side** • Improved perceptions of quality of care by patients • Improved financial protection • Increased utilization of public health facilities	1. Improved nation-wide quality of care at public health facilities 2. Increased demand and access at public health facilities 3. Reduced equity gap in financial protection and quality of care received 4. Improved & equitable health outcomes
Public Health Admin Office Provincial Health Department (PHD) Office & Operational District (OD) Office	**Equipment** • Development of National Quality Enhancement Monitoring Tools (NQEMT) • Development of structured coaching guides/manuals • Tools for assessments (ICT, mamanatalie, neonatalie) **Human resources** • Master NQEMT trainers from MOH • Master coaching trainer • Performance Certification Agency (PCA) **Cash** • First assessment visit per-diem for NQEMT assessors from PHD to OD and other PHD • First assessment visit per-diem for NQEMT assessors from PHD to RH / OD to HC • SDG Funding for PHD/OD: Performance-based SDG (PBG); NQEMT score-linked	1. Cascade Training • NQEMT assessment • Coaching for PHD/OD 2. Quarterly ex-ante assessment NQEMT assessment on: • Carrying out HC/RH assessment • Coaching for HC/RH • Maintenance of supply-chain • Review meetings • Follow-up on targets 3. NQEMT score review & Joint HC-OD/RH-PHD Quality Improvement planning 4. Follow-up coaching visit 5. Quarterly PBG disbursement into bank account 6. Independent verification of NQEMT scores	**Human Resource** • Increased number of decentralized trainers and assessors • Increased frequency of testing of PHD/OD's M&E capability • Increased frequency of testing of HWs' knowledge and clinical skills • Availability of reliable performance-linked financial rewards for staff (PBG) **Management** • Increased structured supervision • Timely and consistency of funds • Routine administrative management of supply-chain • Routine finance recording & management • Routine HMIS reporting • Development and tracking of QI plans **Infrastructure** • Increased sources of investment on eligible items (PBG): • Office supplies, drugs, emergency rescue, medical equipment, minor maintenance and repairing	Same as above	Same as above

8 Additional funds for HCs in a remote area and/or those having patients from indigenous populations.

Appendix 2: Summary of Key Findings with Additional Quotes

SUPPLY-SIDE RESPONDENTS

Tables A1 to A4 present a summary of the key themes identified for SDG implementation along with relevant quotations to illustrate them.

IMPLEMENTATION

Table A1: Summary of key themes identified for Service Delivery Grant implementation and additional quotes illustrating them

THEMES	QUOTES - PHASE 1 (ENDLINE), PHASE 2 (ENDLINE), AND PHASE 3 (ENDLINE)
SDG AWARENESS	
All phases were aware of SDG and viewed it positively. All respondents were long exposed to FLSG and were able to place it in SDG, while most also new about PBG	*"It is a project sponsored by the counterpart between the partner organizations and the national budget to make the health sector including the HC and the hospital function well (…)" (OD3 Phase 3)* *"The plan to change the quality of the Health Center or Hospital service of health can say that" (HC8 Phase 3)*
The majority of Phase 3 HWs and HC Chiefs had been introduced to PBG by their ODs. These either had conducted an initial assessment or were preparing the HCs for it	*"Anyway, involved with the PBG, we haven't received the budget because we are one of the provinces which implements the project lastly" (OD3 Phase 3)*
UNDERSTANDING OF SDG	
Management (i.e. HC Chief, OD Director), normally provided more detail on FLSG and PBG and features such as direct transfers. Most HC Chiefs in Phase 1 were able to describe details the distribution of PBG incentives, while those in Phase 3 had a more general idea of their purpose.	*"The PBG for staff is 80%. Another 20% is for the HC" (HC12 Phase 1)* *"That one 80% for encourage incentive and 20% for buying the materials, photocopying and other" (OD5 Phase 2)*
PERCEPTIONS OF SDG	
All respondents welcomed SDG as useful and even essential to the work in their HCs	*"I think this budget has a big benefit because before had it, we hardly found a finance, hardly found the budget to do anything; thus, having this amount of package can help many patients, this budget is good and we do not want to lose it" (HW8 Phase 3)*
FLSG was considered important to cover expenses in the HC and avoid drug shortages and avoid the limitations of the PBB budget	*"62028, if we talk about the direct meaning, help our health sector" (HC7 Phase 2)* *"It is very important because we need that money to run the process of the Center because the Center if don't have that money don't know how to run the process like sanitation and the medicine that we need to buy it in urgent tools of the medical and equipment of the office such as book and even printing the Prescriptions" (HC8 Phase 3)* *"That budget is good for the center. We think that budget can help the citizens a lot, for us to supply the medical drug, to help poor people, to buy the materials and equipment in the center" (HC9 Phase 3)*
PBG was seen as a measure to incentivize motivate staff to improve to work harder. Assessments were considered fair and a useful tool to learning and improvement	*"That PBG is used to encourage to staff, not use to buy" (HC3 Phase 2)*
FLSG ALLOCATION CRITERIA	
FLSG allocation criteria failed to account for key differences between HCs, such as number of services provided, population coming from other areas and outbreaks. This left some HCs with insufficient funds and others with too many	*"According to the advice, we must not spend it out, it must remain some in our box because we have the box, if it doesn't remain in the box, it's cared when we don't have anything and we need desperately, we must run for it" (HC4 Phase 1)* *"My center, it is big but the money that provides, it is so little. But some center is small in size and the staffs are so little but get big budget. For example, 62028, my center, it is big and many buildings so the budget 62028, we spend a lot, so we get only 1 million per month. Some centers are small, the organizing, it is little but receive 2 million, so it is different like that" (HW11 Phase 1)* *"Difficulties such as there is less budget, but the demand is huge. So, 1 million has been spent on that This is our challenge" (HW14 Phase 1)*
TIMELINESS OF PAYMENTS	
Several HC Chiefs and HWs perceived that the payments were often irregular, sometimes delayed for up to a trimester	*"When we want to buy things, we got budget once a month. Sometimes, it has been delayed and we wait until we get budget then we buy things" (HW14 Phase 1)* *"That money is not received in the month that we want, so it is a bit late" (HW4 Phase 3)*
Delays challenged the ability of some HCs to plan for expenses and face unexpected payments, and force some to borrow funds from other sources	*"It is a bit late like this trimester, like first month, second month, third month, it is given in the middle of third month. So, it is hard for us to spend because we need to buy this and that every month" (HW20 Phase 3)* *"The money is given late because they give money at the end of March per first trimester. For example, drugs, we have to borrow in advanced. When the money is given, we will pay back" (HW24 Phase 3)*

THEMES	QUOTES - PHASE 1 (ENDLINE), PHASE 2 (ENDLINE), AND PHASE 3 (ENDLINE)
CHALLENGES AT THE START OF SDG	
HC experienced some initial difficulties due to lack of information on spending. Reported changes in guidelines after training contributed to this.	*"In the beginning, I observed that each staff did not know and understand clearly so s/he was ambitious to be scored as much as possible to get much money for distributing his/her colleagues. Later on, there was a third party who came to verify accuracy of scoring, penalize and cut some scores. After that, the subsequent assessments have been accurately conducted to avoid any guilty being found by the third party" (OD2 Phase 1)* *"In the beginning, there isn't specific advice yet Err… when the budget is available the center keeps making effort like building the toilet, paving the yard with concrete, and filling the land. These payments were then found issues because of non-compliance" (OD3 Phase 3)*
HCs went through a learning process that improved their knowledge. ODs were key in the training and coaching of HC staff.	*"Before giving the score, the OD teaches. They told us how to give the score" (HC3 Phase 2)* *"OD has role teaching us how to budget properly" (HW20 Phase 3)*
FLSG SPENDING GUIDELINES	
Respondents agreed FLSG guidelines were "too restrictive". It was generally perceived that HCs were not allowed to pay for expenses that were essential to the good running of the HC. These included infrastructure for basic utilities (e.g. sanitation, water, electricity), transport and improvements to create a good environment (e.g. roof, floors).	*"We have bins with proper separation of waste however our HC doesn't have the incinerator to burn the sharp wastes (…) this incinerator is worth tens of thousands of USD to build so we cannot afford it" (HC7 Phase 2)* *"For example, if we want to spend on, we want to say, build a new washing basin, we cannot repair the toilet" (HC7 Phase 2)* *"We spent on what is essential for center, for example, the budget was not allowed to use on building the toilets so put it on hold. If there was a lack of anything in the HC, the HC would spend it without any determination by anyone. It had to be flexible" (HW3 Phase 3)* *"Just like we need to build more toilets, we want that money for building toilet, as patient's toilet is separated from staff" (HW20 Phase 3)* *"Yes, build bathroom toilet and put more cement and make the courtyard to make it bigger it can't, can say that the expense on the big we can't make the garden for more attractive" (HC8 Phase 3)*
some HC Chiefs felt forced to use SDG to pay for expenses that were not allowed. Other HCs expressed concern about spending incorrectly	*"If we spend don't spend it properly, we will be penalized. The governor would also be dragged in the matter. If it is proven to be right, they would scold him" (HW24 Phase 2)* *"The conditions of spending is limited, so when we spend the money, we are afraid that we'd spend it wrong and not have any more money. There are many things to spend on, but we are afraid of violating the policy" (HW12 Phase 3)*
Respondents consistently supported including new items in the new guidelines to make them more flexible and address the HCs´ needs.	*"We want the spending to be a little bit wider than this. yes, the spending is rather narrow. Sometimes we need spending, when we need to do, the budget can't be spent" (OD7 Phase 3)* *"Now after getting some amount of this budget, we fill out the land, we improve the condition of the toilet, new toilet stone, and this building is just covered by new color, and also use some amount of this budget" (HW8 Phase 3)*
MONEY WITHDRAWALS	
Large amounts had to be withdrawn in smaller quantities. This made the process more time-consuming and prone to error.	*"That is because…first…honestly speaking, it is hard to withdraw" (HC3 Phase 2)*
CHALLENGES CONDUCTING ASSESSMENTS	
Phone calls were poorly fitted to reach HC users for feedback, in some populations. these were rural and had bad signal, did not usually have phones or not answered them	*"Connection service system of mobile phone is mostly weak in here. Sometimes, two or three of five selected phone numbers can be reachable so unreachable numbers were not scored" (HW 6 Phase 1)*
Assessment visits failed to account for visits for outreach and training and came at times when part of the HWs were out. For smaller HCs, this put too much pressure on the few remaining HWs	*"For the interview at the center, we have 2 people. But for the study tour, there are three lessons sometimes or one lesson sometimes or two lessons for the midwifery sometimes. So, all of the staffs go to study. Only one person stayed during the assessment, so he/she covered two lessons alone" (HC3 Phase 2)*
A few respondents perceived that it was incorrect to test HWs on services they were not in charge of providing: "some people can get the draw who fits their skill while some do not get the draw who fits their skill."	*"Also meet some issues since this evaluation is done by doing the lucky draw, so it is unfair for those who can't, for example, those who are from the PV, they get the lucky draw of the vaccination injection part, sometimes the children's disease counselling, so they do not know" (HW8 Phase 3)*
Some OD Directors perceived the budget was not enough to cover the cost of the visits	*"The Obstacle is the lack of money for them to visit" (OD4 Phase 3)* *"We lack car but we have motorbike for travelling – but it is worried that until this time, we still use motorbike to the long-distance area that makes it difficult for our officers" (OD7 Phase 3)* *"OD staff now don't have budget to cover their missions to HC. They occasionally visited here once every three months and sometimes once per month or per two months" (HC5 Phase 3)*

SDG OUTCOMES ON QUALITY OF CARE AND AVAILABILITY OF SERVICES

CHANGES IN QUALITY AND HEALTH SERVICES AVAILABILITY

Table A2: Summary of key themes identified for Service Delivery Grant outcomes on quality and availability of services and additional quotes illustrating them, by respondents' phase and time of data collection

