



AHC BI-ANNUAL IMPACT REPORT
Q3 & Q4 2020



2020 was a year of resilience.

While some of AHC's activities paused, the year's challenges did not halt our mission. In fact, our efforts were reinforced by the adversities we encountered.

Increases in malnutrition, the need for preventative healthcare education, the delays in care-seeking, and other downstream impacts from COVID-19 led us to work harder to fill a critical role in ensuring every child received the care they needed.

Looking Ahead

Fortunately, Cambodia continues to evade a full outbreak of COVID-19.

In the years to come, the pandemic's economic impacts will be dire, with projections of increased poverty, putting more children at risk of malnutrition and worsening living conditions, particularly in rural areas. Consequently, we expect to see an increase in the number of children suffering from preventable and treatable illnesses.

Without in-person volunteering, our staff are finding new approaches, exploring online avenues, and optimising virtual volunteering for continuing medical and nursing education. Students and government healthcare workers are due to return in the coming months to resume education, after a year of interruptions due to COVID-19.

In the hospital, Infection Prevention and Control (IPC) will remain paramount through 2021. In the community, AHC will begin operations in a new district, Krahanh. As the only NGO operating in the area, our team will initially focus on COVID-19 prevention education, as directed by the Cambodian Ministry of Health.

Ensuring proper child nutrition will be more important now than ever. The nutrition team are planning for the long-term by focusing on upskilling and refreshing nutrition knowledge of AHC staff. As ever, our focus remains fixated on providing essential medical care to Cambodian children.

1/3 increase



in children at AHC suffering from malnutrition,

due in part to

65% of households



reducing food consumption
due to income loss

To support families through this difficult period, AHC has provided financial assistance to over

