## Targets and progress of partners in FY2021

#### Partners (Activity area supported by our company)

Local healthcare issues

#### Japan Heart (Cambodia)

The Pol Pot regime (1970s) slaughtered 1/4 of the population, who were mainly intellectuals including doctors and teachers, and only a few 10s of doctors survived after the collapse of the administration. Subsequently, in order to solve the shortage of doctors, the government adopted a policy of having medical students graduate after 1 year and engage in medical care, and medical care collapsed because physicians who were inexperienced in both technique and knowledge undertook the tasks of medical care. The level of medical care in Cambodia is still lower than in surrounding countries, and there are few equipped medical institutions, and therefore the development of medical personnel is a major issue. Japan Heart Children's Medical Center, which was established by Japan Heart in 2016, provides medical care to the poor, free of charge, and also develops local medical personnel. Without this center, the poor in the community would not have access to advanced health care. The number of patients is increasing year by year, and this medical center is faced with a shortage of necessary medical devices and failures of existing devices.

#### FY2021 plans

#### Donate inspection equipment for detecting jaundice early in newborns, and Jaundice phototherapy equipment and other devices

We will donate new testing equipment due to the repeated failures of bilirubin\*5 analyzers, which are currently in use and necessary for diagnosing jaundice. We will also donate the latest highly safe phototherapy equipment necessary for treating jaundice. Furthermore, we will donate medical equipment necessary for controlling the body temperature of newborns.

 Enable the facilities for newborns (approximately 600 babies per year) born in hospitals located in the Ponnel District, Kandal Province, to provide screening tests for high bilirubin, and jaundice phototherapy early and safely.
Enable treatment of newborns born in public hospitals in the same region who require respiratory support or body temperature management soon after birth.

KPI Number of cases in which newborns requiring jaundice treatment were detected early and highly safe phototherapy was performed/ Number of treatments under appropriate body temperature control for newborns in need of body temperature management after birth.

- \*5 Bilirubin...A yellow pigment formed by the breakdown of hemoglobin in stale red blood cells
- Provide training to local healthcare professional to ensure that they can treat newborns who need respiratory support or body temperature management soon after birth.

KPI Number of local healthcare professionals who are able to provide adequate respiratory support and body temperature management for newborns

#### FY2021 progress

The donated testing equipment was used not only for testing all babies who were delivered and hospitalized, but also for babies who had concerning levels of bilirubin at cooperating public hospitals during the period when hospitalizations were suspended due to the spread of novel coronavirus infections. We received the following report from Japan Heart: "We were able to confirm our patients' safety by using the donated measuring equipment. We were able to avoid unnecessary blood collections based on the measurement values we obtained from the equipment. It also made it easier to perform evaluations after starting phototherapy. This has prevented the rise of bilirubin levels in our patients. Compared to the other equipment we've used so far, the donated equipment has become easier to use because it allows us to check median values and histories. In addition to our 53 inpatients, we were able to take measures for multiple outpatients as well."

The newly donated infant warmer (open incubator) is very easy to use and makes giving treatments easier since it warms up faster than any device we've used until now, and the treatment area is even larger. During the stays of obstetricians and gynecologists, the open incubator is also used for catching babies during cesarean sections.

Number of cases in which newborns whose body temperatures needed to be controlled were treated under appropriate temperatures after birth: 10 cases (in repeated use)

 We conducted training to local healthcare professionals to ensure that they could provide treatment for newborns who needed respiratory support and body temperature management shortly after birth. Three local healthcare professionals were now able to provide appropriate respiratory support and body temperature management for newborns.





# Support for students who aim to become healthcare professionals

For students who have demonstrated sufficient proficiency to proceed to a school of medicine or nursing, but have difficulty in entering school due to economic reasons of family, we help them learn and support them through a training period at the Japan Heart Children's Medical Center for 2 years after graduation. In FY2021, we are continuing our support for Cambodian nursing students, whom we have been supporting since FY2018.

KPI Nursing students advancing to the fourth year

The Cambodian nursing student we have been supporting since FY2018 advanced to her fourth year on November 15, 2021. She currently continues to take classes online due to the spread of novel coronavirus infections.

Not only does she have excellent grades, but she also actively participates in volunteer activities in the healthcare field on days when she does not have class. Although she is not yet healthcare professional, she is looking for things that she can do as a student in order to "deliver medical care to areas where medical care cannot be delivered," and she has grown to become a very reliable presence.



# Environmental improvement around Japan Heart Children's Medical Center (improvement of the sanitary environment during the rainy season)

The garden around Japan Heart Children's Medical Center is not maintained, and puddles form during the rainy season every year. Water that remains for a long time leads to an outbreak of mosquitoes. In addition, the road becomes muddy, and the feet of the patients and their accompanying families become soiled easily, and the floor in the hospital also becomes soiled. To solve this problem, the sanitary environment around the hospital will be improved by creating a waterway to draw water from places where water tends to accumulate and direct it to a sewer, and by paving the gravel road in front of the hospital.