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
INCREASED AVAILABILITY OF NECESSARY EQUIPMENT, SUPPLIES AND CONSUMABLES		
SDG, and especially the FLSG fund, played a key role in the purchase of drugs, consumables, equipment, and supplies.	*"There's a consultation ward; we have thermometers, blood pressure monitors, and scales. [So, you didn't have those devices in the past?] We did but they were old" (HW27 Phase 1)* *"62028 spends on office material, cleaning and such as the shortage of medical drug" (HC13 Phase 1)* *"For example, we lack the equipment to deliver the baby. So, we buy (HW13 Phase 2 Endline)* *"Buying books, buying brooms to sweep garbage, buying soap to wash hands, buying all those other appliances" (HW24 Phase 2 Endline)*	*"Printing documents, like maternity report slips, HC1 report which we don't have, so we have to make photocopy (…) The [FLSG] budget helps the HCs in its daily operations; so we can see that the quality service has improved" (OD2 Phase 2 Midline)* *"Before, if we wanted to repair the oximeter, it would cost us around 400,000 Riels. But we did not have the money for sure (to repair it). Now we can buy a new one" (HC8 Phase 3 Midline)* *"Before, if we wanted to repair the oximeter, it would cost us around 400,000 Riels. But we did not have the money for sure (to repair it). Now we can buy a new one" (HC8 Phase 3 Midline)* *"Yes, like OPD place has blood pressure machine and thermometer" (HC9 Phase 3 Endline)*
FLSG was also used for transport. This included collecting people in situations of emergency or remote locations, referrals and gasoline for VHSGs to meet at the HC	*"Most importantly on the hygiene and the emergency" (OD5 Phase 2 Endline)* *"And another case is the emergency rescue case when we have the patients in need of emergency rescue need, we withdraw the budget 62028, send the patient" (HC7 Phase 2 Endline)*	*"We can buy fuel to transfer the patients" (HW1 Phase 2 Midline)* *"Saving materials for birth delivery in the ambulance. If the patient has problem and is needed to send to other, some place has ambulance, so we pay for the gasoline. Some place has motorbike, we help to pay for them in order to solve the problem" (HW12 Phase 3 Endline)*
FLSG was essential to compensate a limited national budget and avoid drugs' shortages	*"When there is budget, there is no challenges or what we need. We have budget to support the missing parts" (HW14 Phase 1)* *"Promote all. [FLSG] it's ok for cleaning, sanitation; lack medicine, for instance, the OD side never provided medicine sufficiently; when lack something, we can use the budget, like that, and can use a little bit like lack office equipment such as report paper, for usage, we can use that money" (HW10 Phase 1)*	*"Since we have the 62028 budget, we never run out of consumables and medicine" (HC17 Phase 2 Midline)* *"Also when the medicine was not enough for the month; we can use that budget to solve the problem" (OD2 Phase 2 Midline)* *"Using the money to develop HCs in the case of us having supplies shortage" (HW10 Phase 2 Endline)* *"For example, open the medical drug, open monthly, propose to the OD, 20 types, when arrive, we get only 10 types, don't have other 10 types, we take that budget to buy outside for us to have enough to distribute to the citizen on time, enough. So, we take that budget to buy such as paracetamol, such as the stomach drug, such as the antibiotic drug" (HW4 Phase 3 Endline)*
IMPROVED USE AND FUNCTIONALITY OF AVAILABLE INFRASTRUCTURE		
SDG, especially FLSG, was used to repair and improve the infrastructure of HCs. Funds helped securing access to water, electricity, sanitation, transport, and adequate wards	*"In that expense, it includes the expense on the electricity, water, car gasoline, and the budget for the mission" (OD6 Phase 2 Endline)* *"Constructing toilets, pipes and repairing clogged toilet. We repair the water tank. We repair the top water tank" (HC11 Phase 1)*	*"Before, my buildings did not have water or well. There was shortage. It had not had the budget, there would be no well" (HW7 Phase 2 Endline)* *"Connect the clean water system into the HC to have clean water to use" (HW4 Phase 3 Endline)* *"That money we take it to spend on the process of the Center such as on the tools of equipment, medicine, the equipment in office and clean and repairing for Incinerator" (HC8 Phase 3 Endline)* *"After a meeting, we brought in more patient beds to health center" (HC1 Phase 3 Endline)*
Improvements often focused on sanitation infrastructure, improved hygiene standards and waste disposal	*"The surrounding is cleaner than before because the cleaning staff cleans twice per day" (HW10 Phase 1)* *"Currently, we are repairing the toilet" (HW23 Phase 1)* *"We completed the infrastructure that we lack, also for the hygiene, we make more effort" (HC3 Phase 2 Endline)*	*"In the last 6 months, there has been a lot of changes taking place. In 2016, when we went to the HCs, they were not very clean, not well organized, but after the availability of 62028 budget, the HCs functions well" (OD5 Phase 2 Midline)* *"In the past, we asked them to have the rubbish bins and there were no rubbish bins, but now they prepare by the color and there are basins and the restrooms, the cleanliness and appearance is different" (OD4 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
SDG funds were also used to improve waste disposal by sorting and destroying waste adequately. Respondents reported paying for infrastructure (i.e. incinerators) and storage goods (e.g. sharp boxes, bins)	*"We have container; we keep; we didn't gather in pile and burned as before" (HC11 Phase 1)* *"The division of the garbage bin. For medical waste in the past 6 months, when the safe box is full, they give it to OD to destroy" (HW13 Phase 2 Endline)* *"I see many improvements regarding garden and infrastructure like garbage storage at the backyard" (HW21 Phase 2 Endline)*	*"That money we take it to spend on the process of the Center such as on the tools of equipment, medicine, the equipment in office and clean and repairing for Incinerator" (HC8 Phase 3 Endline)* *"In the previous 6 months, we see that there much change: form of keeping waste; it has 6 or 7 recycle bins in its order- yes, it has prepared, seeing that it's much better. And for waste disposal such as how to dispose the infectious waste; how to dispose the un-infectious waste; how to dispose the solid waste, we have much updated" (OD7 Phase 3 Endline)*
Additional infrastructure included roof, floors, walls and gardens. These aimed to limit the effect of rain and floods and create a more inviting space to attract customers	*"Strictly speaking, the HC area is clean too, we got the money to rent people to spray the grass clean" (HW9 Phase 2 Endline)* *"Initially, at our HC, when the client came and saw shortage. For instance, when they came, they had the service but the sink behind wasn't clean enough. Not enough soap for washing hand and it hadn't hand towel or hand brush in the past. Later, after we obtained the budget, we have those things" (HC4 Phase 1)*	*"There are many changes and much improvement, starting with improvement of surrounding areas, aesthetic of the HC" (HC9 Phase 3 Midline)* *"There are changes to the facilities, make this HC rather clean, designing even the garden, having the better garbage bin, a bathroom with a clean toilet, something like that" (OD3 Phase 3 Endline)* *"Putting the tiles, making concrete roof, tiles. Before it was old center, it doesn't have… it…it…it had low ground, so we put the floor tiles to make it higher as now" (HW3 Phase 3 Endline)* *"Before it was not really clean, before we had the forest, but now there is not, we cut all the grass" (HW8 Phase 3 Endline)* *"The HC repair bathroom (…), buying paint for painting the building, and change infrastructure" (HW2 Phase 3 Endline)* *"Improving and renovating infrastructure of health facility and its surrounding, including land filling, accessible road, concrete pavement, garden and entrance and wall of the facility" (OD3 Phase 3 Midline)*
IMPROVED FINANCIAL AUTONOMY		
HCs received and managed SDG funds directly. SDG provided HCs with autonomy and the ability to use funds faster than before.	*"I can say good. As we have that budget in our hand, we are easier. When there's shortage, it is easy to spend as it is in our hand" (HW5 Phase 2 Endline)*	*"We do not need to make a request and wait for the budget from OD like before" (HC2 Phase 3 Endline)* *"No need to request to OD and all kinds that we are allowed to spend. We can withdraw the budget immediately. The budget is in our control, so it is good" (HC2 Phase 3 Endline)* *"Related to the receiving of the budget 62028, the OD doesn't know because they directly transfer to the HC. For every expense, it is not related to the OD. OD can't order to spend on this or on that, no" (OD 3 Phase 3 Endline)*
These made them more flexible and responsive to their specific needs. It also improved their ability to respond to emergencies	*"During the flood, we used up a lot of medicine because we went to the villages to provide medicine and treat the affected people. So, this we ran out of medicine, but we were able to buy more" (HW8 Phase 3 Midline)* *"When it is emergency or it is necessary that we need to something, we can withdraw the money quickly. For example, when we need to transfer the patient for emergency, and the ambulance is not working, we have to use the money to fix it quickly" (HC1 Phase 3 Midline)*	*"These months, our center will made request to upper level to put beds for treatment that we never had before. We just had it when there was widespread of dengue fever in these months. That is why we decided to allow patient to stay this facility. These are what have changed" (HW22 Phase 3 Endline)* *"Yes, when it needs something, HC Chief will sign to spend immediately to buy. Yes, hygiene material- detergent – if we think it needs spending, buying it as possible" (OD7 Phase 3 Endline)*
IMPROVED MONITORING AND SUPERVISION		
The frequency of supervision was variable between respondents, with some in Phase 3 reporting that the frequency in their HCs was irregular	*"There are changes. As at OD, we have regular work, always have work, when the assigned date come, we must do" (OD2 Phase 1)*	*"One supervision per month, sometimes, once in two months" (HC2 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Assessments were generally perceived as "*accurate and fair*" and praised for their formative nature.	*"When they carried out outreach to make the assessment, they were accurate; they didn't bloat us; they didn't take bribe with us; we were to receive what; they noted it; accordingly, (…) they review our ability; how much we can answer, they would take it" (HW16 Phase 1)* *"It is accurate because it is basically a lucky draw, those who get selected will perform" (HW23 Phase 1)*	
Assessments were perceived to be key to learn and improve, and informed OD's coaching	*"OD is also good. They teach us a lot, and he also comes to supervise often" (HW10 Phase 1)* *"After they carried out outreach to assess, they also advised us; to clean the place of center environment; to be friendly with the patient {I: Yes, yes} they advised us a lot {I: Yes} So, changed accordingly" (HW16 Phase 1)* *"Strictly speaking, it helps us aware of the shortages. What we lack, about our weakness and our strength" (HW9 Phase 2 Endline)* *"Sometime, there is some problem. We are difficult too that they are upset when we give them low score. Especially, some centers have complaints such as why don't we give them score because this point they can answer, thus so there is a complaint. But, the OD, mean that, previously it had voice records. To avoid especially, the rescue of the baby, most of them argued that they did but when we had a feedback meeting, we told them the score for instance, and argued and discussed; we show them the evidence. Like the case of the management of the Director, they have the meeting documents like that but, in the tool, now there are 3 points or 4 points for example and if any points are missed, there is no score. When we show those to them like that, they understood. Later, they stop complaining" (OD2 Phase 1)* *"Before, having a meeting this much, they would give the score. But, now, they look at the meaning within that. They would check the messages that were talked about during the meeting like what are they? Last month, just glanced and saw, then they gave the score. To say, it is stricter than before" (HC3 Phase 2 Endline)*	*"No matter, if say, after he visited, then he summed up, then He gives feedback on us. For what and which points we lack, he told to improve" (HW1 Phase 3 Endline)* *"I think that assessment is good, when they already evaluated, we can know about our ability in providing service. If… example… if we got low score from assessment… we need to continue improvement to provide good service. Provide good service to our people because we think that sometimes we think we've already provided good service, but when they evaluated us, think it's low, so everything… what points… that got bad evaluation, we need to make correction" (HW3 Phase 3 Endline)*
IMPROVED MANAGERIAL CAPACITY		
SDG funds, roles and processes increased the communication and collaboration within the HC and with ODs	*"We need to discuss, to meet, for example any staffs want, buy the material to put, example the baby delivery section needs the doppler, the nurse will do the proposal (...) all staffs participate to discuss to make our center functions" (HC7 Phase 2 Endline)*	*"We hold a meeting every week on Friday to discuss about what we need to purchase and what problems we have" (HW16 Phase 2 Midline)* *"For the 62028, it is the same; if we want to spend, we call the members for a meeting, identify what we need for each unit, but it must be within the limit of what is allowed for the expenditure" (OD5 Phase 2 Midline)* *"When there is a problem, we hold a meeting immediately (…) Now, we hold meeting for important matter" (HC1 Phase 3 Endline)* *"When we need to decide on something, we always have a staff meeting on what we can do and cannot do" (HC9 Phase 3 Endline)*
With more financial autonomy, HCs planned their spending in advance more often, adapting to their circumstances and anticipating issues such as emergencies	*"Previously, we did not have this budget and only used national budget which was small. And now we have a larger 62028 budget for purchasing more materials and medicines. Previously, we could buy, for example, 500 pills. When we have this budget, we buy up to 1000 to 2000 pills as medical supply" (HC3 Phase 1 Endline)*	*"Sometimes they keep it as preparation in the case - if it lacks something, we'll buy it immediately" (OD7 Phase 3 Endline)* *"Yes, the transparency, fairness, at the point that receiving that money, we had our team meeting, 7, 8 people to know how much is our income, so we need to spend on what, so we tell during the meeting to spend on what, and determine which one is the priority to spend first, something that is not prioritize, we don't spend yet" (HW4 Phase 3 Endline)*
HCs and the ODs also reported better communication between themselves, as the latter took a more active role in providing guidance, coaching and supervision. NQEMT and assessments created clear objectives that were common to both.	*"The communication goes smoothly. They (HCs and ODs) provide for consultation if there are problems" (HW10 Phase 1)* *"Usually we have the budget, so we have new ideas and creativity to try and make the unit better" (OD1 Phase 1)*	*"OD just come to support us on the spending, packaging, organizing, and advising on what to spend. They come to visit" (HW4 Phase 3 Endline)* *"If there are any issues, we send through the telegram" (HW8 Phase 3 Endline)* *"When coming for the monthly meeting, the OD reports, they tell us to do this do that, and in a month, there's one staff meeting to assign duties for everyone to be responsible for" (HW 19 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Requiring documentation, autonomy and assessments contributed to informed decision-making in the HCs and ODs	*"Talking related to the management, talking about the documents. For example, before the assessment, their way of keeping the document was bot organized, hard to find. After having that budget, it makes the management tasks become organized. When it is organized, the process in the facility is also good" (OD Phase 2 Endline)*	*"I wanted to have this assessment for my HC. I want the OD and PHD to come and do the assessment because I just became the HC Chief, so if there is assessment done, I would know what area to improve" (HC5 Phase 3 Midline)*
Assessments supported ODs role; providing measurable objectives to guide supervision and key information on performance to coach and manage HCs	*"We can introduce about the missing points in their work or in their service providing. What they missed; we can give them feedback immediately at that time. So, can change continuously later" (OD1 Phase 1)* *"It seems like having a group of people help us to manage" (OD6 Phase 2 Endline)*	
IMPROVED PERCEPTIONS OF QUALITY OF CARE AND COMPETENCIES BY HWS		
Checklists, assessments and OD's feedback provided HCs with a roadmap on what needed to be done to improve quality	*"Each staff need to follow the step, following that regularly every month, practice right on the patients" (HC7 Phase 2 Endline)* *"If we remember the checklist clearly, we will have confidence in ourselves and reduce the risk for clients" (HW1 Phase 2 Endline)*	*"Good result of assessment is that my OD is good, successfully achieved everything that they have assessed. And [the results] of assessment, will help us make adjustment in our place to improve better. If we are successful with good results, then we can get the money" (OD5 Phase 2 Midline)*
OD's feedback and coaching were key to HC Chiefs' and HWs' understanding how to improve quality	*"We hold meeting and OD suggest having coaching course about promoting, educating or we can request something we want. For example, when we have gap in pregnancy check, we request coaching course for pregnancy check in order to develop this capability. We may forget, so this can be a review such as child delivery" (HC3 Phase 1)* *"Before the assessment, we go to train on anything that was failed during the previous assessment" (OD5 Phase 2 Endline)*	*"They came to before they conduct assessment and they gave us document to review. For example, review about high blood pressure, dengue fever, or other illness. On the month that they conducted assessment, they allowed us to review first before they started asking us question" (HW9 Phase 2 Endline)* *"They share new experience to us. If we are in doubts, we can ask them, they will help us to solve the problems. They can help us solve any problems" (HW12 Phase 3 Endline)*
Objectives, assessments and guidance led to HWs working harder to improve	*"Before we didn't know the rate must have done as this rate; we always did as we once did before. After the assessment, advice improved gradually because our service was better" (HC4 Phase 1)* *"Yes, much change like the staff knows more when saying with like that, for the lesson step, know fairly much (…) feel that as we did the practicum in this center" (HW11 Phase 1)* *"Because of the assessment, many government officials get knowledge, for example, the cause of disease or infection. Before, our staff knowledge was limited. When we start the assessment and receive guidance, they (government officials) understand about the disease cause or the infection because of the knowledge of our staff" (OD5 Phase 2 Endline)*	
HWs also cared more about hygiene, waste disposal and availability of drugs and consumables and equipment	*"Yes, before having a plan, they threw the waste in a disorderly way like normal waste; the infected waste for instance, they just throw it into the bins, without knowing which one is for [each type of waste]. When we go to catch them and decrease their score we advise them, we see that they dispose the waste better" (OD2 Phase 1)* *"Yes, it's good [quality of services], Nakkru. Like we have budget package such as referring patients, we have that budget, we take that budget for spending on patient, refer patient, spending on poor people" (HW5 Phase 2 Endline)* *"We have a nice hygienic building. Before, it's speechless as we didn't even know where the soap, toilet, tape water or sink were. At that time, we don't know what to do with the money they gave us. We didn't have sink, neither sterile materials, nothing" (HC10 Phase 2 Endline)*	*"There are a lot of changes on hygiene. Before, we rarely had weekly meeting for clean-up. We did, but cleaning alone was not enough, so staff start to practice handcraft, we start pick up garbage, plastics around facility in every Friday. By doing this, it makes changes more than before" (HW22 Phase 3 Endline)*
IMPROVED ATTITUDE AND BEHAVIOR TOWARDS PATIENTS		
HWs switched from directly giving drugs or skipping procedures to conducting consultation and checks	*"Before, when having no guidance from the OD, sometimes they, we note their name, enter the room OPD, ask them a little, we give the medical drug (…) Now, when they enter, we measure their temperature, taking the life sign and consult with them and give the medical drug" (HW7 Phase 1)* *"It has changed a lot. Before health staff only give medicine, but now health staff check the everyway like blood pressure, pulse and so on" (HW21 Phase 2 Endline)* *"Yes, by changes, I mean to how we, the staffs, have to do checkup on them and then measure their weight and height. For kids, we would just measure their height and give them vaccination" (HW24 Phase 2 Endline)*	*"There is also change in term of providing care, in short, there is gradual change. In the past, we were not cautious when doing medical check like today. In recent day, we have meeting related to technical issue, we have to examine all coming patients, not just take note without examination. Sometimes, some health staffs are lazy, they just asked patients what's wrong with you? If answer headache, then they will give medicine. Now we carefully ask about illness before giving medicine and advise patients return if not get better" (HC1 Phase 3 Endline)* *"Previously, we did briefly. We didn't ask about health issue. They have never had chronic disease- we didn't say about that, but now, it is changed we must say [about that] all to make it remember well and say well without thinking" (HW1 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
HW reported being more communicative with users, explaining them about disease, the care they receive and their treatment. Also spending more time teaching mothers about pregnancy and childcare	*"Like we did a pregnancy checkup of a patient, we say like this and that; we provide consultancy on the safe place they should deliver the baby. Not strictly mean coming to only HC but other places that you think are safe or provide safety to you and your child so, prepare to pack stuffs and other things, like that, they said it isn't as before" (HW10 Phase 1)* *"Before, we educate the women, tell the women based on flip book, rush to finish fast. When there is the assessment, it changes our staffs to strengthen our women (…) Strengthen the education, tell about the content of lesson for the women to remember. It means she talks to the women in longer duration" (HC3 Phase 2 Endline)* *"The way for them to use the medicines is needed to tell them clearly" (HW10 Phase 2 Endline)*	*"I can say that it is the good assessment to the staff that they need to be more careful and study hard on book look there look that, give treatment, they said before they rarely explain to the patience and now they explain" (HC5 Phase 3 Endline)*
HWs were reportedly more "respectful" and "friendly" towards users.	*"When patients come, we welcome them, are friendly, talk to them; and we don't discriminate against them. If they do not understand, we give them special attention. In this area, there are less people (users) who can speak Khmer for instance, a relative of our staff's wife who was admitted here did not know Khmer much and he was given special attention. We explained more and advised him so he could understand" (HW16 Phase 1)* *"They welcome the patients. Before, they don't really ask the patients when they come, not so welcome them" (OD5 Phase 2 Endline)* *"Before, they are not friendly. Now, they are soft toward the patients" (HC3 Phase 2 Endline)* *"The staff are not, err…, use the strong word like before. Know how to prepare their behavior. I think that this HC during this year, having changes" (HW2 Phase 2 Endline)*	*"We seem to speak strongly, loudly. So, now, our mind and body become friendly, speak softly, ask them to participate in using the service, make them listen, make them like us" (HW4 Phase 3 Endline)*
INCREASED MOTIVATION AND MORALE OF HWS		
Respondents in Phase 3 were often aware of the PBG incentives and expressed their support for them.		*"We seem to speak strongly, loudly. So, now, our mind and body become friendly, speak softly, ask them to participate in using the service, make them listen, make them like us" (HW4 Phase 3 Endline)*
Respondents in all three phases commonly mentioned non-financial incentives as a source of motivation	*"When we earn a lot of income, it increases accordingly" (HC12 Phase 1)* *"The staffs change. They make more effort, change to the better than before. They work with trust. They make the effort by themselves" (HC3 Phase 2 Endline)*	*"Because we work 24 hours, the user fees also increase. So, the motivation also increases a little bit likewise according to the staff condition" (OD7 Phase 3 Endline)* *"Now, there is the encouragement through increasing the salary, increase the salary rate" (OD 3 Phase 3 Endline)* *"Yes. we have incentive, we have a meeting at the end of month to share user fee money and how much we earned. In the past, we did not often hold meeting to clearly address the expense and income" (HC1 Phase 3 Endline)*
Respondents in all three phases commonly mentioned other sources of motivation in their jobs that were not related to their income. For example, the combination of clear rules, expectations, feedback, and enforcement around quality were mentioned by HWs	*"That assessment makes our HC a lot of changes. First, it's about the knowledge of the staffs. Second, related to the service providing, asking the patients' phone number to ask them related to our service providing" (HW11 Phase 1)* *"It changes regarding to attitude toward users, it is not normal. We have staff meeting in order to avoid it happen again. Like a service provider in referral hospital, she had problem with person who use delivery service and she slap that person because of bad attitude so citizen did not respect. There is complaint too. Then the ministry published a letter" (HW14 Phase 1)*	*"Before, when poor people came, sometimes, we listened to staff's words, and they had no morality. They said harsh things and blamed clients. I tried to correct them not to blame clients, but we must motivate them because they lack knowledge. If we troubled them, we also did not know anything. Now, ministry urges us to pay more attention. Health staff who have no morality would be removed or fired" (HC9 Phase 3 Endline)*
Some managers and HWs emphasized the importance and potential effects of users' perspectives expressed publicly or through existing feedback channels	*"There are many factors, like even if there is no project, each service provider must make efforts to be competitive because if we do something unusual, it will be spread on the social media which has many effects" (OD2 Phase 1)*	