2,000 families



in-hospital

and delivered preventative
healthcare education to

180,000 community members

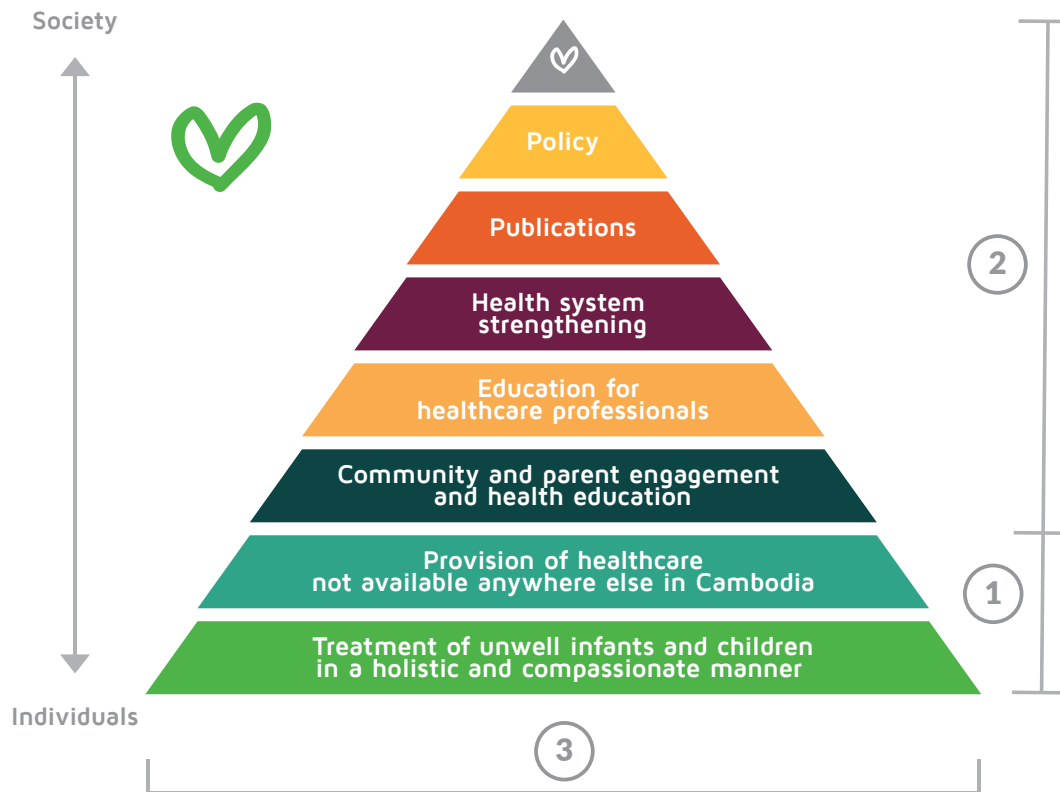


in their rural villages

AHC is delivering essential services and education now, as well as safeguarding the progress made in Cambodia in child health. Thanks to generous, essential support from donors like you, AHC was able rise to the year's challenges and respond to emerging child health needs, within our hospital, the community and beyond.

AHC'S IMPACT MODEL

AHC tracks key output metrics to demonstrate impact across activities.

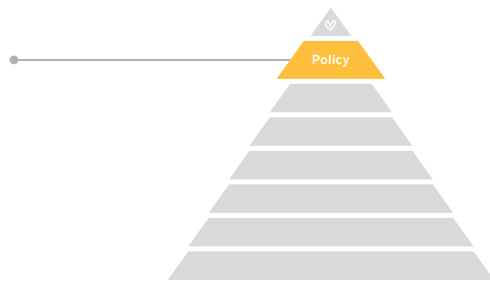


OUR STRATEGIC GOALS





POLICY



POLICY, GUIDELINES, AND TOOLS DRIVING CHANGE NATIONALLY

As a respected actor in healthcare nationally, AHC's practices, methods, and interventions inform and contribute to policy and guidelines in Cambodia, accelerating the adoption of healthcare best practices to systemically improve patient outcomes.



Neonatal Care: Setting a Standard in Cambodia

The AHC neonatal model sets the standard of newborn care in Cambodia, supporting the development and implementation of neonatal care throughout the Cambodian health system, challenging the notion that quality neonatal care is expensive, complicated and unattainable in a low-resource setting.

Since the establishment of AHC's neonatal intensive care unit (NICU), AHC has helped build consensus and formulate recommendations in the development of the National Neonatal Guidelines. First developed in 2012, the guidelines aim to reduce neonatal mortality by addressing diagnosis and appropriate management of neonatal patients throughout all healthcare facilities in Cambodia. Additionally, AHC has also contributed to the development of neonatal nursing standards of practice.

POLICY

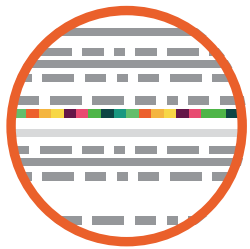
HIGHLIGHT



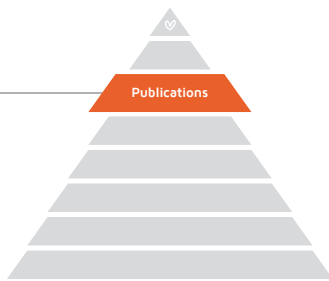
Building from the National Neonatal Guidelines, AHC has adapted its proven neonatal model to inform and develop the Saving Babies Lives (SBL) programme. The SBL programme is furthering AHC's neonatal expertise by developing a blueprint for sustainable community-based healthcare aimed at decreasing neonatal mortality in low-resource settings.

Despite the challenges of the COVID-19 pandemic, AHC has maintained the level of specialty neonatal care at the hospital in Siem Reap, while the SBL team continue to build the capacity of the health system in neighbouring Preah Vihear province. The AHC NICU and SBL teams work together, following a clear progression of care, in order to provide treatment for Cambodia's most vulnerable neonates.

[Learn more about Neonatal Care at AHC on our AHC Lens page](#)



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.



