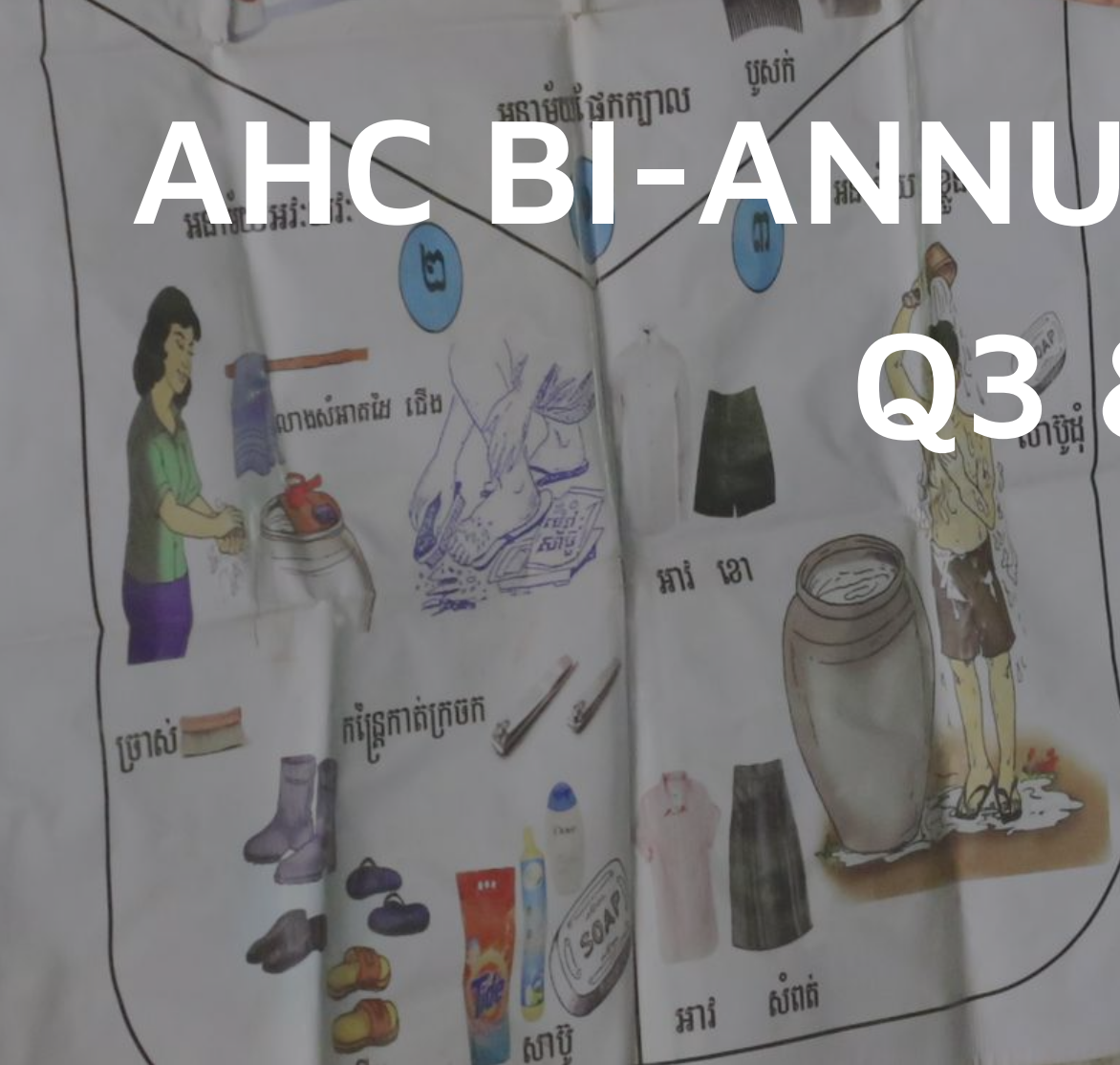




កម្មវិធីកសាងសមត្ថភាព
និងអប់រំសុខភាព
Capacity Building and Health Education Program

អនាម័យ នាំមកនូវសុខភាពល្អ



ពេលវេលាដែលត្រូវ

- ♥ ដៃមើលឃើញប្រឡាក់
- ♥ ក្រោយពេលចេញពីបង្គន់
- ♥ មុននិងក្រោយប្រើប្រាស់ទូទឹក
- ♥ មុននិងក្រោយប្រើប្រាស់ទូទឹក

AHC BI-ANNUAL IMPACT REPORT Q3 & Q4 2021





JULY TO DECEMBER 2021 AT AHC

In the last six months of 2021, AHC experienced significant milestones and challenges.

In early July, AHC saw its first paediatric COVID-19 patients in the ICU. As the number of COVID-19 positive patients and staff increased, a dedicated COVID-19 ward and care team was set up. Many AHC staff were forced to isolate from exposure or testing positive themselves, which led to many units being short staffed.

Patients and their families also felt the strain of the pandemic with further restrictions such as lockdowns, school closures and curfews put into place by the Cambodian government and local authorities, leading to further financial hardships, fear, and delays in care.

Between July - December 2021:



1,978

patients, families and staff
were tested at AHC



58

patients, families and staff
were treated in the ward

By the end of September, Cambodia's Prime Minister lifted restrictions nationwide in order to restart the economy. In November, schools reopened nationwide and in December, international travel without a mandatory two-week quarantine was permitted again.

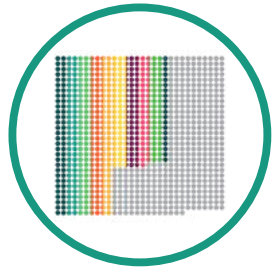


Fortunately, Cambodia has begun to operate near normalcy with precautions in place, as the government's ambitious vaccination campaign rolled out quickly and effectively. By the end of 2021, 98% of Cambodia's adult population and 75% of children five years old or older were fully vaccinated. Booster shots continue to be rolled out across the country, with many having already received their fourth booster shots.