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Respondents identified scores as a measure of one's ability and hard work and thus represented one's image among their peers and supervisors. They were keen on doing a good job to avoid "embarrassment".	*"Having the PBG, so everyone makes effort, right away, afraid of being wrong, is the change for them also in a big way, even the money is little, because they afraid that work gets little score" (HC12 Phase 1)* *"Yes, makes us improved. Like reminding, when he came and finished the assessment, In the meeting, he raises a point, advising that, 'you, must change, must do better than that and as for the delivery field, we must do it to be better than that.' Thus, we feel that when they come to evaluate in the quarter, we try harder" (HW10 Phase 1)* *"We get more money when we work hard but get less when we work less. We also get blamed" (HC10 Phase 2 Endline)* *"Being used to motivate staff, Nakru. They shared; for example, after they interviewed, who got what percentages" (HW9 Phase 2 Endline)* *"Not to compete to get the money, want to have the reputation" (HC7 Phase 2 Endline)*	*"For that it generally has the competition as football play – when failing we must be embarrassed. So, in order to avoid the issue, what should they do? We already advised and told in the meeting – it is that the assessment is the competition" (OD7 Phase 3 Endline)*
Improvements in infrastructure and access to equipment, supplies and consumables made them feel values and perceive their workplace more positively	*"It (FLSG) helps encourage the HC and hospital to work harder because it helps us buy what we need at the HC" (HW1 Phase 2 Endline)* *"I can see that by making the building slightly better, staff feel more clear headed when working" (HW24 Phase 2 Endline)*	*"We did not follow the national guideline before. We did not follow every step. After having this budget [FLSG], we follow the national guideline because of this assessment" (HC2 Phase 3 Endline)* *"Yes, we are satisfied with the work because we have the money to spend monthly, nothing to be difficult. If we don't have money, can't earn the money to spend, stuck, when they send for spending every month, we are satisfied with the work. Our work is smooth every month" (HW4 Phase 3 Endline)* *"Satisfied because when they help us, our facility is moving on" (HW20 Phase 3 Endline)*
Other HWs highlighted their sense of duty	*"[The assessment] is new and it's a bit difficult but we need to adapt ourselves to do it, so we can do it" (HC10 Phase 2 Endline)*	*"Yes, even we do not have something to motivate, we still have a stance. We must fulfil the duty" (OD7 Phase 3 Endline)* *"For me, I am honest to each other, to the nation, and the citizen also. I give up a lot for them such as when the poor stays at his hospital, need to take 800k, I don't take it. Sometime, taking my home money to help them additionally, to make them go back to their hometown, when they don't have, we give up for them, this is the first. Second, we educate them to do, to follow what that they want anything. We educate them" (HW4 Phase 3 Endline)*
Several challenges limited the ability of HCs to improve their scores and influenced their motivation. These included staff shortages, outbreaks, high workloads, and limited ability of some staff to improve their skills.		*"We do not have standard. A standard or each HC must have 8 to 11 staffs. In fact, we do not reach the standard that there are only 4 or 5 staffs. When serving people with the 12 or 13 services in the HC, it isn't on time and it isn't enough (…) Sometimes, in some month or in some year, there are a lot of works. In some year, there is a flood or works; Our staffs are fewer; Workload is much more; Therefore, it could have the issue with working time, causing trouble with citizen" (OD7 Phase 3 Endline)* *"We don't remember much. The question is too long and we need to answer step by step" (HW1 Phase 3 Endline)*
INCREASED AVAILABILITY OF HWS AT HEALTH FACILITIES		
HCs had staff available 24 hours. HCs had staff on standby duty "24 hours on 24 hours".	*"We work punctually; we are on standby; we clean our workplace; we provide services to the patients who are admitted at night or on our day off" (HW16 Phase 1)* *"We have friendly staffs, 24-hour service, always on standby, especially how we meet them every time they come" (HW23 Phase 1)* *"There is [change] because we require them to stand by 24 hours. Especially on the holiday, must standby so that when there is client coming to get the service, they must meet. So, require them to standby all the time" (OD2 Phase 1)* *"Yes. There are always medical practitioners for 24 hours" (OD6 Phase 2 Endline)* *"When the clients come, there are staff who are on24-hour standby duty. They are on 24-hour standby duty (all the time) to provide all services including malaria and fever" (HW7 Phase 2 Endline)* *"24 hours on duty" (HC3 Phase 2 Endline)*	*"The most important one is at our place we have staff guarding 24 hours over 24 hours even on Saturday or Sunday, we have staff standby too. Like me, even Saturday or Sunday" (HW3 Phase 3 Endline)* *"So, I often attend commune and authority meeting. I often say that now, our staff do not work 24 hours. I ask all village chiefs to help broadcasting that my HC works 24 hours on 24 hours and has HWs work in the evening. Do not think that HWs only work for a while and there was no staff in the evening" (HC9 Phase 3 Endline)* *"I think that for the positive impact, it affects in majority. The today positive impact may be: The first is the 24 hours service because people could be asked" (OD7 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Longer opening hours were coupled with more punctual staff	*"Our skill has changed, that is, our skill is still ours, but we changed our behavior; for example, we came to work; not to come late" (HW16 Phase 1)* *"Changes such as respect the time, respect the working rule and time" (OD2 Phase 1)* *"When the assessment starts, there are also staffs working in the morning, and in the evening. 24 hours on duty (…) In our center, we have the habit like for example the working hour starts at 07:30 and we start working also. But some people did not even arrive at 08:00. When we start the assessment, we can see that the facility can provide the service to the client since 7:30" (OD5 Phase 2 Endline)* *"Because with that [the assessment], our staffs make more effort in working, without any gaps. Everyone will be at the center by 7:30 (…) those with clear work and clear working hours, they will receive good score. But if they come for a short time and go back, we put them as absent. For example, there are 20 working days per month, but they come for 15 days" (HC3 Phase 2 Endline)*	*"It has improved much better than before because in 2018 our HC enforced the staff to come to work at 7:30 am. And we observed that sometime the staff came to work at 7:35 or 7:40 am, when late, they have clear reason and explanation why they were late. At noon, the staff leave and returned to work at 1 pm" (HC13 Phase 2 Midline)* *"Workers used to arrive at work at 8:30. But now they arrive at 7:30 and at most 8" (HC1 Phase 3 Endline)* *"Mostly, on time and there is no complaint from the clients because we, in the assessment tool, we also have the phone number to interview the clients or for the calling in that interview, there are questions related to the working hour or the friendly reception in that, if satisfied or dissatisfied. So, we have asked Through the interview, there is much development now" (OD3 Phase 3 Endline)*
COMBINED EFFECT OF SDG OUTCOMES		
Respondents described how changes did not happen in a vacuum- several of them took place at the same time	*"Improve the HC environment. When the customers come, they will admire it and we can hear their comments. We have a meeting and find solutions to problems, and improve our center. For example, in the past, we got only six 600 to 700 customers. After the project comes, we promote it in the community. Our service functions well. We have enough equipment because of SDG project" (HC11 Phase 1)* *"Improve to have the quality of our surrounding, the environment, the courtyard, the water, the electricity. It is a big step that attracts people. they enter only the good place. Something that is not good, they don't enter, this point is important" (HC12 Phase 1)*	

