



**THANKYOU FINAL MILESTONES REPORT**  
**Grant Period:** January 1, 2022 - December 31, 2022  
**Grant Amount:** \$95,000 AUD

**SCALE AND DELIVERY:**

**Program scale up in 2022:**

We successfully launched 4 new districts in 2022 in alignment with our Strategic Plan. Our achievements this year include new partnerships, a growing body of evidence for our work, and the exciting renewal of our 5-year agreement with the Social Welfare Council, which fostered new opportunities for sustainable systems strengthening through local NGOs as well as the Provincial governments.

**Program reach in active districts in 2022:**

The process of getting our new partnership agreement created temporary delays in the implementation process for the new program districts, but as a result, allowed our team additional capacity to amplify efforts towards growing existing programs in our active districts and setting up a strong foundation with the new local NGO partnerships (*Refer to the NGO Partnership Milestones for more details*). While we were able to continue our work in our original districts and onboard new districts (set-up phase), all implementation activities planned for the new districts listed in our new program agreement had to wait until the agreement was signed. The resulting 6-month delay in the new districts temporarily constricted our program coverage, resulting in a total of 82,000 pregnancies reached in our active districts for 2022 instead of the 87,000 originally anticipated. As demonstrated by the achieved delivery indicators in the meantime, however, these minor setbacks will soon be resolved. See Appendix 1 for Program status details as of December 31, 2022

**Program delivery in 2022:**

<b>2022 PROGRAM DELIVERY INDICATORS:</b>	<b>TARGETS</b>	<b>ACHIEVED</b>	<b>VARIANCE</b>	<b>% ACHIEVED</b>
Community Outreach Providers Trained (# of trainees)	1,600	2,737	1,137	171%
Local Stakeholders Trained (# of trainees)	1,917	2,661	744	139%
New SBAs Trained (# of trainees)	89	89	0	100%
ROUSG Trained SBAs (# of trainees)*	16	20	4	125%
CME for Service Providers (# of trainees)*	2,552	2,827	275	111%

Birthing Centers - Newly upgraded (# of HF)	61	77	16	126%
Supplemental medical equipment and supplies (# of HF)	10	35	25	350%
BCs receiving Quality of Care support - initial visit (# of HF)	107	113	6	106%
BCs receiving Quality of Care support - follow up visit (# of HF)	316	266	-50	84%
Palikas receiving technical support (# of Palikas)	74	43	-31	58%
Community Mobilization (# of events)	1,413	14,42	29	102%
Strengthening health facility governance (# of events)	174	157	-17	90%
Radio messaging (# of spots broadcasted)	31,500	75,392	43,892	239%
MNH helpline (# of stipends distributed)	4,095	3,598	-497	88%
Telehealth program (# of stipends distributed)	2,142	2,097	-45	98%

*\* As of 2022, we started disaggregating the ROUSG training from our CMEs. The ROUSG program is demonstrating exciting growth to meet the rapidly rising demand for ROUSG services and is supported by the federal government's increased prioritization and allocation of resources in this area.*

Despite the delays in program implementation as we waited for the program agreement to be signed, we are proud of the progress achieved for most of our service delivery indicators. The delays in program implementation as we waited for the program agreement to be signed allowed our field teams additional time and resources to focus on our program delivery targets, which far surpassed expectations. We are proud of our team and their ability to increase their reach at the community level across all program areas (training, BC support, and community mobilization), particularly in terms of training for Community Outreach Providers, delivery of equipment and supplies to rural Birthing Centers, and targeted MNH radio messaging. Increased impact in these areas are important to note as they reflect areas identified as high-need in the changing landscape of our program in Nepal.