PUBLICATIONS THIS SEMESTER



“Detection of colonisation by extended-spectrum beta-lactamase or carbapenemase producing Enterobacterales from frozen stool specimens”

BMC Research Notes

“Prevalence of MDR organism (MDRO) carriage in children and their household members in Siem Reap Province, Cambodia”

JAC - Antimicrobial Resistance

“Automating the Generation of Antimicrobial Resistance Surveillance Reports: Proof-of-Concept Study Involving Seven Hospitals in Seven Countries”

J Med Internet Res

“MALDI-TOF mass spectrometry for sub-typing of Streptococcus pneumoniae”

BMC Microbiology



AHC Global Child Health Research Priorities and Projects

Neonatal Care

- **SBL:**
Design, implementation and assessment of a comprehensive community neonatal health package utilising medical and social interventions
- **STS:**
Adoption and implementation of training in neonatal life support through simulation utilising low fidelity mannequins in Sotnikum District, Northwest Cambodia
- **StAND UP:**
Perinatal mortality in Preah Vihear Province, Cambodia: its determinants and the communities understanding, practices and beliefs around stillbirth and neonatal death
- **BaRT: Baby Resuscitation Trainer:**
Improving neonatal resuscitation techniques of rural healthcare workers
- **AHC Neonatal Mortality:** understanding the risk factors for death after admission to AHC, a retrospective review and implementation of a surveillance tool for prospective data collection

Pediatric Critical Care

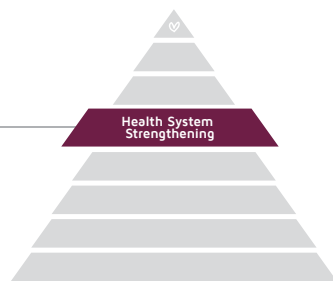
- **KISS:**
Prediction of disease severity in children under the age of five presenting with acute febrile illness in Cambodia
- **PICU:**
Variables influencing survival after admission to paediatric intensive care in a resource-limited setting
- **Medicine Identification:**
Visual Guide for Medicine Identification

Antibiotic Resistance

- Improve clinical and public health impacts through genome-level antimicrobial resistance identification and monitoring
- **ACORN:**
A Clinically Oriented Antimicrobial Resistance Network
- **Global AMR Mapping:**
Global Burden of Disease GRAM study
- **TuNDRA:**
Real-time Tracking of Neglected Bacterial Diseases and Resistance Patterns in Asia

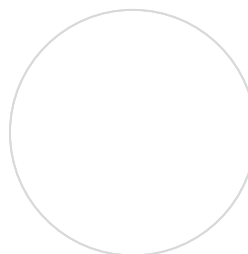


HEALTH SYSTEM STRENGTHENING



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.



37

health posts, health centres and referral hospitals strengthened

On the Frontlines: Cambodia's Village Health Workers

Each rural Cambodian village has a volunteer health worker who supports healthcare in their community. They form a country-wide network of frontline health workers, known as the Village Health Support Group or VHSGs.

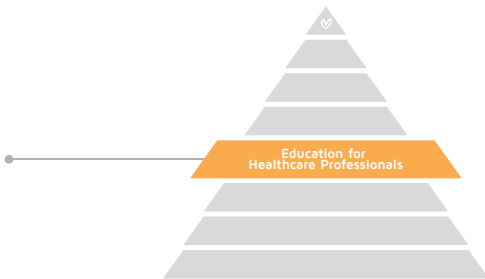
AHC trains and supports the VHSG's of Kulen Mountain National Park. Improving healthcare at the most provincial level and bridging the gap between the village, health centre, and hospital - leaving no child unwell.

Watch On the Frontlines: Cambodia's Village Health Workers on the AHC Lens





**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.



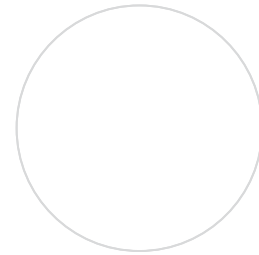
Training the next generation of Cambodian paediatric specialists

In Cambodia, only a fraction of trained doctors are paediatric specialists, meaning children requiring specialised treatment for illnesses like cancer, HIV, or a cleft palate cannot access the paediatric specialists they need, leaving them undiagnosed and untreated.