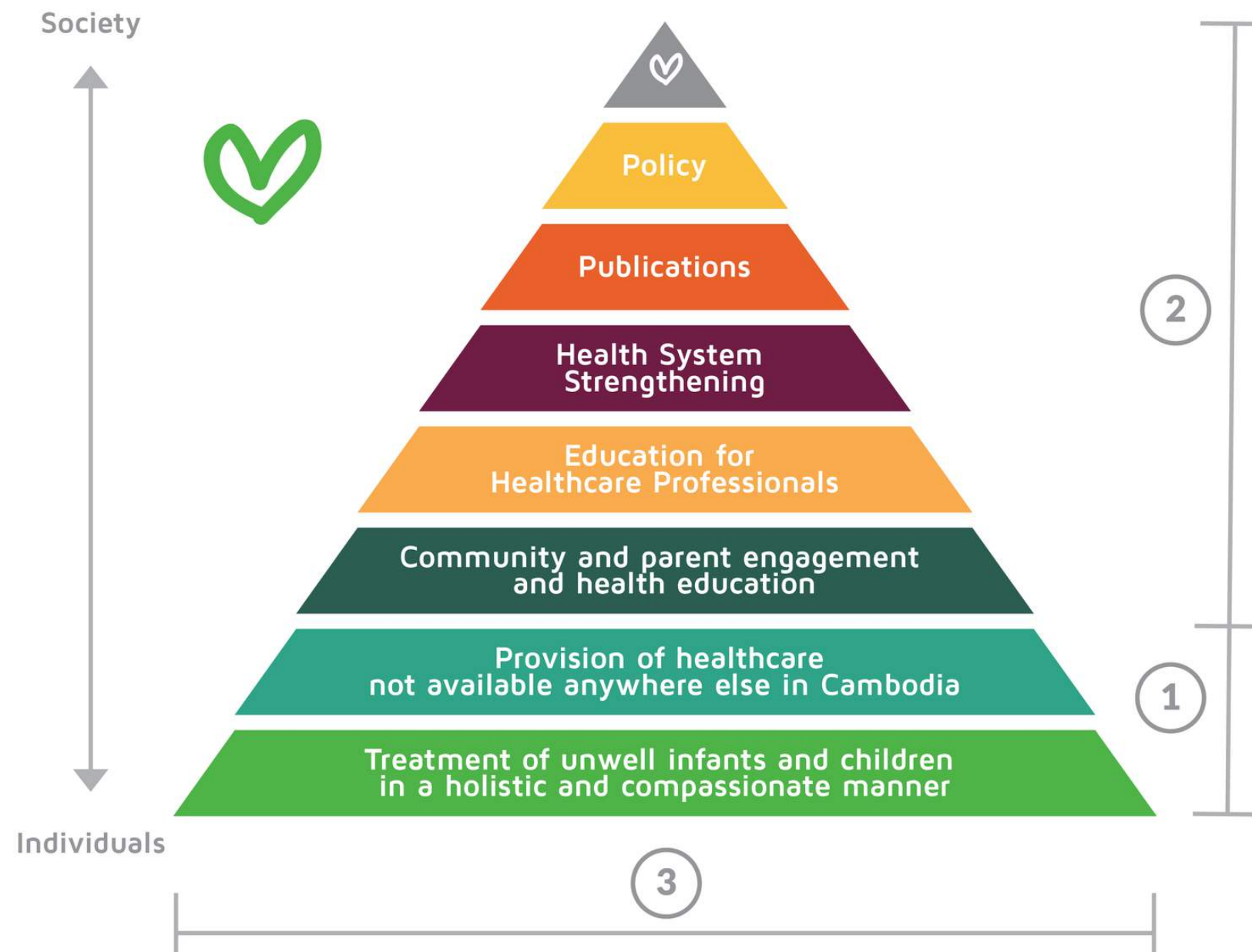
Despite the challenges of the pandemic, AHC took an exciting step towards local sustainability, and for the first time in its history, is a locally led and managed organisation. Dr Ngoun Chanpheaktra, AHC's Hospital Director, has stepped up to manage all aspects of AHC, from medical service delivery, education, operations, to organisational strategy. AHC's former CEO, Prof Claudia Turner, is supporting Dr Pheaktra during this transition. Furthermore, Mr Soum Sambath, who has been an active supporter of AHC for the past 20 years, was elected to be AHC's new president of the Board of Directors.

The knock-on effects of COVID-19 will continue to affect Cambodia. However, AHC remains committed to improving healthcare for all Cambodia's children by providing compassionate medical care wherever they live and whatever their ability to pay.

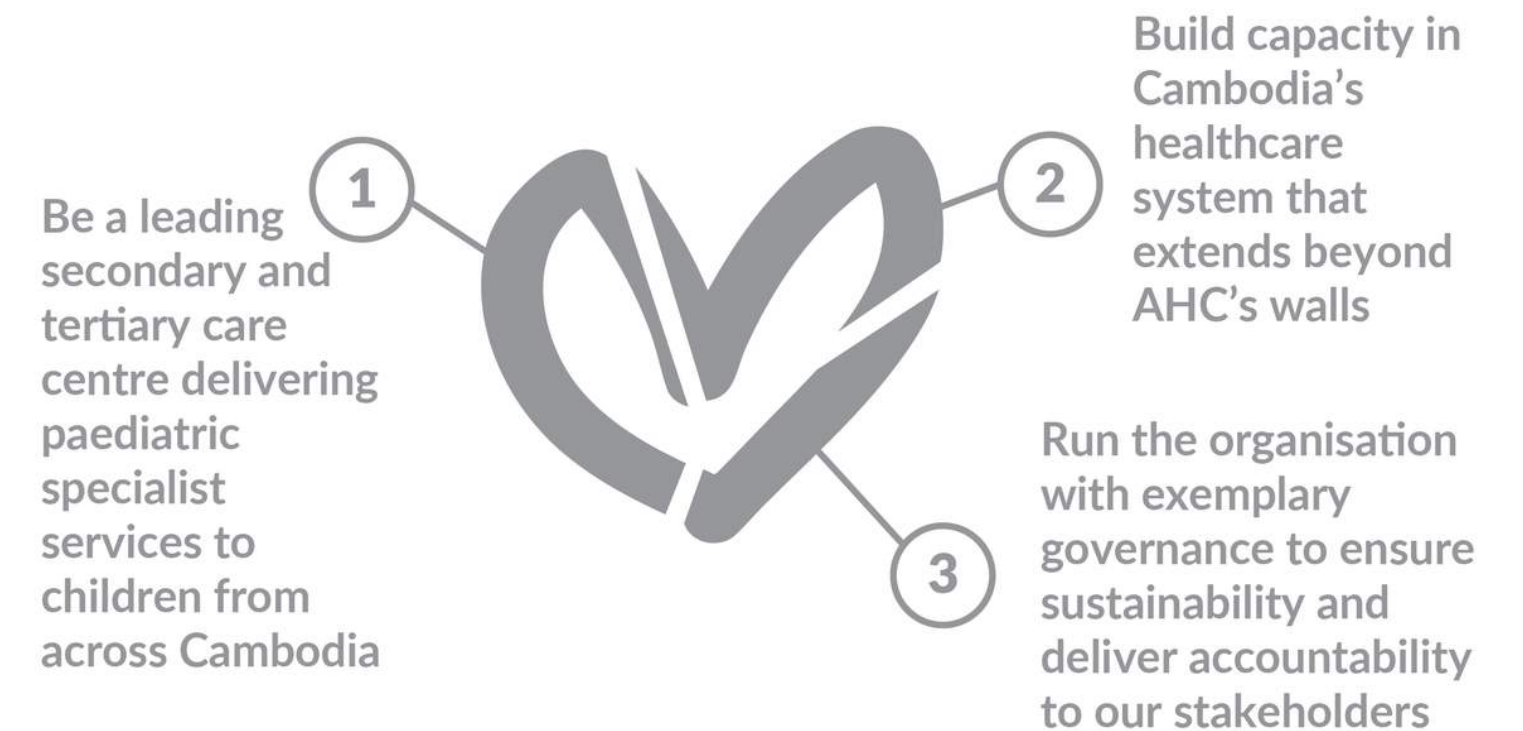
Thank you.