CHANGES IN HC UTILIZATION

Table A3: Summary of key themes identified for Service Delivery Grant outcomes on utilization and additional quotes illustrating them, by respondents' phase and time of data collection

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
INCREASE IN UTILIZATION		
HWs and managers perceived an increase in the number of people attending their HCs in the last six months. This increase was normally concentrated in maternal and child health services.	*"A lot, more than before" (HC12 Phase 1)* *"It changes. There is the increasing of patients in our HC" (HC3 Phase 2 Endline)* *"Change, many people come to use our service (…) A lot, many people come to use our service now" (HW5 Phase 2 Endline)* *"Now, we look at the statistic. We see that the number keeps increasing" (OD6 Phase 2 Endline)* *"In the field of patient reception, the patient increases and delivery also increases. The children coming for vaccine injection also increase than before" (HW10 Phase 1)* *"In the past, there were only eight women giving birth per HC. Now, it increases 30-40 newborns in some HCs" (OD6 Phase 2)*	*"Our service is increasing in terms of both outpatient and delivery clients. The average is 20 births. Compared to 8,000 people, it is very high in percentage. Antenatal care clients also increased. About 60 to 70 people a month" (HC2 Phase 3 Midline)* *"Birth delivery and pregnancy checkup increased" (OD4 Phase 3 Endline)* *"Related to the ANC, for my HC, there are the most clients. At my center, don't know too, there are around 100 to nearly 200 pregnant women per month coming for ANC because some come from other area" (HC6 Phase 3 Endline)* *"The ANC and the delivery, there is the increasing" (HW4 Phase 3 Endline)*
FACTORS REPORTED AS CONTRIBUTING TO THE INCREASE IN THE USE OF PUBLIC SERVICES		
Increase in utilization was connected to HC changes in the last six months and financial protection schemes (i.e. HEF and NSSF), outbreaks and legislation	*"The patients increase because the patients can meet [the staff] when they come" (HC3 Phase 2 Endline)* *"Yes, they said our HC is clean, more doctors, more people working also more medicines than before" (HC10 Phase 2 Endline)* *"When they come, have all doctors working" (HW5 Phase 2 Endline)*	*"The birth delivery increases significantly because there are staff on 24-hour standby duty and these are also the contribution of the Performance-Based Grants (PBG)" (OD4 Phase 3 Endline)* *"When they come, when they come to get vaccines, they can meet us" (HW19 Phase 3 Endline)* *"Before, the process is not so good. Like the patients asked for the drug, we lack the drug to give them. Example, they are sick, and the ministry cannot provide the drug on time. So, our services are decreased" (HC3 Phase 2 Endline)* *"Concerning to the material and medical drug, if we can provide them enough of these, they will come to get my service. They will be like Oh! They can get medical drug when they come to this center. Without the drug, they will be upset thinking that this service cannot provide the drug for them" (HW13 Phase 2 Endline)*
The increase in HWs availability was the HC change most reported to contribute to increased utilization		*"First, there are staffs who are punctual. There are staffs standing by at night for delivery service. So, there are more people access service" (HW17 Phase 3 Endline)*
Respondents also highlighted the contribution of improvements in availability of drugs, infrastructure and attitude towards patients	*"[FLSG] help a lot, err, help our citizen to come. Nowadays we can see they come to use service at HC" (HW5 Phase 2 Endline)* *"There was an increasing number of clients accessing services at our HC. The clients also expressed satisfaction with our services when they talked to us" (HW13 Phase 2 Endline)* *"Firstly good, they come to the HC and admire HC that having changes than before" (HW2 Phase 2 Endline)* *"Some admires that the center looks cleaner" (HC3 Phase 2 Endline)*	*"Well, if we have enough medicine, if we have the money, the doctor looks good, more people will come" (HW17 Phase 3 Endline)* *"Change in contraception, pregnancy check, more people come, more people come to get drugs, the injection of vaccines increases" (HW19 Phase 3 Endline)* *"The medicine bought outside is not effective and reliable, so they come here to get medicine since we are much more reliable" (HW12 Phase 3 Endline)* *"It can be related to the behavior of the staff, their knowledge and technical skill in contribution to the HC" (OD4 Phase 3 Endline)* *"[Because our HC] has friEndliness and has responsibility, and respect, no discrimination, something like that, Neakrou (…) patients are aware of the advantages of a center like that, because the staff has expertise" (HW19 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Financial protection schemes were also perceived as central to increase utilization.	*"And at that time [when receiving financial support with IDPoor], our service, the women, first, the women come to ANC regularly before delivery the baby, take care after delivery, bring the baby for vaccination regularly" (HC7 Phase 2 Endline)* *"Yes, as they have equity funds, they come to use the service" (HW5 Phase 2 Endline)*	*"Have more than before, increase clients who have cards" (HC2 Phase 3 Endline)* *"They (HEF beneficiaries) came a lot also. This month seems a lot" (HW13 Phase 3 Endline)* *"In the past 6 months, there was a program which is about HEF, which is providing budget to women. Pregnant women who have IDPoor card and come to access service here, they receive money back. For pregnant women who come for antenatal care, give birth, they receive the budget from the government when they go back" (HW20 Phase 3 Endline)* *"Since June, there is the budget for the poor women, the pregnant women. I see that such cases increase" (OD3 Phase 3 Endline)*
Outreach services including education to increase utilization were also described. There were some references to using additional resources to conduct outreach, however, there was limited information how much it changed since introducing SDG.	*"Overall, in this half year, we carried outreach to provide services in the villages, just when our material is enough, carrying out outreach" (HC11 Phase 1)* *"Now, they seem have much change; there is dissemination meeting with SDG field, the management committee. We have monthly meeting telling staff to tell the villagers that our service has been improved and asked them to come. The village or commune chief also promote the HC to the villager" (HW10 Phase 1)* *"I, every day, have the publicity through village health support team, committee and when there is a meeting, I take time to join with them to drive them through the authorities. When holding the meeting, there was always the authorities attended in and besides this, we hold a meeting with the committee, village health support team so that they drive the cardholder to utilize it" (HC4 Phase 1)*	*"Much better than before. People come to get our services more than before, because when HC staff go to [the village] for vaccination, they explain [to the villagers] to come and get services at the HC" (HW3 Phase 3 Midline)* *"We conducted outreach to educate the people in the village, and now they know, so they come to use the service a lot. Like birth spacing in the past they go to the private clinic, now they come to the HC" (HW10 Phase 3 Midline)* *"There are many activities especially focus on the health education. We see they go to nearly all villages. Why conducted outreach? Because it is due to the dengue fever. So, we go to educate, education spread, frequently. So, the main activity at the present in health education through outreach activities" (OD3 Phase 3 Endline)*
CHALLENGES TO INCREASED UTILIZATION OF HCS		
Some HCs experienced irregular ups and downs in utilization, decreased attendance in one service or more services or no change		*"There is decrease in utilization, before we had 30 deliveries per month but now there are only 10 deliveries, and some months it is even below 10 cases. However, there is an increase in ANC cases to more than 100 per month" (HW15 Phase 2 Midline)* *"Don't have any change it means for whom come to use that service before as normal" (HC5 Phase 3 Endline)*
Distance, weather, and transportation limited utilization of some HCs	*"Sometime, in some month, many patients came; sometimes, few patients came, for instance, this month; They didn't come much because it rained and the road was difficult; we, our area, for travelling means, some people also don't have" (HW16 Phase 1)*	*"Based on people who came here, they said our HC is good as it is near their houses so is easy and free (…) some villages that we cover here do not come to seek care from us. It is a problem because their areas are remote, so there is small amount of people who come to receive service from us" (HC9 Phase 3 Endline)*
Communities perceptions of quality of care and safety in different facilities made some women prioritize hospitals for delivery and for serious conditions. HEF and NSSF benefits enabled this decision.	*"Sometimes, they don't trust us. For serious disease, we need to send them to the province. They don't trust us" (HW7 Phase 1)*	*"But, talking about baby delivery, we lose [users] to other facilities (hospitals)" (HC6 Phase 3 Endline)*
Some community members preferred to use private providers	*"It has happened over the time, based on what I observe, they do have that card, don't charge coming to the HC, why they go outside, I am thinking of the reason, the private health care. Because I think it is fast, the private health care, because [it's the same as if] they order to buy something at the market, it is easy" (HC13 Phase 1)*	*"Delivery service seems to be decreased more and more. Maybe it is because there are more private clinics for delivery in 2018 available in [Name] district town that women prefer to go there more. In the past our HC have about 40 delivery cases per month but now it is less" (HC5 Phase 3 Midline)*