Dr Um Khemuoy is training to become a paediatric respiratory specialist at AHC, so Cambodian children requiring respiratory treatment for illnesses like, pneumonia, asthma, or bronchiolitis, can access the paediatric care they need.

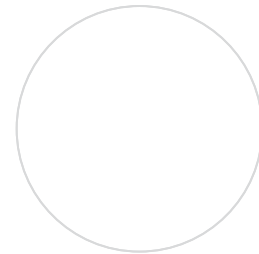
**Watch Training the next generation of
Cambodian paediatric specialists on the AHC
Lens**

THE DATA



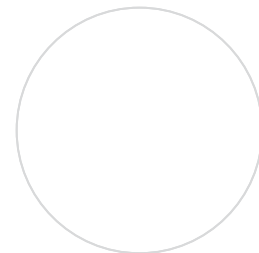
3

external healthcare workers trained



394

medical and nursing students educated



9,633

total AHC staff attendances 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 behaviors, through one-on-one and group sessions.



Preparing for 2021: Malnutrition in the Community

Malnutrition does not discriminate. Across communities, its incidence is also increasing.

In AHC's hospital wards, the nutrition team face the result of poor and uneducated families not feeding their children correctly. Throughout the villages surrounding Siem Reap, AHC's community outreach team see the same.

“ Almost all of the malnourished children we see in-hospital come from rural villages. These communities often do not understand or cannot afford proper nutrition for their child. That is why my team and the community outreach team focus on building the knowledge of these rural communities to prevent malnutrition during the global COVID-19 pandemic.

Phannsy Sroeu
AHC Nutrition nurse ”

Read more about Malnutrition in the Community on our AHC Lens page



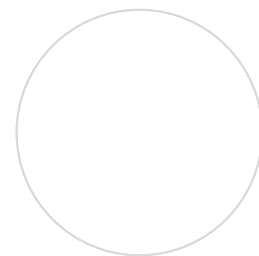
AHC In the Press: The fight against child malnutrition

Since the pandemic began, children in rural Cambodia have been hardest hit by the knock-on effects of the virus, with a worrying increase in malnutrition that is threatening to reverse the Kingdom's progress made in child health over the last decade.

Southeast Asia Globe recently published our article highlighting the increase in child malnutrition and AHC's work to combat this worrying trend in rural Cambodia.

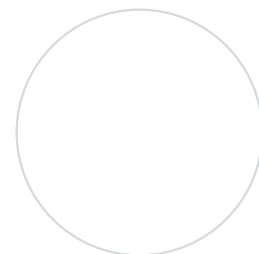
[Read more about AHC's fight against child malnutrition in the SEA Globe.](#)

THE DATA



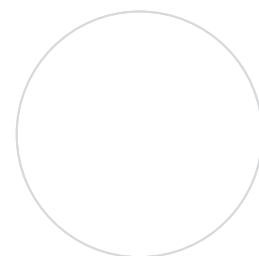
159,779

village member attendances



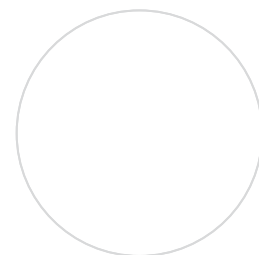
8,054

school student attendances



28,698

caregiver attendances
(in-hospital)

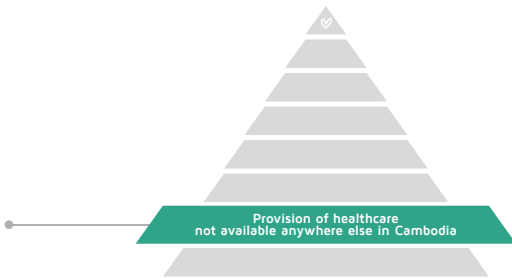


196,531

sessions conducted by AHC
for caregivers and community members



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.



Meet the Mentors of Cambodia's Paediatric Surgeons

Over the past decade, Dr Kevin Gandhi has volunteered at AHC every year.