The few target deficits were due largely to increased government capacity and factors outside our control such as local elections. Specific delays include:

- **The MNH Helpline and Telehealth program:** As our government partners continue to grow their capacity towards MNH investments, priority programs can be more easily integrated into their overall budget and strategy. In this instance, with these programs already established and growing research to support investment, we were pleased to support the government's decision to absorb some of the targets related to the helpline and telehealth programs, which subsequently frees up our resources to be redirected elsewhere.
- **The technical assistance programs for the Palikas:** These planning and budgeting activities mostly occur in Q2 as Nepal operates on a fiscal year that starts in July. Unfortunately, the timing coincided with local elections which occurred in Q2 of 2022.
- **Strengthening health facility governance:** These programs were impacted by the elections as well as we had to wait for them to be finished in order to begin working with the newly elected representatives.
- **The MSS/Quality of Care follow-up visits:** The delayed start in the new districts as we waited for the new agreement to be signed meant that we could not conduct the initial MSS/Quality of care visits on the expected timeline. As a result, we needed to complete these before we could conduct the expected follow-up visits. As demonstrated by the data in the above table however, we are well on our way to resolving this issue.

## **OPERATIONAL EFFICIENCY:**

### **Continue To Adapt To The New Post-Pandemic Landscape In Nepal:**

While COVID's debilitating waves of 2021 and 2022 have passed, the full extent of the pandemic's deeper impact on the health system is still being assessed and, in many ways, is still playing out. Our efforts in 2022 emphasized the need to simultaneously maintain our own program activities and help our government partners proactively plan for future emergencies. To do this, we have:

- Invested in expanding our suite of digital solutions to continue to support rural health providers, SBAs, and pregnant mothers. This includes the Amako Maya app, the Safe Delivery app, social media groups exclusively for rural providers to seek guidance and support, the OHW/University of Rochester Chatbot.
- Conducted 14 virtual training sessions for some of our CME in obstetric and neonatal care.
- Increased our investment specifically towards service provider training, mentorship, and support through digital tools, social media, and training opportunities to combat burnout and isolation.
- Expanded our partnership across all levels of the Nepali Government to support them in the shift from emergency response to rebuilding and strengthening the health system overall. By leveraging support at the federal, provincial, and Palika levels, we can promote resilience in MNH infrastructure, capable of responding to both current and anticipated needs.
- Partnered with Direct Relief and the Government of Nepal to increase our government partners' capacity to store essential specialized vaccines and reduce the national burden of COVID-19 infections and other illnesses by constructing a fully functional cold chain storage facility.

### **Incorporate Strong Local Implementation Partners:**

In compliance with the policy from the Social Welfare Council, One Heart began implementing some of our community-based program activities through local NGO partners. Official partnership agreements have been signed with five NGO partners working in Salyan, Rukum West, Dolpa, and Rautahat, and our team held an orientation to introduce the formal policies, procedures, and guidelines. Based on our 3-year Strategic Plan and our program mandate with the Nepali government, this orientation is intended to provide our new partners with a clear and mutual understanding of project activities and ensure that our local partners are fully equipped to carry out our programs successfully.

These districts represent a new and exciting era for One Heart in terms of project implementation approach and geography. With all of the new districts, we will be implementing through our local NGO partners and working collaboratively to implement the *Network of Safety*. As we continue to expand in the Madhesh Province, we are learning to work in the southernmost region of Nepal where the terrain is mostly plains (thereby less challenging to access, but with a larger population to serve) and sociocultural influences are vastly different. Implementing through local partners will be a critical component to adapting our model to these contexts and grow the community outreach necessary to meet the needs of the larger numbers of marginalized communities within such densely populated areas as the Madhesh and the isolated communities in the remote mountains of the Karnali.

### **Develop and Strengthen New Local Partnerships:**

Our team leveraged essential support from the USAID-funded Strengthening Systems for Better Health (SSBH) team, engaging their support in obtaining letters of support from all municipalities in the Karnali Province as well as data and technical reports which contributed to our successful five year program agreement and our ability to effectively launch programs in this new area.

In addition, our team has been working closely with the board of directors of Surakshit Pariwar (SP) to determine a path forward for the newly registered entity, drafting a position to run SP under OHW supervision and supporting their fundraising efforts. Two funding opportunities were identified, one was lost and the other is currently under review. This proposal would expand our model into a new district, beyond our current program mandate.