FINANCIAL PROTECTION

Table A4: Summary of key themes identified for financial protection in Supply-side respondents, and additional quotes illustrating them, by respondents' phase

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 3 (ENDLINE)
HEF'S ROLE IN INCREASING THE USE OF PUBLIC HEALTH FACILITIES AND SERVICES		
Respondents reported an increase in HEF beneficiaries coming to use HCs. HEF benefits were seen as partially responsible for the increase.	*"I have just conducted monitoring to review the mid-year achievement by comparing to previous year achievements. With regard to OPD, it was not found an increase, but it declined. Why did it decrease? In fact, there should be an increase number within this month based on my observation in community, in contrast, the private facilities were found a lot increase" (OD4 Phase 3)* *"More, more than before" (HW19 Phase 1)* *"It seems like now is better. Before, in the beginning, they did not care about the card" (OD6 Phase 2)* *"They come; receive service fees" (HC4 Phase 1)* *"The health benefit for the those with HEF card when they bring the card with, we provide the drug accordingly" (HW6 Phase 1)* *"Don't need to spend money, free of charge" (HW5 Phase 2)*	*"Yes, there is change on the point that the HEF, we don't really have, only little, now, even more different, come even more" (HW5 Phase 3)* *"They don't pay for the services because they have the HEF cards" (OD4 Phase 3)* *"When they come, they have IDPoor card, and HC doesn't demand them fees, but they have HEF card. We serve them free" (OD7 Phase 3)*
Free transportation to refer patients to hospitals and covering expenses of patients travelling to the HC or hospital	*"For birth giving woman, they have transport budget" (HC4 Phase 1)* *"That one, we provide for the women that delivery the baby there because we have only the delivery, that's why we provide only the travel money" (HW6 Phase 1)* *"We give the travel money to the women, it is 40000!" (HC7 Phase 2)* *"Do they get transportation allowance? R: No" (HW21 Phase 2)*	*"Spending for transportation. And one month and half they get 40000 for transportation" (HC5 Phase 3)* *"(Int): For transportation allowance, do we have? R: We don't have" (HC1 Phase 3)* *"Spending for transportation yes! And one month and half they get 40000 for transportation" (HC5 Phase 3)*
HWs and HC Chiefs were also aware about NSSF and HEF cash incentives received women visiting health services to use key maternal and child health services.	*"We support financially. For delivery of a baby, [a mother] receives the money until the end of two years; she receives 760K more" (HC7 Phase 2)*	*"Yes, for pregnant women, they give 4 times, for give birth once get 40000,40000 four times when give a birth they give 200000 Riel after give birth they give only 40000 come once and give 10 times more" (HC8 Phase 3)* *"For IDPoor cardholders, they encourage them to come for pregnancy checkup. They give this budget as 40K and immunization for 40K for cardholders. For cardholders, it is easy to spend, easy to take, just finish the interview, type the name, give Wing card to withdraw the money on one own. Starting from the first ANC until due date, if they came correctly as the appointments with health staff, they would get money as much as 760K" (HC2 Phase 3)* *"Related to the HEF card, now everyone wants a lot after he knows about the benefit, they sponsor the pregnant women. The pregnant women get 40 thousand each time coming to have checkup, and the kid for vaccination, when coming, gets 40 thousand also" (HC6 Phase 3)* *"That is to say in a word from the above, first ANC, she gets 40000 riels, second time is 40000 riels, and third time until due date. After delivery, she gets 20 0000 riels. Later, she gets 40000 riels until her child is under 18 months old, simply, 2 years old. Hence, even after the pregnancy checkup period is over, she can bring her child for immunization to get allowance. One more benefit is poor mother who has HEF and works in factory would receive budget package from NSSF card as 40 0000 riels from government and 20 0000 riels from HEF if she was to deliver her baby in here" (HC9 Phase 3)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 3 (ENDLINE)
CHALLENGES BECOMING AN HEF BENEFICIARY		
Respondents across all types and phases highlighted issues identifying the correct families as IDPoor, with poor families being left out and others with more means being accepted.	*"Just say that, want to say, the issuing the card for the citizen to be fair, don't let the rich have the IDPoor card, the real poor don't have the IDPoor card" (HC7 Phase 2)*	*"So, for the card, some are poor and don't have the card. Some are rich but have card. It is difficult. It is related to the feeling of the service receivers" (OD3 Phase 3)* *"It is difficult due to late issuance of IDPoor card. In fact, they are poor and they don't have IDPoor card. They have already been passed the interview but they have not yet been given the card" (HC5 Phase 3)* *"Why I said it is not clearer because the village has their lineage, if someone still has the house, motorbike, she/he still gets the ID, and those who do not have even the house to stay do not get the ID, for this point I see it by my eyes before" (HW8 Phase 3)* *"In some villages, there are real poor people, but they are not given. People who are in average livelihood are given" (HW17 Phase 3)*
HWs and HC Chiefs assisted people who could not benefit from HEF (e.g. not having an IDPoor card or a certification from their Chief) but the HC considered in need by providing healthcare without asking for payment	*"Having the card but do not bring it, we need to make the exception case for them because they have the card, they are poor, not money" (HW10 Phase 2)*	*"Having the card but do not bring it, we need to make the exception case for them because they have the card, they are poor, not money" (HW10 Phase 2)* *"Some people do not have cards, they are poor but do not have cards. It has a case of problem like that, but even if they do not have cards, we look at the actual situation. We make an exception for them, not ask them to pay, too" (HC2 Phase 3)* *"We even enter the child in the family who does not register the child's name in the card. It requires some documents like copied ID card, copied Family Record Book, and child's birth certificate. Sometimes, they do not bring it, so it is hard for us to register the child's name (...) So, we lost, but we do not want to lose, but it is difficult because we ask them to bring needed documents, but they do not bring it to us" (HC9 Phase 3)* *"We ask their neighbors. They can't pay for the service. I don't mind them" (HW1 Phase 3)*
KNOWLEDGE OF HEF BENEFITS		
IDI respondents believed that IDPoor recipients and poor households that would be able to benefit from HEF were not always aware of the benefits they could access.		*"They don't know where they should use the cards, so we give them instruction. When they arrive at hospital there, the hospital gives them foods allowance. Only know only after we instruct them" (HC1 Phase 3)* *"Some people have the card, but they did not know that using the card, they don't have to pay for anything" (HW3 Phase 3)* *"Some patients were told to get some money when they visited for hospitalization – they didn't understand. Some of them only visited for budget from both health check-up fee and transport allowances from facility, for instance" (OD7 Phase 3)*
Respondents also believed that HC users did not always know how to access HEF benefits when they came to the facility. Patients not bringing their card when coming for care were a major issue.	*"Sometimes, they don't bring the IDPoors card with. They rely on that they have the IDPoor card, they come and want to have the consultation with pay exemption without bringing the IDPoor card with" (HW11 Phase 1)* *"They take the card with them only if they go to hospital and get treatment for a longer period" (HW27 Phase 1)*	*"It is difficult because sometimes they do not bring the cards. When they come, they tell us right away that I have the IDPoor, they said like this. And I ask, auntie/uncle, where is the IDPoor and they told 'have you checked this book' and I said I do not know how to check this book, auntie/uncle. So, it is difficult like that, we ask them to go and get it, before ask them to go and get it, we ask them the reasons, they said that they live a bit far, and if they live further, we tell right away that please wait for a bit, I will check it, yeah so it is difficult; however, for some people when they arrive, they just hand to us right away, they have it for us right away. They thought they have used it so it already has in the system" (HW8 Phase 3)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES - PHASE 3 (ENDLINE)
Some patients did not know they ahd to bring their card while others did not bring their cards despite being aware it is required. These were often described as feeling "lazy to bring the card". However, the reasons for not bringing the card were not clear	*"Before, they don't come to take. Sometimes, they said 'forget'. Sometimes, they said 'lazy to carry with'. They prefer to pay the money" (HW7 Phase 1)* *"They said they are lazy to bring the card along" (HW9 Phase 2)*	*"When I show the HEF card, will the physician accept it, they sometimes hesitate. Although they have the HEF card - but expired –, they daren't come. Sometimes, they took the HEF card a long, but they daren't show, they hesitate. - But we advised them that however, the HEF card was expired or not, if they had it, they can utilize temporarily" (OD7 Phase 3)*
HEF EDUCATION FOR COMMUNITY		
HCs described taking an active role in educating their communities. This education took place at the HC and through outreach in the community.	*"I thought that utilization of IDPoor card has changed. In the past, clients who did not carry the IDPoor card, they were then advised to always bring it if they had" (HW19 Phase 1)*	*"This, we have already promoted, promote and educate them at HC, during outreach activity, we also promote" (HC2 Phase 3)*
As part of their outreach, HCs educated people while providing services. They also educated and collaborated with communes to spread the word	*"Since we provide the education about the service, they come to get the service" (OD5 Phase 2)* *"In our opinion, we should have meeting in commune. Example, this health facility needs to go to that village. We have to switch commune chief to attend meeting in that commune in order to expose about using HEF card clearly" (HW14 Phase 1)* *"When we have a communal meeting, ask the head of village to publish" (HC7 Phase 2)*	*"When there is little activity, we give vaccine, educate, and promote to cardholders to use the care service at HC because patients who hold the cars are exempted from paying" (HC1 Phase 3)* *"The authority helps to promote to the citizen to know, for them to understand, so they participate in using the card in the HC. So, when the authority, they have the meeting, so they can hear. The authority, they meet, they raise. We also educate monthly, daily, and weekly at our HC. In our HC, there is the education once a week for the citizen" (HW4 Phase 3)* *"We publicize through the local village authorities, during the communal meeting or committee meeting or if financially capable, through the radio in the provinces, like that, for the poor or the pregnant women. Sometime, some people don't know about the benefits like the poor pregnant women can receive up to 760 thousand since the pregnancy until the child born is under 2 years old" (OD3 Phase 3)* *"I think there are the HC Management Committee meetings to help the dissemination" (OD4 Phase 3)*
A minority of HWs may not be fully aware of HEF benefits and may turn down patients.	*"Sometimes, they carry with when coming but our staffs don't pay attention, or don't really know to charge people. I have the card, have the card so must pay me back. {Q: Pay back, Lokrou?} payback about 4000 riels, that need to payback 40 km away, driving" (HC12 Phase 1)* *"If for us staying here, I accept only in [the district of the HC]. If outside the district, at my place, they don't have any book to check [other districts] and the above here, very far, don't know" (HW7 Phase 2)*	
HWs believed community members sometimes believed they were discriminated because they were HEF beneficiaries.	*"They are ok, but they feel upset because of having that card. They think that when they go to see the physician, they don't get much attention from the physicians" (HW23 Phase 1)* *"No, now they are not reluctant. When they come, they will give us the card" (HW6 Phase 2)* *"Respect the same, and equal. People directly pay and people having cards. Is the same respect" (HW2 Phase 2)*	*"When they came like that, we are friendly to them. We don't wait each other turn, they came to get service first, got first" (HW13 Phase 3)*
CHALLENGES FACED BY HCS PROVIDING HEF BENEFITS		
Some HWs highlighted challenges of working without Patient Management and Registration System. These included lack of information from people coming from outside the catchment area Some HEF beneficiaries were used to send someone to the HC to collect medicines when they felt unwell. HWs had to refuse and require checking them first, which led to user's discontent	*"If have, it involves in the example that taking the IDPoor card to receive the service, sometime, it was outside our coverage area, like that. So, we can't provide the service to them also because they don't have the name in the list. Sometime, the paper was expired, we, We also can't receive for instance, and sometime, they come to take, don't have their children's name in the IDPoor card, we can't provide the service to them also" (HW12 Phase 1)* *"Difficult, some people, for instance, have the IDPoor card as well, but they live far; they send (the card) with someone else and ask to be paid pay for medicine, but we can't pay them. So, this one, it is a difficulty either that they have the card, but they send (it) with someone. For example, they want to be paid for the medicine and have minor illness, want to pay and get the medicine, by sending the IDPoor card with somebody. That is a difficulty, for them. We can't provide them also. So, sometime, they are also angry; they send the card, like that, suggest to pay (and get) medicine, they are poor identity; But don't want them to do like that" (HW11 Phase 1)*	*"It is difficult on the point that there is no name on the old card, except the name of head of family. They just tell us their name. When we include their name into the system, it doesn't appear" (HC6 Phase 3)* *"The problem like they have the card, they have the a few family members, they hold the card and ask for the drug like, teacher, I want more drug for few people, they can't come. I said they need to come for the medical practitioner to check when they are sick. They said teacher, please favor me for once (Laugh). If we don't give them, they don't come anymore so we compromise. It is difficult when they have the card and we don't agree to give some to those who don't come, they said the card is useless" (HC6 Phase 3)*