He is a paediatric urologist based at Mary Bridge Children's Hospital in Tacoma, Washington, USA.

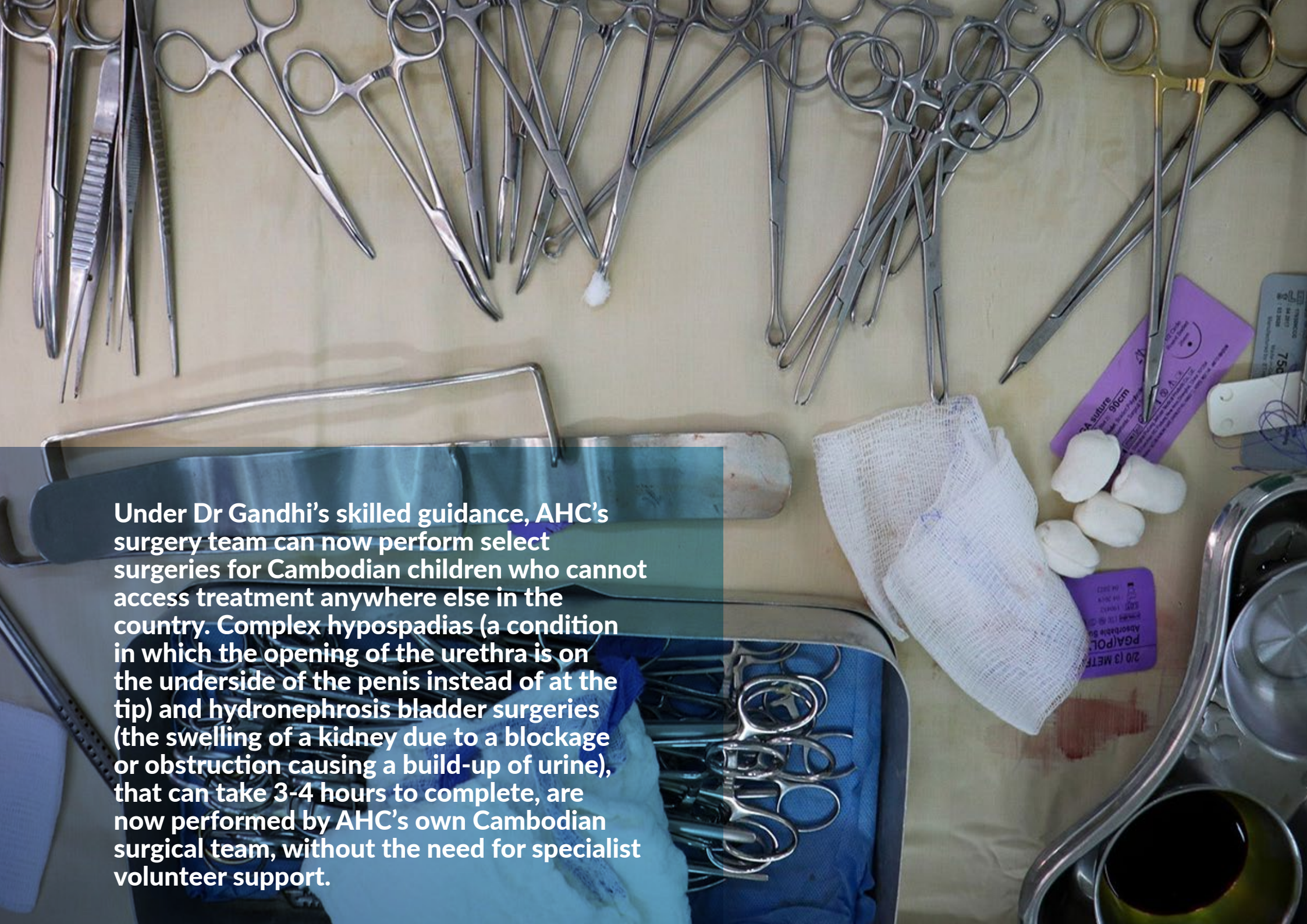
He specialises in diseases and disorders of the urinary tract and reproductive organs, as well as congenital defects of the kidneys and bladder.