AHC'S IMPACT MODEL



OUR STRATEGIC GOALS





PUBLICATIONS

THE WIDEST REACH OF KNOWLEDGE DISSEMINATION

AHC's commitment to evidence-based knowledge and data-based analysis results in robust research that solves national and international challenges in paediatric healthcare. Our research, regularly published in international, peer-reviewed journals, informs the hospital's provision of care, contributes to the national dialogue on pressing healthcare issues, and influences child health on a global scale.





INTERNATIONAL PUBLICATIONS PUBLISHED JULY ~ DECEMBER 2021:

"Combination of inflammatory and vascular markers in the febrile phase of dengue is associated with more severe outcomes."

Elife 2021

"Grandparent caregiving in Cambodian skip-generation households: Roles and impact on child nutrition."

Maternal & Child Nutrition 2021

"Community Understanding of Stillbirths and Neonatal Deaths in Cambodia: Family Education and Communication is Vital to Improve Outcomes."

Cambodia Journal of Public Health 2021

"Candidates' and policymakers' perspectives on the needs for a master's program in nursing."

Nurse Educ Today 2021

"Saving babies' lives (SBL) – a programme to reduce neonatal mortality in rural Cambodia: study protocol for a stepped-wedge cluster-randomised trial."

BMC pediatrics 2021

"Indirect Effects of COVID on Oncology Patients."

J Pediatr Hematol Oncol 2021

"Improving empiric antibiotic prescribing in pediatric bloodstream infections: a potential application of weighted-incidence syndromic combination antibiograms (WISCA)."

Expert review of anti-infective therapy 2021

"Work hours and overtime of nurses working in Cambodian hospitals."

Int Nurs Rev 2021



HEALTH SYSTEM STRENGTHENING

BUILDING ORGANISATIONAL CAPACITY

AHC provides tailored training, technical support and ongoing mentorship to healthcare workers along the continuum of care to increase access and improve quality within the healthcare system. We ensure the support provided in referral hospitals, health centres, health posts, and villages equips and empowers healthworkers with the skillsets needed to carry out training within themselves, ultimately, ensuring sustainability.



HIGHLIGHT:

Successfully putting new neonatal care training to the test

“

Vany is my miracle. She was born so small but now she is bigger and growing every day, developing well like other children. I want to say thank you so much to everyone at the NCU for their help in supporting my daughter to be healthy.

Navy
Vany's mother”

Back in November 2019, Navy, a 29-year-old mother-to-be from Srey Sonos Village in Preah Vihear Province, travelled 100km to January 16 Referral Hospital, as she felt she was in premature labour. There, she gave birth to her daughter, Vany. Vany was admitted to the Referral Hospital's newly installed Neonatal Care Unit (NCU) a day after she was born. Vany had complications from premature birth (30 weeks), including low birth weight. She weighed only one kilogram.



At the time of Vany's admission, AHC's Saving Babies Lives (SBL) team had just begun the first several months of mentorship sessions with the January 16 Referral Hospital team. The nurses at the NCU checked Vany for congenital abnormalities. They also knew they had to keep Vany warm under a baby warmer, and provide her with Continuous Positive Airway Pressure (CPAP) therapy to support her breathing. Vany also received intravenous antibiotics Ampicillin and Gentamycin, nasogastric feeding, and blood screening.

After two weeks, Navy was able to start breastfeeding Vany and her condition began to improve. Navy wanted to return home as soon as possible, as it is too difficult to be away from home for extensive periods of time. The team reluctantly discharged Vany, as long as Navy agreed to come back for a follow-up in one month.

One week later, AHC's SBL team returned to the referral hospital for a routine mentorship visit, and discovered Vany's case, and how she was discharged after only two weeks of care in the NCU. They explained to the team that it was too early for Vany to have been discharged and advised them to contact the family to advise them to bring her back to the hospital immediately. When they located the family, Navy said they lived too far to come back again. The team explained to her how important it is for Vany to come back to the hospital for proper care because she was too small.



Eventually, Navy returned to the NCU with Vany. After a few days, Vany was able to gain weight, become active and suck properly on the breast. Navy received education to prepare her to continue caring for her small baby at home, learning about topics such as breastfeeding and the importance of keeping her baby warm. SBL mentors supported NCU staff to teach her Kangaroo Mother Care (care method for premature babies involving skin-to-skin contact). AHC's SBL mentors and the referral hospital staff all felt content. Vany was discharged and had a successful follow-up one month later. This was one of the first cases where the January 16 staff had to put their new neonatal care training to the test and effectively advocate for the proper care, even though it was contrary to the mother's wishes.

In late 2021, pure delight erupted at January 16 Referral Hospital's NCU when almost two-year-old Vany returned to the unit to say hello. Navy had brought her to the hospital to treat a small wound on her foot and wanted to come by to visit the team that had helped her baby as an infant.

[READ MORE ON AHC LENS](#)

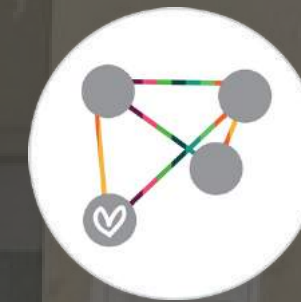
“

It is difficult to express how happy we are to see Vany. We are all just so happy. When she first arrived, I felt like the case was hopeless and that she would not survive. Our NCU had just opened and our knowledge was very limited. SBL mentors from AHC taught us how to care for babies directly by teaching mothers together about Kangaroo Mother Care and how to do it at home. Vany makes me so happy because she is our first case of such a small baby surviving at our hospital.