DEMAND-SIDE RESPONDENTS

Tables A5 to A7 present a summary of the key themes identified for SDG implementation along with relevant quotations to illustrate them.

HEALTH-SEEKING BEHAVIORS

Table A5: Summary of key themes identified for health-seeking behaviors in Demand-side respondents, and additional quotes illustrating them, by respondents' phase

THEMES	QUOTES – PHASE 1 (ENDLINE) AND PHASE 2 (MIDLINE AND ENDLINE)	QUOTES – PHASE 3 (MIDLINE AND ENDLINE)
TRADITIONAL MEDICINE		
The traditional healer/shop/seller continue to practice but not as much as in the past. Several respondents at Endline mentioned that they still purchased traditional remedies from the market for treating their illness.	*"When broken arm or leg, also go to the hospital or Khmer traditional healer. Some do not go to the hospital but go to see Khmer traditional healers" (FGD 8 Phase 2 Endline)* *"I only use Khmer traditional medicine and the medicine from company" (FGD1 Phase 2 Midline)*	*"Khmer medicine. It depends on the illness. If they want her to treat any illness, she can treat with medication. Effective remedy with Hemorrhoids, Setback medicine, leucorrhoea. [Respondent 4]: I used to take the medicine during pregnancy and I felt better" (FGD9 Phase 3 Endline)* *"Some go to traditional healer if health facility could not treat, and eating some good food, food supplement. All over above, we are not just use health service center. if there are a lot of money will use variety services to buy food supplement when salesperson come to sell especially [Name] company, I try their product, I used to try it during that time and they also do blood test" (FGD19 Phase 3 Endline)*
PUBLIC HEALTH FACILITIES		
Most IDPoor respondents in Endline mentioned using HC for common illnesses such as flu, high fever, headache, as well as other diseases like TB and dengue. Vaccination was sought at the HC.	*"Not really. You can get vaccination a HC, and we have Yellow card. I live in name, so I can get vaccination in name, and because it's time to get my child vaccinated" (FGD14 Phase 2 Endline)*	*"Seriously ill or injured, go to name. Yes. Even though they don't have it, they still go there. For example, Uncle [name]'s wife went to name for delivery" (FGD 16 Phase 3 Endline)* *"In short, I go to have treatment at the HC in the village only. Never been to Provincial hospital" (FGD16 Phase 3 Endline)* *"If serious, we go to the referral hospital. Just like me, when I was sick, I must go. The first place they go is the referral hospital. My husband was also seriously sick. We only went to that health facility and he stayed there for two nights. I went there to have eye surgery" (FGD2 Phase 3 Endline)*
TIME OF ILLNESS		
Respondents in Midline and Endline identified the need for immediate care at night as the reason for seeking care at private facilities or directly purchasing medicines from a pharmacy.	*"Some go to HC. If we are sick on the holiday when they do not work, we go to some private hospitals which are always open on any day" (FGD13 Phase 2 Endline)* *"If you are sick during the day, there is no problem. But when you have sudden illness and it happens at night, then we go to the private service because it is closer" (FGD1 Phase 2 Midline)*	
ACCESSIBILITY AND AVAILABILITY OF HEALTH SERVICES		
Respondents reported that they sought private care because they believed it was faster and more convenient. Private services were perceived to be more expensive; however, the need for faster services, the need to not go through tedious documentation, not waiting for service, and wanting a shorter trip to the facility offset the additional costs	*"The matter is that they are lazy to wait in the queue for long time but for private clinic is quickly and spent 30 000 or 40 000 Riels. The vendors are closer and easier anytime that's less people around 8 to 9 am" (FGD22 Phase 2 Endline)* *"They call the medical person to come. That way, it is more convenient" (FGD5 Phase 2 Endline)* *"Why do people want the medical person to come to their house? [Respondent 1,2]: They do not want to travel. They do not want to encounter difficulty as there is no one to attend them [at the health facility]. It is difficult. There are many works to do and no people. Many people go to work in Phnom Penh, in factories. Yes, no one to take care of them. That must be like that" (FGD5 Phase 2 Endline)*	*"I have brought my mother to public hospital. Honestly speaking, there is no service charge at public hospital. However, they don't provide enough care for us. So, it is faster to see the private physician. They will do checkup, blood test and give us medicine. They did blood prick, then injected, in a way of waiting not long" (FGD16 Phase 3 Endline)*
REFERRAL TO HIGHER CARE		
Respondents across FGDs in all phases mentioned going to the HC as a point of referral for higher care at district and provincial hospitals. Non-IDPoor respondents in the Endline, understood that the referral process did not necessarily start from the HC, but was connected to the severity of illness.	*"Only if doctor in [Name] can't give treatment, then will be referred to Kampong Cham. [Respondent]: I want to say that they will send those who have serious illness to somewhere else" (FGD8 Phase 2 Endline)* *"They told us that we got severe illness, they couldn't accept, so that is why they sent us to the provincial referral hospital. I already went to [Name] HC, they didn't accept us, they didn't accept us, they asked us to go to the provincial" (FGD26 Phase 1 Endline)* *"The HC make a referral letter to refer. Those who needed to be referred were referred for the consultation. If they saw that the disease was serious, they would refer the patients to referral health facility" (FGD24 Phase 1 Endline)*	*"We go to HC for treatment, if not cure, then they referred to district hospital, and could be all the way to provincial referral hospital. I brought my child to HC, they referred us to different level. My husband got surgery at district hospital, but they also sent us to [Name] hospital" (FGD11 Phase 3 Midline)* *"The medical practitioners say they did not dare provide examination because I had gynecological problem. They sent me to [Name] referral hospital. After I was washed already, [Name] hospital, they sent me to [Name] hospital. I carried the IDPoor with me, so they provided me the IV solution" (FGD12 Phase 3 Endline)*

THEMES	QUOTES – PHASE 1 (ENDLINE) AND PHASE 2 (MIDLINE AND ENDLINE)	QUOTES – PHASE 3 (MIDLINE AND ENDLINE)
SERVICES FOR ANC AND DELIVERY		
Several respondents in the female-only Endline FGDs mentioned that they seek health service at the HC particularly for ANC and delivery.	*"It was already night when I went there. That time I was having a labor at night. When I went there, it was already night. And when midwife have checked my uterus, delivery might be at 2 Am, or 3 AM that night. And I was having pain; I was having severe pain, but (they) would not check up on (me). And when my husband went to ask, (they) said, hmm. It was not the time to deliver yet. So I was having labor almost dying. Not coming to check up, and then blamed my husband almost 2 or 3 times" (FGD14 Phase 2 Endline)*	
Respondents were aware of the policy and requirement necessary for people to go to the public facility for delivery.	*"We cannot have delivery outside of health facility, they did not allow. Only at HC that they can deliver baby" (FGD12 Phase 2 Midline)*	
SEVERITY OF ILLNESS		
Respondents across all FGDs reported that people use public health facilities depending on the severity of the disease, particularly for serious illness; the referral hospital was mentioned as a preferred choice for public hospital. HC was used for treatment of minor illness	*"They test to see whether to refer or not. If serious, only public hospital will admit for treatment. Some private hospital will also not admit. Interviewee (Grandma) If serious, only go to public hospital" (FGD7 Phase 2 Endline)* *"Yes. We go to the private hospital for a minor case like getting medicines. If we're seriously sick so we have to stay at the hospital, it has to be the public hospital" (FGD17 Phase 2 Endline)*	*"If the illness is not serious, we can just call the private providers to give 1 or 2 IV fluid injections, then the illness would be cured. But for serious illness we would to [Name] district hospital" (FGD4 Phase 3 Midline)*
EFFECTIVENESS OF TREATMENT/MEDICINE		
Respondents perceived that injections were more effective than oral medication, leading them to demand injections for fast recovery.	*"The private provider, the doctor come to give injection in the village like mobile medical. But there (public health facilities), they take care enough for us and have medicines and injection while get sick need get injection when they see the illness!" (FGD20 Phase 1 Endline)*	
Respondents across all phases in the Midline and Endline studies perceived therapeutic injections to be more effective than oral medicine. Some respondents mentioned wanting to get IV fluid injections as a reason for seeking care at a private provider.	*"If you are sick and need to be treated with injection, then you go to the private clinic. We get injection after delivering a baby to make the body warm and to make the veins inside our body stronger" (FGD8 Phase 2 Midline)*	
FINANCIAL AFFORDABILITY		
Money was commonly quoted by all respondents in Midline and Endline as one of the factors determining whether they seek public or private care.	*"Private clinic is for rich people. The rich people go to [Name hospital]. The vendors are rich but why don't they come to district hospital? They don't stay at the district hospital because it's dirty but people at [Name village] always go to district hospital more than people come from the countryside" (FGD4 Phase Endline)* *"As far as they have money. If they do not have money, they go to public health services" (FGD13 Phase 2 Endline)*	*"Well, as you mentioned earlier, then why do some people go to private clinic? [Respondent 1,2]: They are rich. They have money, Neakrou (speaking at the same time). For them, they are rich. For us, we are poor; so, we would rather die here. If they refer us, we just follow their referral" (FGD1 Phase 3 Endline)* *"Those who do not go (public facilities), they generally go to a private health facility. They have money, they go to private health facility" (FGD2 Phase 3 Endline)*
Most respondents across all SDG phases in Midline and Endline stated, "those with no money" or "the poor" only go to the public health facility. Respondents pointed that people with no money could not afford private care; thus they had no other choice but to go to public health facilities.	*"We go to public hospital because we don't have money. We force them to cure us because we're poor" (FGD25 Phase 1 Endline)* *"Go to the HC, for private medical provider we do not go because we are poor, no money. No money, like me I am poor so I go to the province right away. I am poor, I have no money, so I choose to go to the referral hospital, which the medicines they support" (FGD26 Phase 1 Endline)*	*"We know that when we are sick we need treatment. We know that private clinic charged a lot of money, so only the public health facilities that don't charge money for poor people" (FGD13 Phase 3 Midline)*

PERCEPTIONS OF QUALITY OF HEALTH SERVICES

Table A6: Summary of key themes identified for perceptions of quality in health services in Demand-side respondents, and additional quotes illustrating them, by respondents' phase