Improvements have been made to the environment around Japan Heart Children's Medical Center, which has reduced the amount of vibration felt when using a wheelchair and has made things more convenience. Up until now, dust soared up and entered the hospital on sunny days, and when it rained, it was dirty with mud all the way to the entrance. However, since being paved, the environment around the center has been kept clean. Even after it rains, the feet of patients and staff have become less likely to get dirty, and the areas inside the hospital are kept clean and comfortable. In addition, since it became possible to secure waterways, drainage has been improved and it is now possible to prevent water from accumulating for long periods of time. The sanitary environment has also been greatly improved.



#### Partners (Activity area supported by our company)

Local healthcare issues

#### People's Hope Japan (Myanmar)

In rural areas of Myanmar, the maternal mortality rate and the newborn mortality rate are higher than in urban areas. As for the use of basic maternal and child health services, there are large regional disparities between urban and rural areas, and economic factors and access environments have major impact. In rural areas, approximately 2400 pregnant women (2017) and approximately 22,000 newborns (2018) have lost their precious lives in one year. It is reported that the major causes are the following three points: delay of awareness, access, and care. To prevent these, it is necessary to improve the knowledge and health behaviors of the residents as well as the environment and quality of services among health service providers and the capacity of health authorities to manage local health systems.

#### FY2021 plans

#### Skill monitoring of midwives and assistant midwives (second)

Continuing from FY2020, we will conduct a second skill monitoring to determine whether the knowledge and skills learned are being utilized in clinical practice, and to measure the degree of establishment and improvement. We also plan to conduct training of committee members for maternal and child health promotion according to local needs.

KPI Perform skill monitoring using assessment sheet

#### Training after graduation of midwives and refresher training of assistant midwives

We will conduct the training which was scheduled for FY2020 as soon as the local environment is prepared.

KPI Conduct the training (3-5-day training programs in cooperation with the local health authorities)

\* This may be changed to more emergency assistance, depending on the situation and changes in Myanmar after February 2021.

#### FY2021 progress

Since February 2021, the domestic situation in Myanmar has been challenging, and the planned skill monitoring for midwives and assistant midwives, postgraduate training for midwives and refresher training for assistant midwives could not be implemented, so a decision was made to postpone the training to the next fiscal year. Instead of the original plan, we trained maternal and child health promoters (volunteers) to serve as a bridge between local residents and health services.

In March 2022, we conducted training for volunteers in two sessions on subjects such as prenatal checkups, neonatal care and signs of danger during pregnancy, and trained 60 maternal and child health promoters in 13 villages. The third training is scheduled to be held in May 2022 (25 people from 6 villages). We will continue to train them in order from the villages where needs and safety have been confirmed. Maternal and child health promoters who have been trained work closely with each expectant and nursing mother and conduct activities such as health education and home visits to pregnant women while ensuring safety.



Maternal and child health promotion staff's activities in the village (\*The photograph is an image of their activities. Photo taken in August 2019.)

#### Partners (Activity area supported by our company)

Local healthcare issues

#### Japan Committee, Vaccines for the World's Children (Bhutan)

Bhutan does not yet have the ability to prepare all the vaccines needed in their country, and some children die from vaccinepreventable infections. Also, there is not enough vaccine refrigerators to access the vaccine.

#### FY2021 plans

### Provision of DPT (diphtheria/pertussis/tetanus) vaccines for 53,500 people

(100% elimination of the shortage of vaccines for two-yearold children)

- Provision of hepatitis B vaccines for 9,000 people (100% elimination of the shortage of vaccines for infants within 24 hours of birth)
- Provision of TD (tetanus/diphtheria) vaccines for 69,482

(Pregnant women: 2 times during first pregnancy, then once per pregnancy.

Children: Elimination of 56% of the shortage of 2 vaccinations)

Provision of 5 vaccine refrigerators

KPI Number of vaccines and vaccine refrigerators supplied

#### FY2021 progress

- 96% of two-year-olds received the DPT vaccine (The target vaccination rate was over 95%). We were also able to systematically provide on-site vaccinations to nomadic children and others.
- 96% of newborns received the hepatitis B vaccine (The target vaccination rate was over 95%).
- 96% of children and 92.8% of pregnant women received the TD vaccine (The target vaccination rate was over 95%). Mass vaccination was also carried out systematically at schools and other areas.
- The refrigerated warehouses for vaccine storage that our company has supported have been installed at the following five facilities and are still in use:
  - 1. Mongar hospital
  - 2. Lhuentse hospital
  - 3. Paro hospital
  - 4. HongtshoPHC, Thimphu
  - 5. GhummauneyPHC, Samtse

All of the vaccines we supported arrived in Bhutan by December 2021, and thanks to the well-organized support we received, we were able to secure stocks of vaccinations even in clinics located in remote areas and maintain a high vaccination rate at all times.





The activities of Future Code (supported area: Bangladesh), which we had been supporting in FY2020, were delayed until later than originally scheduled due to the impacts of the novel coronavirus infection and the severe national regulations. The newly planned hospital opened in December 2021, and we donated PCR testing equipment to the facility. As of May 10, 2022, a total of 31 PCR tests have been conducted to diagnose COVID-19. Out of those 31 subjects tested, 12 tested positive were treated, and the number of deaths from the positive tests was zero. The poor, representing 61% of the patients who received the PCR test were treated free of charge.