Sreylin
NCU Nurse at January 16 Referral Hospital

”

AHC'S IMPACT



28
health posts, health centres and
referral hospitals strengthened



PROFESSIONAL EDUCATION

**ADVANCING CAMBODIAN
INTELLECTUAL SUSTAINABILITY**

As one of the few paediatric teaching hospitals in Cambodia, AHC partners with government-run facilities, medical and nursing schools and private clinics to train students and healthcare staff in the highest standards of paediatric care. Since our founding, we've provided a comprehensive range of paediatric education programmes across disciplines and grades that allow healthcare professionals to go on to practice and teach in each of Cambodia's 25 provinces.



HIGHLIGHT:

Becoming the first Bunong midwife in her Bunong village

SreyPhem is a 21-year-old midwifery student, currently in her third year at Stung Treng Regional Training Centre. She comes from Ou Reang District, Mondulkiri Province, and is the youngest of five. Her family is of Bunong ethnicity, one of Cambodia's biggest indigenous minority ethnic groups.

The area now called Mondulkiri Province has been home to the Bunong for over two centuries. For indigenous groups such as the Bunong, modern resources and education is very scarce, and they strongly believe in spiritual and traditional healing methods.

From an early age, SreyPhem knew she wanted to help her rural district become safer and modernised. Watching her sister become a midwife and her brother work in a hospital, she naturally became curious about contributing to her community through healthcare.

Now in midwifery school, SreyPhem finds learning to deliver babies the biggest motivation to prepare to return to her village to keep women and newborns healthy and safe. Her biggest challenge is research, as modern technology is still new for her.

“

Everything in my hometown is limited and far away from each other. Growing up, I watched many women give birth and have their babies die because no one knew how to take proper care of the mother or the baby.

SreyPhem
Midwifery student

”



To complete her Midwifery Associate Degree, SreyPhem spent one week at AHC for her first internship. Because of COVID-19 restrictions, which included nation-wide school closures, AHC could not receive students between April and October. Once schools were re-open, AHC reduced its internship duration to one-week instead of two-weeks, to receive all midwifery students in Cambodia.

During her internship, SreyPhem learnt the process of registering patients, checking patients' temperatures, checking patients' internal status with a stethoscope, and intravenous insertion. Kao Chanmakara, AHC's Chief of Nursing Education, also challenged her and her fellow classmates with several assignments, regarding topics such as pneumonia.

"Because of COVID-19, my education and this internship were all delayed. When I finally got to come here, I was very nervous. Compared to what I learned and experienced before, everything at AHC is of higher quality, including procedures and patient care," shared SreyPhem. Her second and final internship will be at Mondulhiri Provincial Hospital, where she will learn about the government resources closest to her village.

SreyPhem has three months left before graduating, and plans to head right back to Ou Reang District. Although many in her community to go onto study midwifery, they all leave to work in bigger cities with better opportunities. Currently, there is only one male Bunong nurse and two midwives in her village, both Khmer. SreyPhem will specialise in baby delivery and work as a junior midwife with them, making her the only Bunong midwife in her Bunong village.

“

I am so grateful for this experience at AHC. I learned a lot of new things this week from the doctors and nurses here, especially the importance and impact of a warm welcome to all patients, treating them like they are your own family. My goal as a midwife will be to help my village move away from traditional styles of medicine and giving birth, to a modern and safer way to ensure my hometown be a happy community.

SreyPhem
Midwifery student

”



THE DATA



123
number of participants in short courses



118
medical and nursing students educated



18,468
total attendances of AHC staff at continuing professional education sessions



COMMUNITY EDUCATION

PREVENTATIVE EDUCATION FOR COMMUNITIES AND CAREGIVERS

AHC's community-based, holistic healthcare initiatives deliver health education, increase access to care, address rural health inequalities, and ultimately, improve health outcomes. We partner with key actors and stakeholders within communities to provide health awareness events, first aid trainings, health screenings and other interventions that educate and empower children, villagers, and community health workers to decrease preventable illness. In the hospital, AHC provides health education to caregivers of admitted patients to help them understand and address the underlying causes of childhood illnesses, as well as develop healthy habits and behaviours, through one-on-one and group sessions.



HIGHLIGHT:

Pushing for malnutrition education in the era of COVID-19

For AHC's Community team, 2021 was a year spent thinking outside the box, getting out of comfort zones, and trying new things to support rural communities in achieving improved health and nutrition. At this critical time, AHC continued to fight malnutrition in Cambodia's rural communities by providing cooking demonstrations, screenings for malnutrition, and nutrition education to teachers and families.

Saren is a 31-year-old farmer, living in Sleng Spean Village in Srei Snam District, Siem Reap Province. She and her husband, Pros, are farmers who are expecting their first child. Saren is currently seven months pregnant. The economic effects of the pandemic hit farmers like Saren and her family hard, and many ate their crops rather than sell them because of food insecurity in rural communities.



Prior to AHC's community work, Saren knew very little about nutrition and the differences in ingredients she uses when cooking. She learned about the importance of eating a mix of fish and meat, vegetables, and rice.

AHC's Nutrition Project Team Leader, Phoung Thy, is a trained nurse and has been working at AHC for the past 10 years. For Thy, his biggest achievement during the global pandemic has been successfully maintaining nutrition education as top priority.

“ Of course, hand hygiene and general health was the emergency. Still, we cannot afford to let parents forget about how to feed their children properly in order for them to get the right nutrients and vitamins for growth. Most parents still don't know what to do when their children are sick, and most continue to take them to a traditional healer.

Phoung Thy
AHC Nutrition Project Team Leader ”



Saren explained that during education sessions by AHC's community team, she learned about; the importance of different ingredients (such as fish, meat, eggs and green vegetables), how to cook nutritional porridge, and why children need to eat all food groups. Saren says that she found these lessons useful, not only for her child on the way, but in general everyday life to keep everyone in her family healthy.

“ I never knew about nutrition before and now I feel happy I can cook for my baby once he or she turns six months old. Usually, I just eat whatever I want or what is prepared for our whole family. Now I know that I should eat all food groups during my pregnancy to make sure my child grows well inside my belly. I think I don't eat enough fish or meat.

Saren
Mother-to-be in Sleng Spean Village ”




Yet, these lessons were not easy for AHC's community team to spread in the community. As Cambodia struggled to prevent the surge of community cases, prevention measures such as travel bans, gathering limits and school closures forced the team to adapt and find new ways of delivering key messages.

“ When COVID-19 hit Cambodia's rural communities, we maintained social distancing, explained how the virus spread, and halved our group size for nutrition education and porridge. Before the pandemic, we used to gather around 30 people at a time. Furthermore, instead of gathering villagers in one meet-up location for nutrition screening, our team went door-to-door. I'm proud of my team for the extra hard work this year.