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES – PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
CLINICAL SKILLS AND KNOWLEDGE OF HEALTH CARE PROVIDER		
Respondents across all Endline FGDs, particularly in Phases 2 and 3, observed improvements in the clinical skills and knowledge of health care providers who were providing proper diagnosis, prescribing tests and examining patients thoroughly. Noting case histories, asking questions and doing thorough physical examinations were also mentioned by respondents as good process quality of care provided by HWs.		*"I am satisfied because people get treated when go there. They asked us questions. The doctor checked and asked questions. I get used to the health facility already. It has been many years already now that I am with the health facility. For the whole year round, I go to health facility" (FGD1 Phase 3 Endline)* *"I'm satisfied with the fact the HWs there do check-up patient, that they were welcoming us coming to their place. And If we need a lab test, they help check this or that for us. So, if we were to wait long at the health facility it's because they feel dissatisfy with us. I'm satisfied with everything. Strictly speaking, if not satisfied, not going at all to this public health facility, and go to private health facility instead" (FGD15 Phase 3 Endline)*
DRUGS, EQUIPMENT AND CONSUMABLES		
Respondents described the observed changes in terms of what they experienced in the past (before) and in the present (now) as: "different from before". Most respondents across FGDs in Endline perceived that in general the availability of different drugs has improved.	*"What about medicine supplies? Has it gotten easier? [Respondent 5]: Medicine supplies are better. The time. When it's the time, they bring medicines to us. They give injections right at our place" (FGD17 Phase 2 Endline)*	*"Observe that there is more modern medical equipment. For example, the equipment for eye treatment. It's more sophisticated, it was not available in the past. The health care providers take care the patients better and there are good medicines" (FGD19 Phase 3 Endline)*
INFRASTRUCTURE		
Respondents in both Midline and Endine were asked if they observed any changes to the infrastructure in the public health facilities where they seek treatment services. The majority of respondents in the Endline observed that the infrastructure in public health facilities had improved in the last six months		*"Last time, seeing soil was filled up in front of the hospital; filled up that canal; filled up. These days, seem having a considerable improvement. That's right. At the front, seeing there are a lot of motorbikes and cars, it is too narrowed when entering, maybe park at the front. I saw they fill it up in front of the hospital, spacious" (FGD11 Phase 3 Endline)*
HYGIENE		
The majority of respondents across all FGDs, in all three phases, reported changes with regard to hygiene and cleanliness of the health facilities. Respondents, in particular, observed changes in the surroundings of health facilities – they were cleaner, free from trash, and the space was kept clean by cleaners and the patient's caretakers themselves.	*[Respondent 1]: "In the past there was not much rubbish but the cleaner could not clean all. The mongo leaves and cans. Now there is a storage. They do not litter at the health facility anymore. There is a place for putting cans, bottles and nappies and other litters" (FGD24 Phase 1 Endline)*	
HW ATTITUDE/ BEHAVIOUR		
Respondents across FGDs noted the friendly and welcoming attitude of HWs when patients arrived at health facilities as something different than in the past. They took care of patients actively and responsibly; they did not scold or blame patients; they were polite; they asked what the patients wanted; and they didn't take any money from patients.	*"Feeling of health providers were also clean. Know how to be friendly and know how to dig questions in detail. Now, the health staffs know a lot. During the day, oh, very organized. The staff, working with those carrying the health equity card, are sitting in front of the health facility, so they don't dare to be arrogant" (FGD14 Phase 2 Endline)*	*"The medical staff; since the time I was admitted there, the medical staff has changed a lot. They are normal. The medical staff is very good. Well, they are totally good. They are not quite grumpy like previously.... When my husband was admitted, around half a year ago. It was like, they were not quite good... They pulled; they pulled the IV fluid cord; they were angry and so on. But now, there is no problem anymore. Now it is good" (FGD2 Phase 3 Endline)* *"Now, when a child shouts here and there, they walk there to ask. Oh, in the past, they scolded us. In the past, yes. They scolded, they blamed. Why don't you look after your child? You cannot take care of your grandkid, can you? Why you open your eyes but do not see anything happening like this? (laughs). In the past yes, but now no. Since I was there, there was no" (FGD2 Phase 3 Endline)* *"Now they changed and how about the new doctors? How about behavior of physician there? [Respondent 1]: Yes, now it is better than before and they take care of us all the time. They were friendly during the delivery; they were so polite" (FGD9 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES – PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Respondents in several FGDs in Phase 3 Endline reported that older staff were more experienced, with more knowledge and had better behavior than the younger staff. Older HWs were perceived to be more friendly, to take care of patients, and be more attentive, especially in the case of delivery.		*"The health staffs are friendly. She is a long-serving one, loukru. They are open for question. We get the medical drug. Health staff, is too much. The health staff assistant also easy. Child delivery she took good care, never stay, at night. And take care of us, never spend the night there; he monitors every morning, asking us how is it. And for those coming for delivery never sleep there. Those who have been there, they said that health facility is good. So when going there, it's good" (FGD11 Phase 3 Endline)* *"They meet the old nurses, I guess, like the long-serving ones; they have knowledge. You meet only the old staff. There, they all know, they get in for check-up at there" (FGD11 Phase 3 Endline)*
Some respondents across all three phases mentioned negative attitude or behavior of health staff during Midline and Endline. This negative perception appeared in four FGDs in Endline and 2 FGDs in Midline, mostly among the non-IDPoor respondents, with age ranged from15-49 years old, and of mixed gender.	*"Yeah, don't want to open their mouth. That is the most difficult section. Sometimes when we ask, they point to other person in charge. When we hand the prescription, we ask and pay monthly. We ask them, they said they do not have and advise us to buy outside. Push us to buy outside but we already pay the full purchase" (FGD17 Phase 2 Endline)* *"How was their behavior before? [Respondent 4]: I still remember their faces. Those who are good and bad. I'm old but I remember everything. Their way of speaking showed no respect. Mostly younger doctors aren't like the old ones. Old doctors don't really care about us just because they're rich. Like, they know we're poor from the field, so they don't want to talk to us" (FGD17 Phase 2 Endline)* *"Yes. But, but, yes. But I also face some difficulties when going to the hospital. When my little sibling went for a checkup; good god, I freaking called out to them but, no matter how much money you have or how quickly you give it to them, they would just give you a quickly check up and go off for a nap. Unless you have a great deal of money… If you have only a little money, they won't give a damn. I'm really angry" (FGD6 Phase 2 Endline)*	
Endline respondents in Phases 2 and 3, observed that social media, like Facebook, could be used as a mechanism to report bad behavior of health staff toward patients. Thus, social media was mentioned as mechanism for people to complain or to regulate behavior of health care providers by making health care staff "afraid of doing something wrong" or "not daring to use bad words or commit something wrong".	*"The health staffs these days are well disciplined. If there are a lot of people coming, Lokru, they are even afraid. Now afraid when taking picture/video then post on internet, so they turn silent now. There are many, mostly they monitor every day" (FGD14 Phase 2 Endline)*	*"It's like they have this enough. They have enough papers, so if don't take care, it will be a trouble. Don't know. to wait for coming to ask and Ohh very hard, … like for those who have, maybe don't have because they legally go, they go appropriately, they have IDPoor card, when organization comes, they said the nurses don't pay attention like this, like that, so the health staff must be…They are scared of that point, health staffs' weakness and these days, it's Facebook time. You know, these days is Facebook time. Something wrong, the neighbors, when the nurses use bad words, they will secretly take a video, Facebook. Nurses, these days are quite scared, don't dare" (FGD11 Phase 3 Endline)*
Respondents in the Endline also reported the monitoring process whereby a third party (NGO or OD assessor) asked patients to provide feedback on health staff behavior when they received health care service.		*"I never know about it. My grandmother has it and she said they take great care. They come and check on us 2 to 3 times a day and when the organization (NGO) comes to ask us that how is the health staff, check on us, or whether they have bad words or not, they interview with the sick (patient). I think somehow they care. When we call them, they come quickly for anyone who has the card. For those without card, I don't know. The Good point, (is that) they take great care of you; they give 50 for a morning. In short, having have the card, it's convenient" (FGD11 Phase 3 Endline)* *"(The organization) coming to ask (people) with IDPoor card, when organization comes, they said the nurses don't pay attention like this, like that, so the health staff must be afraid" (FGD11 Phase 3 Endline)*
OPENING HOUR AND RESPONSIVENESS OF SERVICES		
Respondents in both Midline and Endline had both positive and negative perceptions of the availability of health staff at the HC during the weekend and early opening hours; some others had a negative perception of HWs coming to work late, and irregular opening hours of the HC.	*"The working hour is good. They arrive on time. For the service hour at hospital, they started about 8 a.m. If we go later than that, we will see the doctors there waiting for us. At 7 .am or 8 am, they start working" (FGD7 Phase 2 Endline)*	*"Yes. Before, they were rather delayed. Now there aren't many problems. They even arrived before the appointment" (FGD15 Phase 3 Endline)* *"Public health facility it opens at 8 am and stop at 11 a.m., then it starts again at 1 pm and stop at 4 pm. But for delivery, it opens 24 hours" (FDG12 Phase 2 Midline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (ENDLINE)	QUOTES – PHASE 2 (MIDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
PERCEPTION ON THE EFFECTIVENESS OF TREATMENT		
Preference for injection as a form of treatment was equated to quality of care in public health facilities. Respondents felt satisfied when they received injections from the health provider as it reinforced their confidence levels in the public health service.		*"When I went there the medical staff asked me and started to provide IV fluid immediately. If the IV fluid needle become misplaced, or some patients detach the IV fluid cord, they come quickly and help immediately" (FGD2 Phase 3 Endline)* *"Very good, super good this health facility. I was only feeling dizzy, I felt quite unwell, they connected me to oxygen. They provided IV fluid for me one after another. They brought some medicine to inject for me immediately. Injected immediately" (FGD2 Phase 3 Endline)*
Some respondents across all FGDs in Endline perceived that medicines provided at the HC were effective in treating common illness.	*"I bought the cold medicine to take twice and it's not effective. Yes, buy medicine here [at the HC] twice, want to try as I saw many people go to buy so I want to try. Because I heard it is effective. But it is not. So go to the HC to get medicine. The medicine is effective. It is more effective than serum outside too" (FGD8 Phase 2 Endline)* *"They said the medicine was delayed but the medicine was good. It was different from the private health facility and the services at health facility was more attentive" (FGD 24 Phase 1 Endline)*	*"At the HC, it has good medicine. I always got cured by taking medicine at HC" (FGD11 Phase 3 Midline)* *"Yes, like what I have mentioned above, if going to private health facility, it won't help, so I go to public health facility and if it still won't be cured, I go back to private health facility (outside voice, some health facilities are effective and some also are not effective)" (FGD9 Phase 3 Endline)* *"I want to say that some people think HC's medicine is more effective than the medicine selling in clinic. Some people believing, recovered when taking this medicine" (FGD16 Phase 3 Endline)* *"Some people do not want to go [at the HC], even if we told them. Some medicines are effective and other not so effective. We are poor, so we go to HC. I now go to the HC to get the medicine, because the medicine that I got, helped me to get better" (FGD1 Phase 2 Midline)*
However, respondents in the Endline made contradictory statements when they perceived that medicine at the private clinic was more effective than at the HC.	*"They said that HC medicine was not good. The medicine was all kept in cans. That was what the locals said. They said that the medicine was kept in the can" (FGD24 Phase 1 Endline)* *"When I get sick, I go to this HC always, but not fully recovered which is why they refer me to the province for the treatment" (FGD26 Phase 1 Endline)*	

FINANCIAL PROTECTION: FGD EXPERIENCES AND BARRIERS TO UTILIZATION OF HEF

Table A7: Summary of key themes identified for financial protection in Demand-side respondents, and additional quotes illustrating them, by respondents' phase