Dr Gandhi travels to Siem Reap each year to perform life-saving surgery on Cambodian children and build the capacity of AHC's surgical unit.

“ I have seen so many changes at AHC over the years. It has been wonderful to watch the hospital grow despite the obvious challenges Cambodian healthcare faces. All the surgeons have become more proficient with all aspects of genito-urinary paediatric surgery and the post-op management has improved simply with increased familiarity with new procedures. ”

Dr Kevin Gandhi
AHC volunteer



Under Dr Gandhi's skilled guidance, AHC's surgery team can now perform select surgeries for Cambodian children who cannot access treatment anywhere else in the country. Complex hypospadias (a condition in which the opening of the urethra is on the underside of the penis instead of at the tip) and hydronephrosis bladder surgeries (the swelling of a kidney due to a blockage or obstruction causing a build-up of urine), that can take 3-4 hours to complete, are now performed by AHC's own Cambodian surgical team, without the need for specialist volunteer support.




“ During my earlier visits, I remember telling my wife I was exhausted because we were doing so many difficult cases in a short space of time. But over the last few years, my case load has decreased, giving me more time to train the staff new skills.

Dr Kevin Gandhi ”
AHC volunteer



Volunteers are essential to the education offered and care provided at AHC.

That is because medical education in paediatric subspecialties, like paediatric urology or paediatric nephrology, is not currently available in Cambodia and must be obtained internationally.




AHC receives medical volunteer support from academic institutions and paediatric hospitals such as Boston Children's Hospital, Harvard Medical School, Wisconsin Children's Hospital, University of Massachusetts, John Radcliff Hospital, Oxford Children's Hospital, Oregon Health & Sciences University, University of Massachusetts, University of Minnesota, University of Colorado and others.



“ The physicians in Cambodia have to do more with fewer resources than what we have in the US, often solving problems without a new tool or test to help. I try to bring this problem solving and ingenuity back home to improve my own practise. I don't think a day passes where I don't call on my experiences at AHC in my own practise. ”

Dr Kevin Gandhi
AHC volunteer

A photograph showing three surgeons in an operating room. They are wearing blue scrubs and blue surgical caps with a white and red floral pattern. The surgeon on the left is wearing a light blue surgical mask and glasses, looking down. The surgeon in the center is also wearing glasses and looking down. The surgeon on the right is partially visible, also wearing a surgical cap. The background shows a window with a grid pattern.

Dr Gandhi is helping develop AHC's laparoscopy procedure, which uses a small camera to examine the organs inside the abdomen. He was able to source new laparoscopy equipment for AHC through his professional network, helping the hospital save costs and benefiting the patients who otherwise would struggle to find treatment for the highly specialised procedure.



“ In the coming years, I am hoping to fund a laparoscopy student to go anywhere in the world for training and bring someone back to AHC who can teach the team the laparoscopy skills needed.