#### **Continue to Strengthen The Cost-Sharing Component Of Our Model:**

Following the elections in 2022, our team focused on engaging the new federal, provincial, and local representatives and have secured commitments from every Palika. We are pleased to share that we met the targets for this milestone, with a 55% percentage cost contribution average for facility renovation costs and 51% of palikas contributing to other aspects of our programs (training and equipment/supplies). Additionally, in alignment with our new Project Agreement, we have signed agreements with representatives from Gandaki Province, Madhesh Province, and Province 1.

- The agreement with Gandaki Province emphasizes provincial cost-sharing to establish a new birthing center in Parbat.
- An amendment to our existing MoU with the Ministry of Social Development in Madhesh Province defines our provincial-level partnership within the broader context of our new Project Agreement towards increasing provincial-level program ownership to better support maternal and neonatal health in Madhesh province. This support is critical to successful expansion within our Terai districts.
- The Ministry of Health from Province 1 has committed 10M Nepali towards a collaboration with OHW to construct and set up a dedicated maternity ward at the Udayapur District Hospital. Reflecting an impact of 8,000 mothers and newborns annually, this project presents exciting opportunities for collaboration and sets a new precedent for expanded cost-sharing potential with the provincial-level governments.

#### **Geographic Information System:**

In 2022, OHW integrated the use of Geographic Information Systems (GIS) within the *Network of Safety* model, amplifying our internal capacity to identify, predict, and effectively respond to the unique MNH needs of underserved populations. GIS data are now routinely collected and integrated within OHW's database. Three of our staff members have completed GIS training to be able to manage and analyze the data collected by our field teams. We are planning to offer further training to our staff to improve their ability to target resource allocations and program services in our program districts.

## **RESEARCH AND DEVELOPMENT: INTEGRATING MNH BEST PRACTICES**

#### **Simulation Based Mentorship Program:**

In collaboration with the Family Welfare Division of the Government of Nepal, One Heart designed a Simulation-Based Mentorship Program (SBMP) for rural health providers in Nepal. The SBMP is a hands-on, workstation-based coaching and mentoring program. Local-level mentors provide short doses of regular demonstrations and drills provided to rural health providers, which has been proven to increase information and skill retention. In 2022, we continued sessions in Udayapur and Dolakha, while expanding the program to Sarlahi and Myagdi. Seven simulation labs were established across Sarlahi and Myagdi, reflecting 18 mentors developed and 216 monthly SBMP sessions. We are encouraged to see the growing demand for this program, particularly in light of the heavy toll COVID took on health providers across Nepal in terms of both skills retention and professional/social support. In light of the

growing demand for this important program, we are pleased to share the results of the midline assessment of the program in Udayapur and Dolakha which confirms the program's potential as a tool to increase skills retention and support among rural providers. The assessment revealed significant improvements in both skills and knowledge across all 7 themes of the mentoring sessions when compared to baseline results. Skills rose from 45% at baseline to 90% at midline, while knowledge increased from 68% to 89%!

#### **eHealth Pilot Study:**

With both implementation and evaluation completed for this project, our team looks forward to sharing the long-awaited results and lessons learned. We expect to finalize the current draft by the end of Q1, but early results have already provided a great deal of insights about the program. The eHealth pilot study was designed to address gaps in service utilization continuity by using e-recording for maternal service utilization via the maternal service register (HMIS 3.6.1) through laptops at the health facility level by nursing staff. After the intervention, an evaluation was conducted to assess aspects of acceptability, appropriateness, and feasibility from the perspectives of both nursing staff and women. Participant feedback was largely positive from both the women and health providers. Most of the recently delivered women expressed positive perceptions about the SMS in their cell phones, receiving follow-up calls from nursing staff and felt that the SMS messages were understandable and useful. Despite technical challenges with the HMIS 3.6.1 system which limited operation and utilization, nursing staff participants remained unanimously positive about the experience and the benefits of the electronic recording system overall, including records safety and ease of locating specific records in the system. Lessons learned revealed gaps in the technical functions of the system that will need to be addressed for the program to work more effectively, yet overall the study found an improvement in the continuation of service utilization after the intervention.