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (MIDLINE AND ENDLINE)	QUOTES – PHASE 2 (ENDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
BENEFIT OF IDPOOR CARD AND HEF		
Most respondents in Midline and Endline understood that IDPoor was only provided to poor people, and were aware that the card is used to access health care service at public health facilities.	*"Some people go to the HC. If you have IDPoor card, they don't charge money" (FGD1 Phase 2 Midline)* *"I have IDPoor card so I go to HC, they don't charge money and also because I have no money…. Before I have IDPoor card, I go to private provider; now that I have IDPoor card I go to the HC. It is free" (FGD7 Phase 2 Midline)* *"They help pay for us. We have IDPoor card, so they pay for us" (FGD1 Phase 2 Midline)*	
Respondents across all FGDs mentioned that IDPoor card holders received benefits such as an allowance for caretaker and travel cost reimbursement. Respondents mentioned that IDPoor Card not only helped to cover their service fee, but also provided more benefits.	*"It is more convenient and useful to go to the district referral hospital because they have money to give to the patient who have IDPoor card. In one day we get 5,000 Riel for food. My son was going from district hospital to the provincial referral hospital without having to spend any money. I thought my son would not have survived at all" (FGD5 Phase 1 Midline)*	*"They gave money for transportation, and calculated based on kilometer you travel from the village" (FGD11 Phase 3 Midline)* *"They gave 5,000 Riel per day, and food for patient" (FGD4 Phase 3 Midline)* *"They take good care; they pay good attention for treatment. Food cost, from the beginning they gave. Like I am in [Name] village, when I go, I get five thousand and when I come, I get five thousand. Both trip I get three thousand" (FGD2 Phase 3 Endline)* *"It seems they stop giving to those who only go to get medicine. But for those who are admitted, they pay five thousand per day. If you stay for a week, you get for a weak" (FGD2 Phase 3 Endline)*
Respondents in Endline, but not in Midline also mentioned a new incentive scheme that had been recently implemented by the government, the 1,000-days scheme, which provides financial incentives to pregnant women for ANC/PNC checkup and delivery, and child growth monitoring until 2 years old.	*"Apparently, it is about 700,000 riels. Only having four antenatal visits that you can get that money. Not having complete four antenatal visits, you cannot get that money. That's to prevent those who are lazy. [Moderator]: "They want you to come for checkup huh? [Respondent 2,8]: "They want to know about our child's health. They want to check our health. That's why we know going there (to health facility) is easier now" (FGD14 Phase 2 Endline)* *"When we delivered baby, they give 200 thousand Riel. We get money when delivering a baby. When my wife delivered a baby, we got 5000 Riels per day and the 200,000 that they gave. Only these. Has it changed or not? I don't really know. In short, I don't know whether the one delivering a baby got the money or not" (FGD17 Phase 2 Endline)* *"First month they pay me 40.000 riels. But later no. They said wait until giving birth. Somebody from the organization said we'll get 200.000 riels when giving birth, but not anymore" (FGD23 Phase 1 Endline)*	*"For delivery, they give 500,000. For me, if I was hospitalized I will get 30,000 or more than 20,000 per day. No, but now they change; they changed to give money back to delivery women, for no" (FGD15 Phase 3 Endline)*
ACCESSING IDPOOR, HEF, PAC		
Respondents across all FGDs in Midline and Endline understood that only the poor were entitled to have IDPoor cards. Respondents mentioned the various criteria used to identify poverty status of the household.	*"It's limited quantity and divided to village to the poorest 1, 2, or 3. They called all villagers and quoted the number of motorbikes, house, land, and situation as widow, no job, or sick those are the condition for consideration to offer the IDPoor. We select around 10 people who have small land then they quoted the current properties. Cards also have its term, expired and renew" (FGD22 Phase 2 Endline)*	*"Who know what is right and what is wrong; some poor people get that and some rich people are not allowed to get that card. The poor people meet the requirement, like no money, no everything, no rice field; has only house and land, a little land; has only one plot of land with a house for his wife's residence" (FGD9 Phase 3 Endline)*
BARRIERS TO ACCESS AND UTILIZATION OF HEF/IDPOOR CARD BENEFITS		
One of the key concerns posed by many of the respondents through FGDs was the expiry of the IDPoor card, which was not updated by the IDPoor identification process.	*"So, all of you are those who do not have the cards. Have you all had any experience in using the IDPoor card? [Respondent 1]: I used to have the card, but it expired. Yes. When I had the card, it was like I didn't have it because I had not used it because our card period was 2 years and then the last one was 1 year" (FGD13 Phase 2 Endline)* *"Sometimes for one year and it expired without using it" (FGD13 Phase 2 Endline)* *"When the card is expired, and when I went to the hospital they told me that this IDPoor card cannot be used anymore. And without the IDPoor card the health staff told me to pay for service fee" (FGD5 Phase 1 Midline)* *"The card was expired, so they don't accept it" (FGD1 Phase 2 Midline)*	*"Yes, my mother doesn't have it. She had it in the past. They checked via computer and saw that my mother had it, but it expired. But my sick mother is more than 50 or 60. And then brought her to because just had disease" (FGD16 Phase 3 Endline)* *"When you went to [Name], they said they did not eat that card? [Respondent 2]: they did not eat the card. It was a long time ago. Now it changes a lot. I carried it with me, too but it was invalid. They did not accept it. I carried it to [Name], they said they did not accept that IDPoor. I carried it to [Name], they did not accept it" (FGD3 Phase 3 Endline)*

THEMES	QUOTES - PHASE 1 (ENDLINE) AND PHASE 2 (MIDLINE AND ENDLINE)	QUOTES – PHASE 2 (ENDLINE) AND PHASE 3 (MIDLINE AND ENDLINE)
Several respondents in the Endline also referred to the issue of family members excluded from the IDPoor card.	*"She didn't have the card. She had only my card. That time I failed to register her name because she was still at Phnom Penh and could not come to take picture. In that case, the card can still be used to get back 40,000. Yes. But when photo was taken there was only me. My children were all still at Phnom Penh could not get to take picture, and so could not have the card. My child had asked for the IDPoor card. I said. 'But how can there be a card, if you didn't bring it along.' She said, 'Sir said to send the card just in case the card can be used. You could save 200,000 for the services'" (FGD14 Phase 2 Endline)*	
BARRIERS TO USING IDPOOR CARD/HEF		
Some HEF beneficiaries reported their negative experience with barriers to using IDPoor card at health facilities. Some of the barriers listed by respondents included not being taken care of when receiving medical treatment for serious illness because they had IDPoor card.	*"Some patients with IDPoor cards were left untreated because they didn't have money, but now I see it clearly, it is the same for those who pay and those with IDPoor cards. The doctors treat them the same way such as in Operations. The IDPoor cardholders get the same treatment" (FGD7 Phase 2 Endline)*	*"They treat all diseases. Yes, all types of diseases. But like mentioned earlier, those with IDPoor card are not properly taken care of because we don't need to pay for their service, literally. Those without IDPoor card must pay 150,000; so, they are properly taken care of" (FGD16 Phase 3 Endline)*
OOP EXPENDITURE AS A BARRIER TO UTILIZATION OF HEALTH CARE SERVICES		
Most IDPoor respondents in Midline mentioned that they needed extra money in hand to pay for things other than those not covered by the IDPoor Card, particularly to buy extra food and materials that they need for inpatient care; and in some cases for the cost of transportation as well.	*"Got a severe sick, so when I went to the hospital, I slept there 7 days, 7 nights, the medical provider said, my kid got fully recovered, and I asked the medical provider about my kid's condition. He said my kid was ok, and he was fully recovered. When I came back home, my kid was not fully recovered yet, still sick, and now still gets sick, always fever and cries most of the time. And I went to the provincial hospital also, I spend 100 $, during that time I owed the other's money in the village" (FGD 26 Phase 1 Endline)*	*"I need to have some money, so I had to borrow from my relative living nearby, because I don't have enough money. For example, if we go to hospital and staying for a week, and we only eat the food provided by the hospital, it would not be enough, because my grandchild always went with me to the hospital. So, we need to have money as reserve to buy extra food, like in the morning, I need to buy rice porridge to eat before taking medicine" (FGD4 Phase 3 Midine)* *"The extra money that we need to have when going to hospital that we use to buy food and extra things; we borrowed from other people and from relatives; and sometime we borrowed with money lender in the village" (FGD8 Phase 3 Midline)*
Most IDPoor respondents in Midline mentioned that they needed extra money in hand to pay for things other than those not covered by the IDPoor Card, particularly to buy extra food and materials that they need for inpatient care; and in some cases for the cost of transportation as well.	*"Spending on extra things, water and room charge, and also give money to the staff as showing gratitude, even you have IDPoor card, but very small amount" (FGD7 Phase 2)* *"What are the same? What are (they), the good point? [Respondent 2]: Good physicians won't take money and give food. Because the physician is good and don't take any money from us. Yes, because the physicians don't charge money from us" (FGD25 Phase 1 Endline)* *"They didn't take money when I gave them as thank. They said, 'I won't ask you to pay.' That's because the health staff is acquainted. 'I won't ask you to pay.' But I gave them 10000 as thank. (Laugh)She was even afraid when I gave her 10000. She said, 'I won't take money from you.' And I replied, 'No, Lokru, I'm giving as thank to Lokru" (FGD14 Phase 2 Endline)* *"We give 10000 or 20000 as thank, she doesn't ask for any other (sound of baby crying)" (FGD14 Phase 2 Endline)*	*"For that, I haven't made the IDPoor card yet. Only I have card, but my daughter didn't. they also charged for the service, the health care provider. They said the baby to be removed in the stomach, Ah, they aborted the baby. Now, we paid for the health care provider's service; one health care provider was 20,000. That time, 2 people, I gave them 40,000 already. I gave them the tips" (FGD15 Phase 3 Endline)*
Respondents in both Midline and Endline alluded to under-the-table payments made as part of out-of-pocket payments when using public health services. This under-the-table-payment was perceived to be payment of appreciation to the health care provider; but it was also seen as a form of bribery for better care. People were aware that health staff were not allowed to receive any payment from patients, but they insisted on doing it out of their own free will.	*"Then, what about those who are, uh, poor or has an IDPoor card or without the card. Uh, how welcome are they or what was the attitude of the medical providers? [Respondent 1]: Equally! Nothing; it's just like usual, yes. Their speech manner is nice; they're not discriminating against us or anything!" (FGD6 Phase 2 Endline)* *"They paid the same attention to the IDPoor cardholders as to those who paid. They paid the same attention. In the past, they didn't treat those with IDPoor cards well.... I heard from others, but now I see by myself" (FGD7 Phase 2 Endline)* *"Also got, how about related to the respect, for example, when you held the card, did the medical provider respect you? [Respondent 1,2,4]: Also respect. Just like my case, when I brought the older daughter to, they respected. Do not know those who do not have the card, I have the card, I used to go one time when my big daughter delivered the baby. They respect" (FGD26 Phase 1 Endline)*	*"Good! They respected you. How about the doctor? [Respondent 4,5]; Yes, it's ok. They checked us, and also paid enough respect to us. They respected. They came to talk with us; they paid so much attention" (FGD4 Phase 3 Endline)*

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"Normally, when we have a budget, we can do everything. We can develop our institution. Sometimes, we have some ideas or initiatives but without any budget we cannot do anything. If we compare now to when we hadn't received the budget, we see a change."

- OD1 Phase 1 Endline

"That money [FLSG] we take it to spend on the process of the Health Center such as equipment, medicines, the equipment in office, cleaning and repairing for Incinerator"

- HC8 Phase 3 Endline

"Yes, sometimes they come without the card with them, come to use the service but don't know where the card is, and sometimes, the name is different from the name on the card"

- OD6 Phase 2 Endline

"I think it is good because it makes us upgrade our knowledge and gives more confidence (....) Yes, I think it is fair and gets reflected in the service quality and makes each staff highly knowledgeable"

- HW10 Phase 1 Endline

"Each center makes more effort because generally we, in each trimester, show them the result. Amongst 15 HCs, they compete with each other because they want the high scores. So, they need to work hard to build the capacity, build their infrastructure to get the higher score, competing with each other"

-OD2 Phase 1 Endline

"When there is the assessment, and the knowledge of receiving the incentive, it makes our staff have the motivation to work"

- HW6 Phase 1 Endline

"We prepare ourselves, both with the knowledge and doing. Whenever they come to assess, they will ask a lot of questions. They observed everything around the HC, including toilets and room"

- HW9 Phase 3 Midline

"I think it is good because it makes us upgrade our knowledge and gives more confidence (....) Yes, I think it is fair and gets reflected in the service quality and makes each staff highly knowledgeable"

- HW6 Phase 1 Endline

"Those with no money, they go to HC; and those with money, they don't go there. ... If no money, we go to provincial hospital because we have IDPoor card. But those with money, who want fast service, they go to private clinic"

- FGD6 Phase 1 Midline

"It means that he works at the HC and also opens the clinic and sells drugs. That doctor is working at the center and he also does the serum injection at everyone's house. Just like anybody else"

- FGD23 Phase 1 Endline

"We are ethnic people and we can't speak Khmer well, so, they think that we are not capable or confident enough to make any complaints"

- FGD3 Phase 1 Midline

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