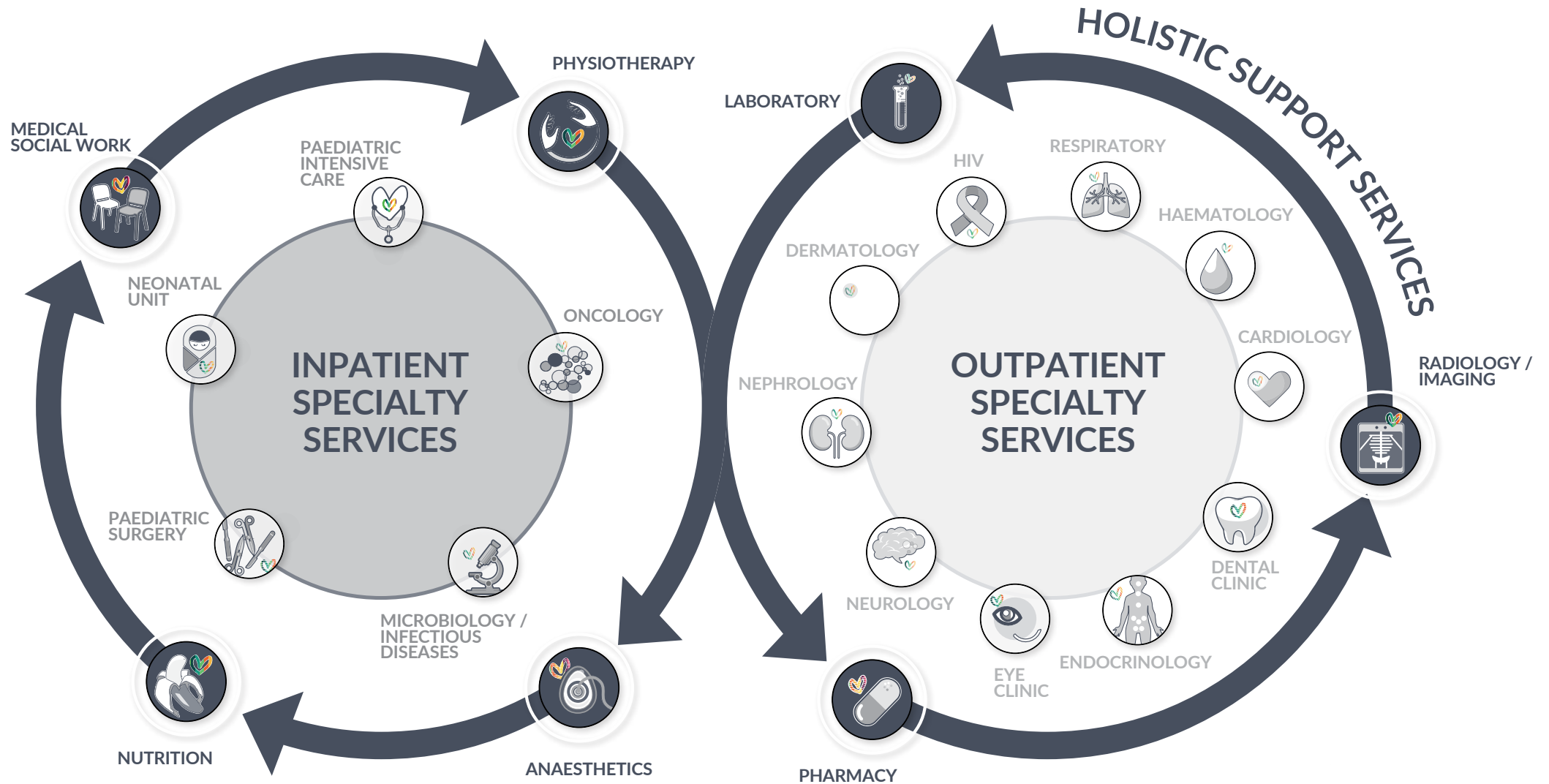
Dr Kevin Gandhi
AHC volunteer ”



Since the global pandemic began, international volunteers have been unable to visit AHC, instead providing expert feedback via video conferencing and online discussion. AHC is eager for volunteers like Dr Gandhi to return to our hospital so our staff can continue developing specialty services at AHC and improve the knowledge of healthcare professionals across the country.

Learn more about volunteering at AHC at angkorhospital.org

AHC'S SPECIALTY CARE MODEL



THE DATA



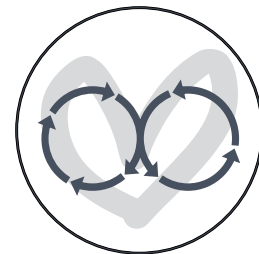
2,965

total patients receiving inpatient specialty care this semester



8,954

total patients receiving OPD specialty care this semester



11,919

number of patients receiving specialty care this semester



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.