#### **New Digital Tools:**

OHW thoroughly explored several digital solution opportunities in 2022 for both functionality and partnerships. These include:

- **Amako Maya (<https://amakomaya.com/en>):** Our leadership team signed a contract with Amako Maya in 2022, formalizing our partnership towards implementing their app which will expand access to pregnancy-related information in Sarlahi. This app is already aligned with the updated Nepali Government's Birth Preparedness package, and also digitizes the patients' health records, replacing the paper-based registers for maternal and neonatal health services records.
- Additionally, we have established strong partnerships with both the Maternity Foundation and the University of Rochester, developing firm concept notes outlining the exploratory work intended for these programs. We have been co-fundraising to further our efforts together in 2023 through proposals submitted to USAID's DIV program, the Agency Fund, the Roddenberry Catalyst Prize, and the Global Innovation Fund.
  - **The University of Rochester:** this collaboration is designed to develop and test an innovative community-led chatbot to address health literacy gaps among pregnant women and increase access to MNH care in rural underserved areas.
  - **Maternity Foundation:** we have been exploring a number of opportunities for collaboration with the MF to develop a customized training package and launch the newly developed Nepali version of the MF's Safe Delivery App (the App) as part of OHW's training program. Additionally, the Maternity Foundation included One Heart in their submission to the 2022 Maternal and Infant Health Award (MiH). With MF as prime and OHW as a consortium partner, the pitch centered on a data-driven approach to identifying inequities in access to MNH care through the MF app in 5 countries (Egypt,

Mexico, Nepal, Ethiopia, and Sierra Leone) and provided OHW with a path to expansion through strategic partnership.

- **Laerdal Global Health:** our partnership with LGH continues to grow as we expand the SBMP program and explore additional opportunities. Towards this end, OHW submitted a proposal to the MiH Award in collaboration with the Government of Nepal and Laerdal Global Health with the goal of creating a national skills-building strategy for all MNH care providers in Nepal by expanding our existing SBMP that could deliver country-wide coverage for all pregnant women in Nepal. As part of this program, a Learning Secretariat would be developed to guide research and advocacy for equitable MNH outcomes both in Nepal and more globally, allowing the overall solution to be adapted as a pathway for expansion into two new countries in partnership with LGH.

#### **Community Health Score Board:**

With the support of CARE Nepal, we successfully launched a Community Health Score Board Self Applied Technique (CHSB SATH) in 6 of our program districts, namely Dolakha, Kavrepalanchok, Udayapur, Sarlahi, Myagdi, and Parbat. The purpose of this project is to increase participation, accountability, and transparency among service users, providers, and decision-makers. After developing implementation guidelines and tailoring the implementation modality by integrating the CHSB SATH, an orientation was conducted with all the program staff from implementation districts. Execution of the program is ongoing, but based on our successes thus far and early evidence of governance and accountability improvements, this program is expected to be scaled to the districts of Dolpa, Salyan, Rukum west, Rautahat, Bara, Mahottari, Kalikot, and Dailekh in 2023.

#### **Strengthening the Referral System at the Palika Level:**

Only one of the palikas where our team tried to establish this program responded positively to the development of this revolving fund towards obstetric and neonatal emergency community evacuations. Some of the feedback provided by the other palikas to our team was that a referral system for mothers and newborns was not broad enough to cover their needs; that the funds allocated by our program were not enough to cover their needs, and that more than a referral fund is needed to establish an effective referral system. Our team is currently taking in consideration all the feedback obtained before establishing any additional type of referral program in rural Nepal.

### **PROGRAM IMPACT:**

#### **Direct program impact:**

As of the end of 2022, our program districts appear to have successfully weathered the effects of the pandemic. We have achieved our stated program goals in terms of improved access to care, improved quality of care and local program buy-in.

#### **Access to care:**

Improved access to care as evidenced by an observed increase in the number of births attended by a trained health care provider. Our current target is a 30% increase as compared to baseline. We have achieved this goal in all program districts which have completed program implementation (phase 2).