Phoung Thy
AHC Nutrition Project Team Leader ”

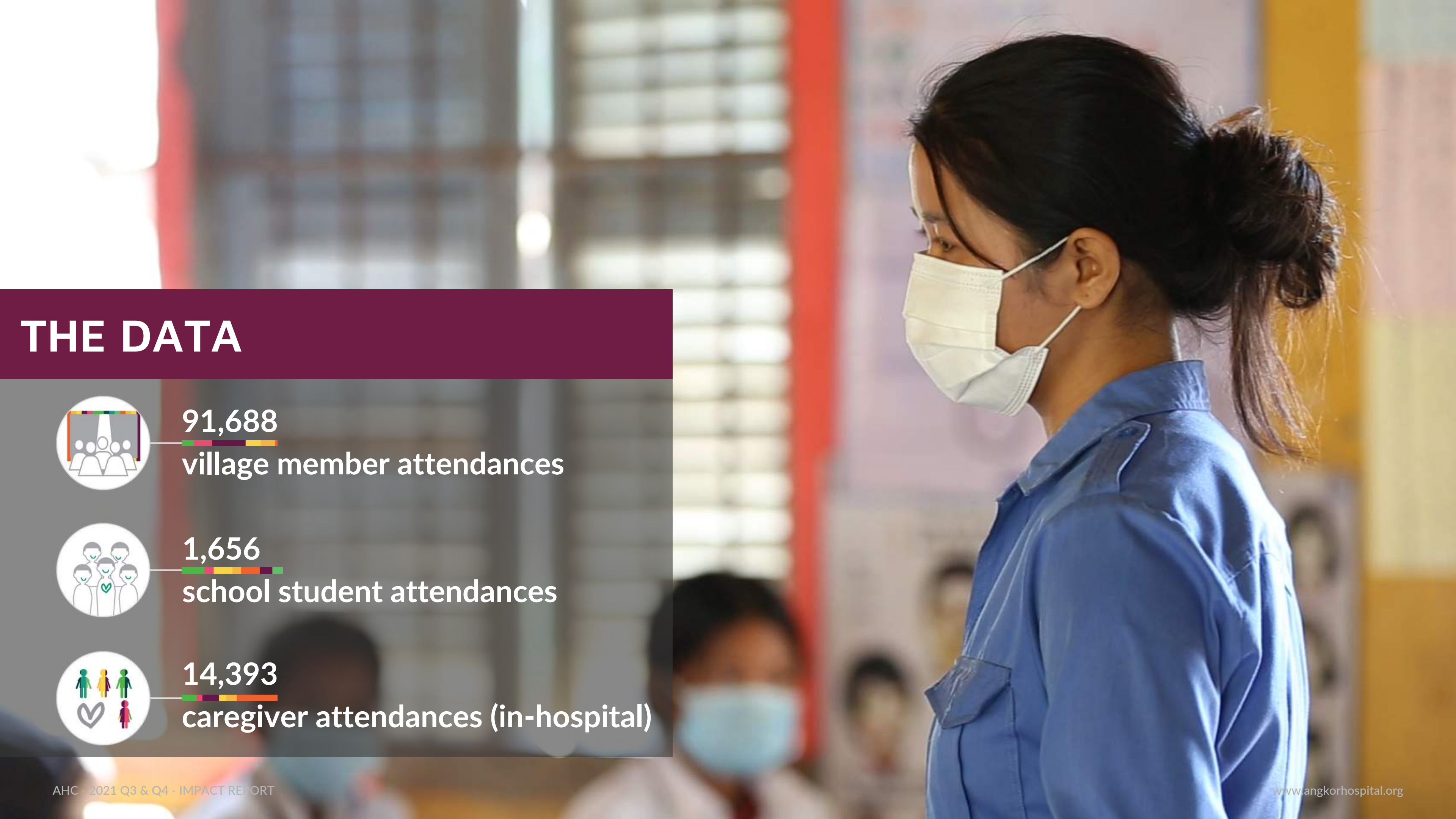




“ Parents in rural communities believe that having very thin children is normal. They only start to get concerned when they realise their children are sick, because in fact, they are malnourished. Our team makes sure to visit communities repeatedly to spread the knowledge about the importance of proper nutrition for their children.

Phoung Thy
AHC Nutrition Project Team Leader

”



THE DATA



91,688
village member attendances



1,656
school student attendances



14,393
caregiver attendances (in-hospital)



SPECIALTY SERVICES

PROVIDING SECONDARY AND TERTIARY SERVICES AVAILABLE NOWHERE ELSE

AHC prioritises treatment of paediatric sub-specialities, a strategic response to the needs presented amongst patients and gaps within the country's healthcare system. This specialty care includes treatments in tertiary facilities, like neonatal and intensive care, as well as outpatient-based specialty services, like oncology, cardiology and neurology.

As one of the only healthcare organisations providing this service, we're establishing its importance to drive progress in specialty and routine service provision.



HIGHLIGHT:

Fighting leukaemia while COVID-19 positive

Five-year-old Ningning lives in Kampot Province with her mother, Srey Po, father, Sathya, and nine-year-old brother, Pros. Ningning's family is native of Pouk District in Siem Reap Province, having moved to Kampot six years ago to find better opportunities. Currently, Sathya works as a gas station attendant.

In mid-2020, Ningning developed a fever and bruises on her body. The local clinic where Srey Po took Ningning told them Ningning had to go to a children's hospital immediately. As Siem Reap is the family's hometown, the first hospital they thought of was AHC. Srey Po and Sathya travelled over 400km to bring Ningning to AHC for diagnosis.

Ningning's full blood count result showed low white blood cell, hemoglobin and platelet counts, leading AHC's oncology specialists to suspect leukemia. They performed blood film to detect leukemic cells. To confirm, they followed up with flow cytometry and detected pre B cells, confirming the diagnosis as Acute Lymphoblastic Leukemia (ALL).



“

I was relieved because Ningning started looking and feeling better as soon as we arrived at AHC. Her bruises and fever disappeared. Then we found out AHC is specialised in the cancer Ningning has. We were first nervous and scared, but soon knew we could rely on the doctors here and follow their instructions for Ningning's treatment.

Srey Po
Ningning's mother

”

ALL is a type of blood cancer where the bone marrow progresses rapidly to create uncontrolled immature white blood cells, as opposed to mature ones. Immature white blood cells stop children from fighting bacteria, fungi, and viruses.

Children with ALL receive five rounds of chemotherapy over the course of three years. Upon diagnosis, Srey Po and Ningning stayed at AHC for one-month for the induction phase of chemotherapy, following up with the intensification phase, re-induction phase and continuation phase. Ningning successfully returned every two months for her continuation phase of chemotherapy treatment.