Melioidosis: The Emerging Tropical Disease

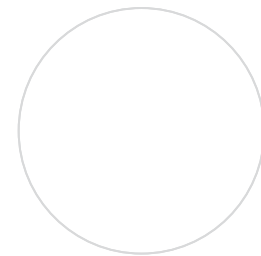
Ary was only two years old when she was admitted to AHC with a serious tropical disease infection, burkholderia pseudomallei melioidosis. It took three months – and the collaboration of multiple hospital units working together daily – to successfully treat this emerging and often misunderstood disease.

Melioidosis is a growing tropical disease in Southeast Asia, with manifestations including pneumonia, septicaemia, and localised infection in various organs. Often contracted from contaminated soil and water during the rainy season, melioidosis poses a serious risk to Cambodian children because of the difficulty diagnosing the infection without specialist healthcare.

According to one study, melioidosis mortality can exceed 40% in some low-resource regions. Even when diagnosed correctly, melioidosis infections can still have a high mortality rate in Southeast Asia because it requires microbiology laboratory diagnosis and a long course of antibiotic treatment, which can be costly and often inaccessible to families from poor rural areas.

[Read more about emerging tropical disease research at AHC on our AHC Lens page](#)

THE DATA



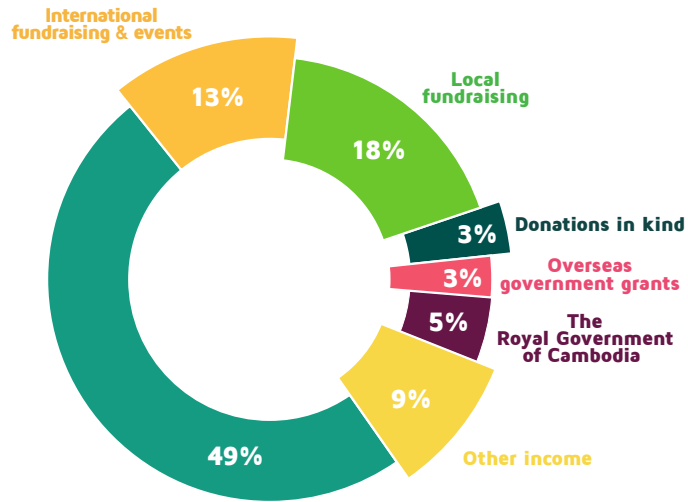
36,338

total patients treated this semester

FINANCIALS

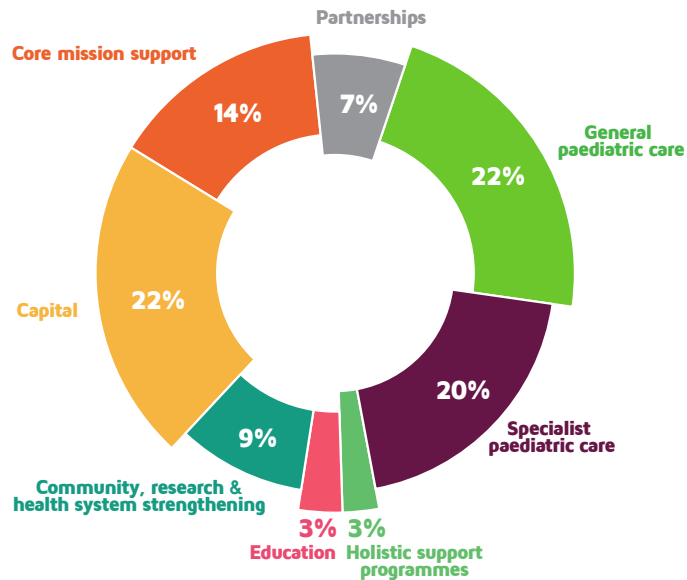


SOURCE OF FUNDS:
JULY-DECEMBER 2020



Total funds raised in 2020: **\$6.2 million**

USE OF FUNDS:
JULY-DECEMBER 2020



2020 Budget: **\$5.9 million**
adjusted due to COVID-19

QUANTIFYING AHC'S IMPACT