**SBA attended deliveries in fully completed program districts\*:**

Districts	Baseline	2022	% increase
Baglung (2010)	24%	62%	158%
Dolpa (2011)	20%	45%	125%
Sindhupalchok (2015)	20%	45%	125%
Bhojpur (2015)	18%	34%	89%
Terhathum (2016)	26%	35%	35%
Panchthar (2016)	43%	62%	44%
Taplejung (2016)	30%	50%	67%
Khotang (2016)	18%	41%	128%
Sankuwasabha (2017)	39%	62%	59%
Okhaldhunga (2017)	54%	74%	37%
Ilam (2017)	22%	32%	45%

\*Dhading district results presented with external endline survey results

**SBA attended deliveries in transition districts (program implementation completed):**

District (baseline)	Baseline	2022	% increase
Solukhumbu (2018)	25%	43%	72%
Ramechhap (2018)	29%	41%	41%
Nuwakot (2018)	34%	51%	50%

**SBA attended deliveries in districts with at least 2 years of program implementation completed:**

Districts (baseline)	Baseline	2022	% increase
Udayapur (2019)	35%	56%	60%
Dolakha (2019)	45%	64%	42%
Kavrepalanchok (2019)	16%	29%	81%
Sarlahi (2020)	36%	50%	39%
Myagdi (2020)	54%	71%	31%
Parbat (2020)	25%	41%	64%

**Quality of care:**

Improved quality of care as evidenced by an observed increase in the number of birthing centers scoring 75% or above on the Nepal Government Quality Improvement Program (QIP) tool. Our current target is a 30% increase as compared to baseline. We have achieved this goal in all districts which have completed program implementation.

**Quality of care - BC scoring 75% or above on QIP tool in transition districts:**

DISTRICTS (baseline)	Program baseline (2019)*	2022	% increase
Solukhumbu (2018)	23	43	87%
Ramechhap (2018)	4	50	1,150%
Nuwakot (2018)	17	55	224%

\*the quality of care program was initiated in 2019

Most of our current districts under program implementation are showing progress except for Myagdi where we have seen a decrease mostly due to staff transfer after the local elections. Our team is working with the local health authorities and the local health providers to remedy this issue.

**Quality of care - BC scoring 75% or above on QIP tool in current districts:**

DISTRICTS (baseline)	Baseline	2022	% increase
Udayapur (2019)	0	55%	N/A*
Dolakha (2019)	11%	35%	218%
Kavrepalanchok ( 2019)	0	33%	N/A*
Sarlahi (2020)	17%	100%	488%
Myagdi (2020)	33%	19%	-42%
Parbat (2020)	4%	16%	300%

\*Unable to calculate percentage when one of the values = 0

**Government buy-in:**

Demonstrated government buy-in as demonstrated by the percent of OHW's Palika-level partners in each district prioritizing MNH by setting aside budgets explicitly earmarked for this purpose (above and beyond funds provided by the central government). Our current target is 80% or more by program completion. We have achieved this goal in all the program districts which have completed at least 2 years of program implementation.



**Percent of Palikas prioritizing MNH care (internal monitoring data):**

Districts (baseline)	2022 status (%)
Solukhumbu (2018)	100%
Ramechhap (2018)	100%
Nuwakot (2018)	92%
Udayapur (2019)	100%
Dolakha (2019)	89%
Kavrepalanchok (2019)	100%
Sarlahi (2020)	83%
Myagdi (2020)	100%
Parbat (2020)	100%

**Service utilization in Dhading (external assessment):**

The results of our endline survey in Dhading show tremendous improvement in service utilization considering the 2015 earthquake which functionally destroyed the healthcare infrastructure in the district. A tremendous amount of external support from relief agencies including One Heart Worldwide supported the reconstruction of the healthcare system and are a strong endorsement of the resilience of the healthcare system in this area.

INDICATORS	baseline (%)	endline (%)	% increase
SBA delivery	64%	95%	48%
Institutional deliveries	62%	94%	52%

**Maternal and Newborn Mortality (External assessment and internal data):**

Our original program goal was a 50% decrease in both maternal and newborn deaths as compared to baseline in all our completed districts (10+ years post-program inception) as assessed by an external agency. While we have seen some decrease in both indicators, we have not reached our goal of 50% reduction for either indicator.