In late July, while traveling from Kampot Province to AHC for a routine chemotherapy treatment, Ningning developed a high fever and rough coughs. Ningning tested positive for COVID-19 upon arriving at AHC and was transferred to AHC's COVID-19 ward.

Oncology patients have very weak immune systems and are vulnerable to neutropenic fever, which increases risk of infection. Blood tests showed that Ningning had a low white blood cell count with neutrophils level less than $0.5 \times 10^9/L$. With her white blood cell count so low, AHC's oncology specialists decided to pause chemotherapy while she received the antibiotic Meropenem and kept her under close observation.

“

Neutropenic fever is always very concerning for our oncology patients. As we had no prior experience with COVID-19 positive oncology patients, we paid special attention to Ningning's condition and recovery. We are glad she is doing better now.

Dr Sam Lyvannak
AHC's Oncology Specialist

”



Eventually, Ningning's fever went down and her condition improved. A second PCR test showed she was still COVID-19 positive, so she remained isolated in the ward for another 16 days. After she fully recovered from COVID-19, she was discharged. Ningning returned in two weeks for further blood tests, before resuming her continuation phase of chemotherapy.

Ningning is currently halfway through her 97 weeks of treatment. Dr Vannak is confident Ningning can persevere and finish treatment by the beginning of January 2023.

“AHC and the doctors and nurses here are amazing. I trust their skills with my family's lives. Everyone working here is so warm and caring. They treat us not as their duty but from a will deep from their hearts.

Srey Po
Ningning's mother”



THE DATA



2,245

patients received inpatient specialty care



4,271

patients received outpatient specialty care

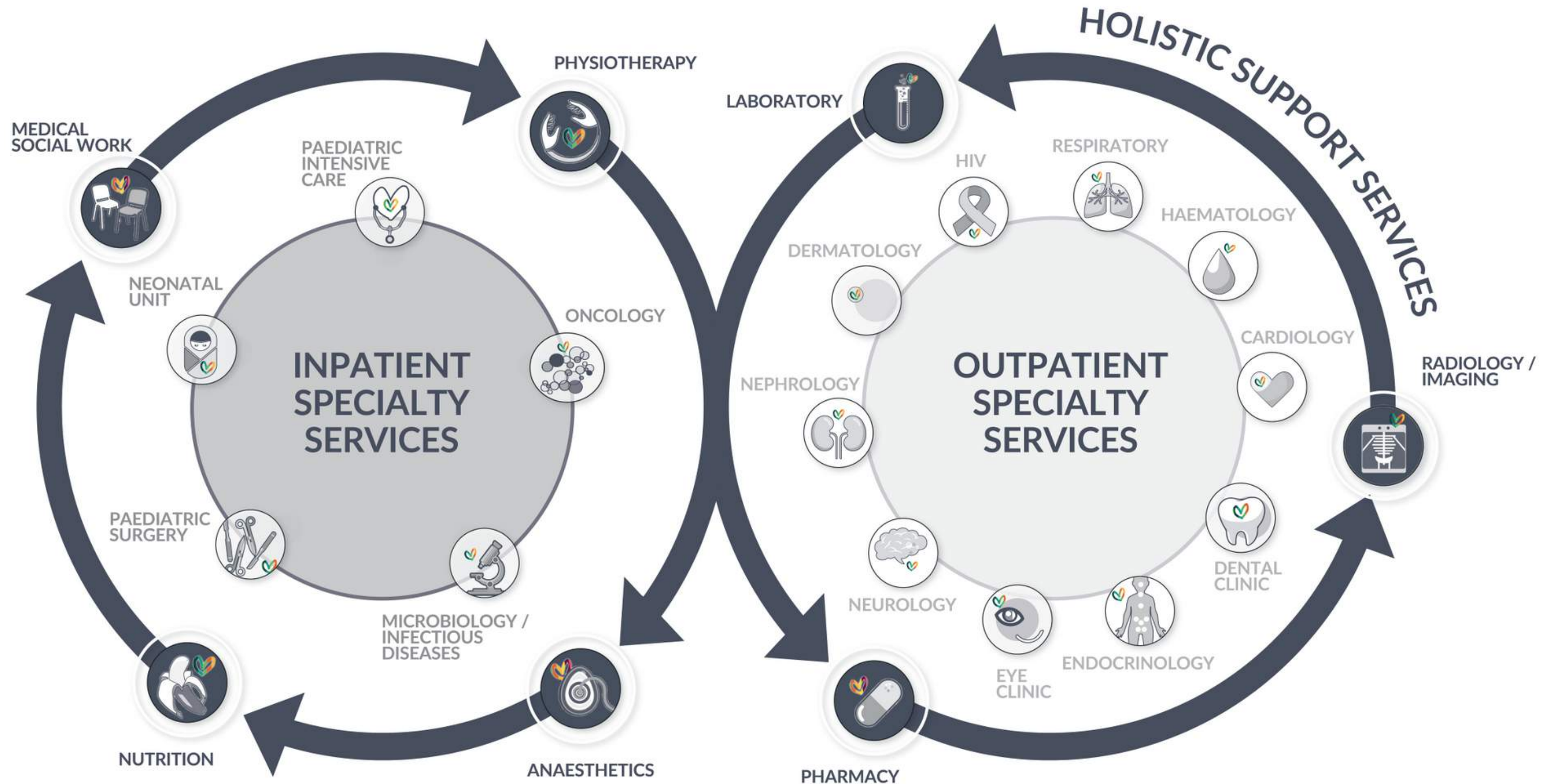


6,518

total number of patients received specialty care



AHC SPECIALTY MODEL





QUALITY CARE

HOLISTIC, COMPASSIONATE CARE FOR ALL

Since AHC's founding, the organisation's vision has remained: that all Cambodian children have access to quality, compassionate medical care, wherever they live and whatever their ability to pay. Between our 19 interconnected departments, we provide over 135,000 quality treatments annually to patients from each of Cambodia's 25 provinces – delivered by staff who treat each patient as their own.





HIGHLIGHT:

From a small cut to a leg infection

Vichea is a four-year-old boy who lives in Bavel District, Battambang Province, around 150km west of AHC. His father, Oudom, is a carpenter and his mother, Sreylay, is a housewife who takes care of Vichea and his two-year-old brother, Vibol. Oudom supports his family with an average income of five dollars a day from his woodwork.

In late December 2021, Vichea was playing outside with his friends as he usually does. Unfortunately, this time, he fell off his bicycle. Oudom and Sreylay did not think much of the fall, as Vichea only got a minor cut on his right leg.

Over the next ten days, Oudom wrapped his son's cut with traditional herbs found around his village. He believed that the herbs would help the wound heal itself.

Vichea's condition got worse; he could no longer walk, play, or eat. Vichea could not control his irritable cries. Oudom noticed that Vichea's temperature kept rising. The traditional herbs had infected Vichea's small cut.

Oudom and Sreylay did not know what to do, nor did they have any savings to bring their son to a hospital. Desperate, Oudom called his brother who lives in Siem Reap for advice, who recommended they go to AHC for the best treatment, no matter the ability to pay. The family took a two-hour bus ride to AHC right away.



Upon arrival, an AHC nurse noticed Vichea as his irritable cries were so severe. The nurse saw that Vichea had an unusual wound that needed immediate attention. He was quickly transferred to AHC's Surgical Unit for examination.

AHC's surgery team conducted a head-to-toe examination and suspected osteomyelitis (infection in long bones in the leg), due to the severe swelling, redness and abnormality in Vichea's lower right leg. Therefore, the team ordered tests for blood cultures, as well as an ultrasound and X-ray for the right leg. The team knew they had to take Vichea to the operating room immediately.

As the team detected pus in the bone, they performed an incision and drainage with bone window, which took one hour. Surgeons used a surgical irrigation system to supply serum and antibiotics, Ceftriaxone and Cloxacillin, into the bone. After removing all pus out of the bone, the incision was quite long.

“ I was so worried and terrified. I thought the doctors would have to cut off his leg. I never experienced any of my family members in this situation before

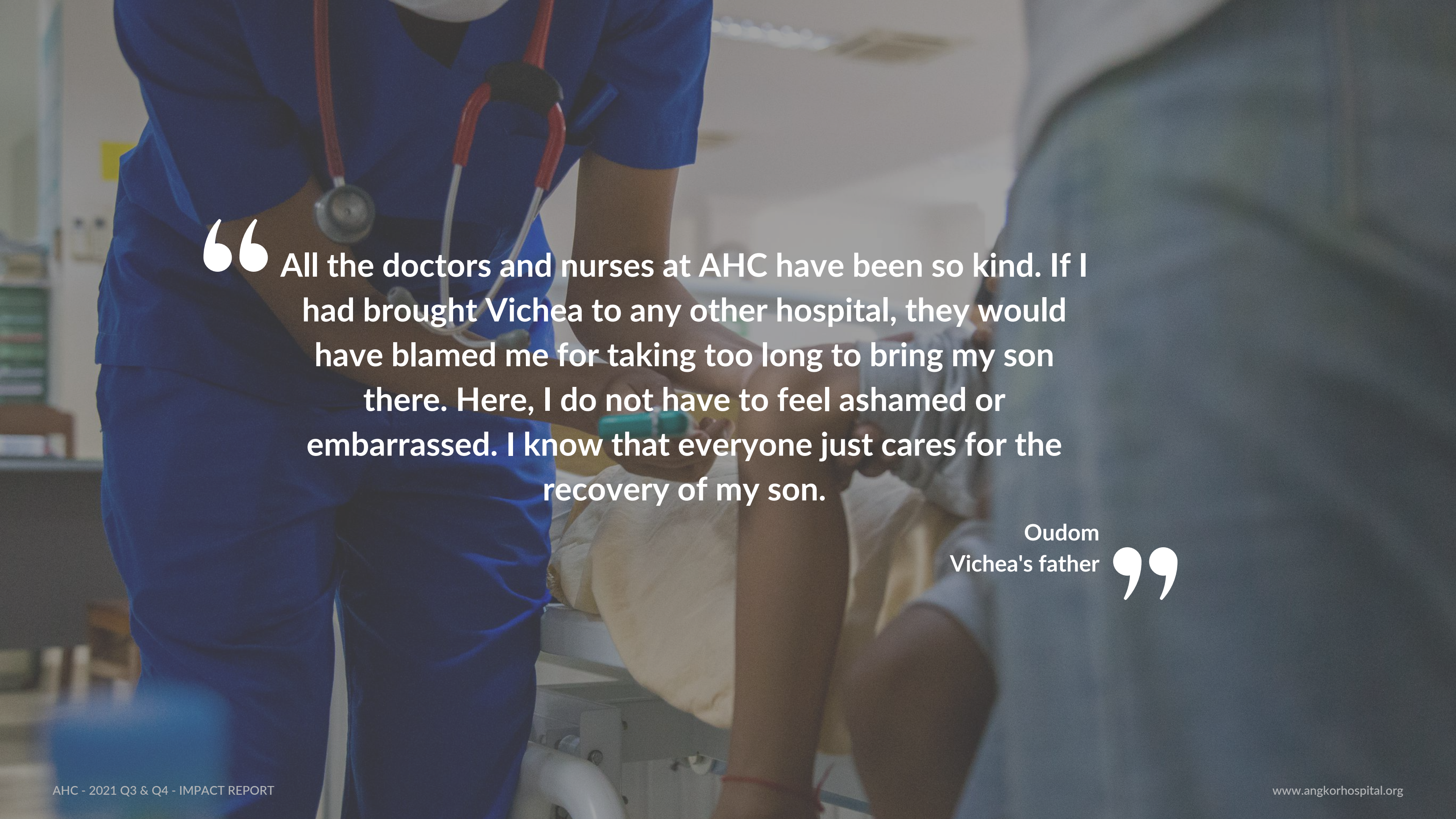
Oudom
Vichea's father ”



48 hours after AHC's surgical team performed the incision and drainage with bone window, results of the blood and pus culture tests showed staphylococcus aureus, a bacterium that commonly causes osteomyelitis. Vichea continued to receive the broad-spectrum antibiotic Cloxacillin through intravenous to fight the bacterium. It took one week for Vichea to feel better again. He started to smile again, eat and play as he had before his accident. His fever subsided and his temperature went back to normal.

As per AHC's guidelines for osteomyelitis, patients need to stay in AHC for two weeks to complete intravenous antibiotic treatment. For Vichea, AHC's surgeons added one more week of admission due to concerning blood culture growth.

[READ MORE ON AHC LENS](#)



“ All the doctors and nurses at AHC have been so kind. If I had brought Vichea to any other hospital, they would have blamed me for taking too long to bring my son there. Here, I do not have to feel ashamed or embarrassed. I know that everyone just cares for the recovery of my son.