Maternal Mortality details:	2014	2015	2016	2017*	2018*	2019	2020	2021
Actual # of maternal deaths	6	5	7	6	1	9	4	4
MMR/100,000 live births	77	66	87	74	12	113	51	51

\*2017 and 2018 data collected by OHW team, all other years collected by external assessment team

Between 2014 and 2021, the maternal mortality decreased by 34%

<b>Neonatal mortality details:</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017*</b>	<b>2018*</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
actual # of newborn deaths	43	73	82	27	49	38	50	30
NMR/1,000 live births	5	10	10	3	6	5	6	4

\*2017 and 2018 data collected by OHW team, all other years collected by external assessment team

Between 2014 and 2021, the neonatal mortality decreased by 20%

**Complete Our External Program Evaluation:**

Dartmouth College in the United States and Social Sciences Baha in Nepal have completed the second phase of data collection and are in the process of completing the data analysis process and report write-up. Unlike the first phase of data collection which was performed remotely via telephone due to COVID, data was collected in person during this phase. The 2-person research teams traveled to the four districts of Sankhuwasabha, Dhading, Baglung and Pyuthan (the selected study areas) and interviewed mothers, stakeholders and health workers. The teams also performed a readiness assessment of the health facilities within these study areas. We are on track to submit the final report in Q1 2023.

**Document Our Impact:**

In 2022, One Heart has made substantial advancements toward documenting our impact through both professional publications and increased organizational visibility. As mentioned earlier in the report, we were honored to have been accepted as a member of the Innovations in Health network and the CORE network and look forward to exploring collaboration potentials with other members. The University of Rochester presents a unique opportunity to expand our research-focused partnerships with research institutes and universities specifically to develop and document MNH-focused research studies in Nepal. Dr. Jose Perez-Ramos who leads the PR Lab at the university has partnered with One Heart Worldwide since 2017 to explore mobile health interventions in Nepal. Last but not least, we submitted two manuscripts for publication in peer-reviewed journals, one looking at MNH service utilization during the COVID pandemic in our program districts (currently under review) and the other about our work with Medical Aid Films which was published in [Women’s Health](#). We also submitted 4 abstracts for oral presentation at professional conferences. We are pleased to report that one of these abstracts (representing the Network of Safety model) was accepted for an oral presentation on existing Networks of Care at the International Maternal Newborn Health Conference in South Africa.

**APPENDIX 1: Program status as of December 31,2023**

Districts	Program status as of December 31,2022	% of program completion
Baglung	Program completed	100%
Dolpa	Program completed - Additional quality of care activities	100%
Dhading	Program completed	100%
Sindhupalchok	Program completed	100%
Bhojpur	Program completed	100%
Taplejung	Program completed	100%
Khotang	Program completed	100%
Panchthar	Program completed	100%
Terhathum	Program completed	100%
Sankhuwasabha	Program completed	100%
Okhaldhunga	Program completed	100%
Ilam	Program completed	100%
Solukhumbu	End of year 1 transition	100%
Ramechhap	Implementation completed	100%
Nuwakot	Implementation completed	100%
Udaypur	Implementation completed	100%
Dolakha	Implementation completed	100%
Kavrepalanchok	Implementation completed	100%
Sarlahi	End of year 2 Implementation	80%
Myagdi	End of year 2 Implementation	80%
Parbat	End of year 2 Implementation	80%
Salyan	Delayed - year 1 implementation not completed	30%

Rautahat (T)	Delayed - year 1 implementation not completed	30%
Rukum west	Delayed - year 1 implementation not completed	30%
Bara (T)	Delayed - Setup not completed	0
Mahottari (T)	Delayed - Setup not completed	0
Kalikot	Delayed - Setup not completed	0
Dailekh	Delayed - Setup not completed	0

\* In Kavre, we are focusing our work on 7 rural Palikas who do not currently benefit from any other maternal and newborn health interventions, specifically: Khanikhola, Mahabharat, Roshi, Bethanchok, Chaurideurali, Temal, and Bhumlu.

\*\* The five year project agreement signature process delayed our program in our new districts by approximately 6 months