Oudom
Vichea's father

”

AHC'S IMPACT



25,187

total patients treated between
July - December 2021

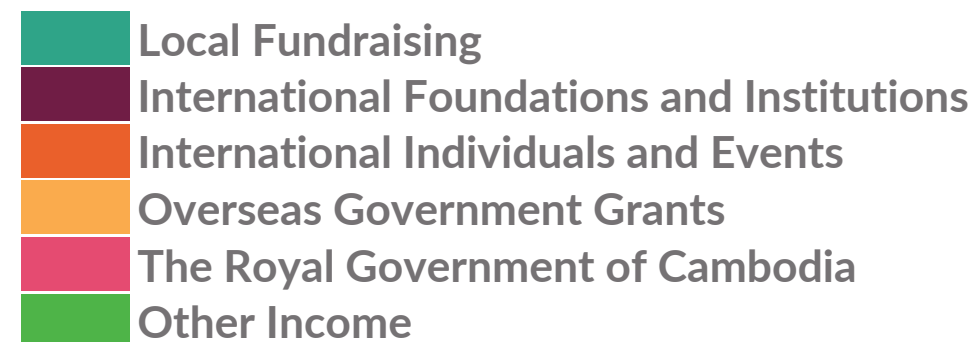
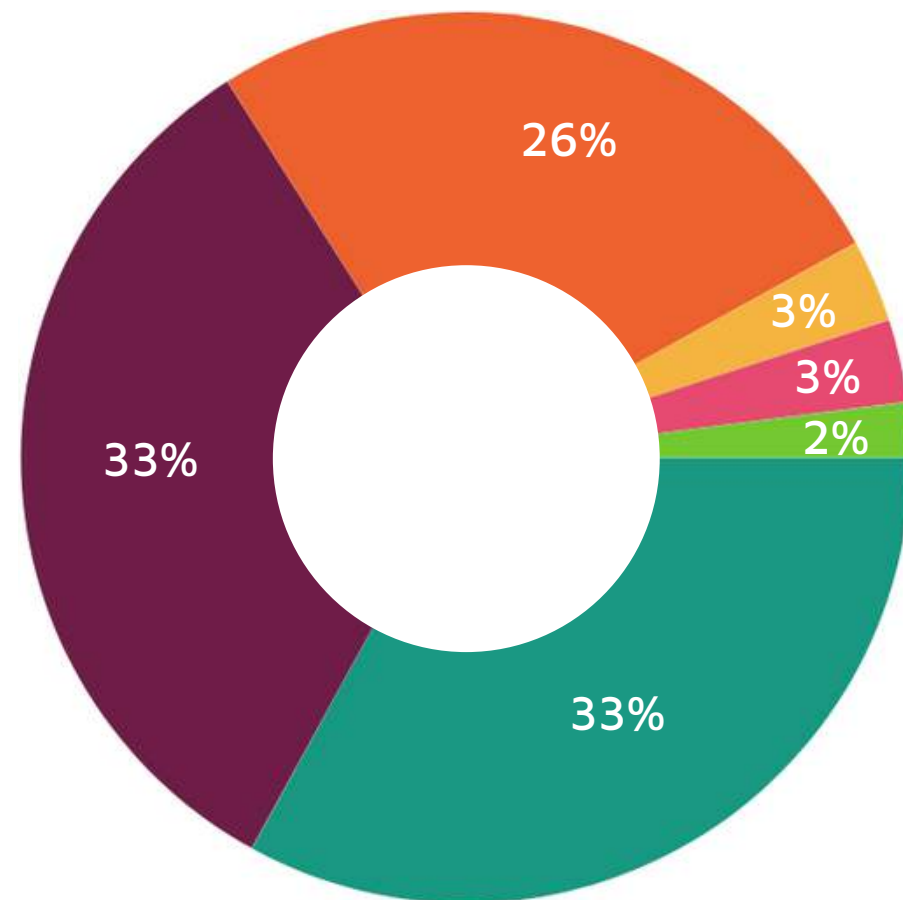


FINANCIALS

Source of Funds

Total funds raised

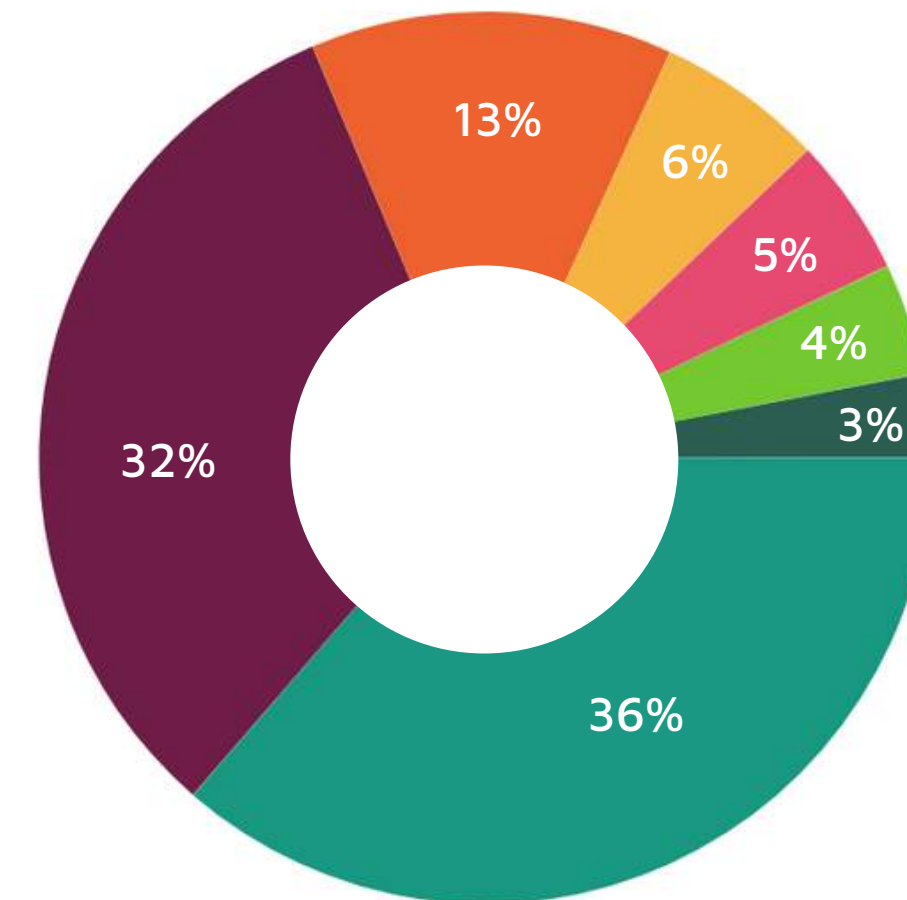
July to December 2021: \$3.64mil.



Use of Funds

Total funds used

July to December 2021: \$2.69mil.





AHC'S IMPACT: JULY TO DECEMBER 2021

