

CHIL raises \$2.4 M for further expansion

04 November 2019 | News

Funds will go towards expanding neonatal care services in the Asia Pacific, international regulatory approvals and evolving the integrated NICU platform for predictive analytics



Child Health Imprints (CHIL), the Singapore-based company focusing on neonatal-clinical care improvement has announced that it has raised US\$2.4 million in Pre-Series A funding. The round was led by HealthXCapital, with participation from Enterprise SG and other HNIs.

According to the 2018 World Health Organisation's report, nearly 15 million infants are born preterm annually, of which close to 1 million die due to preterm birth-related complications. More than 60% of preterm births take place in Asia and Africa. Prematurity, infections, delay in treatment, skilled manpower shortage and human-based errors are the major causes of neonatal deaths. Better data integration amongst multiple devices (patient monitor, ventilator, blood gas machines, infusion pumps) and ElectroMagnetic Resonance adoption in NICU, along with unified neonatal workflow practices need to be urgently adopted to tackle the rising neonatal births across the world.

CHIL develops and applies informational and computational technologies including IoT, AI, and predictive analysis; to improve early diagnosis of critical diseases, and overall quality of neonatal intensive care units across the world. The solution aggregates and integrates neonate's vital data, bedside clinical observations and laboratory results, leverages deep learning methodologies to analyse the data in medically comprehensive formats and is available to clinicians for improvised decision making.

CHIL founders Harpreet Singh and Ravneet Kaur, faced similar challenges when their twins were born preterm and one of them passed away within a week of birth due to NEC (necrotizing enterocolitis). Their personal struggle, helped them understand the urgency of transforming NICUs, and led them to build the solution comprising bedside IoT based device - NEO, that inter-operates with various medical devices used in NICU.

NEO aggregates data in a vendor-agnostic manner offering temporal (longitudinal) data of the infant's stay in the NICU that reduces manual charting effort of nurses. The solution also provides bedside tablet-based interface to ensure prospective data entry supported by AI-based iNICU analytics engine that infers millions of data-points persisted in time-series representation. By leveraging clinical rules and deep learning-based disease-specific (respiratory distress, sepsis, bronchopulmonary dysplasia) analytical models, iNICU assists the neonatologists in focussing on neonatal care and identifying early onset of diseases.

Harpreet Singh said, "Our aim is to improve neonatal safety across countries with high neonatal mortality rate. The company will also develop inroads into more advanced neonatal ecosystems to bring their best clinical practices to other markets across the world."

Ravneet Kaur stated, "Regulatory compliance and peer-reviewed publications to document the efficacy of iNICU platform in reducing medical errors in the NICU will be the next strategic step of our expansion. This is why we couldn't be more thrilled to have some of the best strategic partners in HealthXCapital and Enterprise Singapore, who are equally passionate to build the next phase of CHIL."

Presently, CHIL is running in 25 NICUs across top tier hospitals in India including Apollo Hospitals (Apollo Cradle in 4 key cities) and Sir Gangaram Hospital (New Delhi) amongst others.

The startup is set for further expansion in India, Indonesia, Japan, South Korea, Gulf Cooperation Council and the ASEAN region shortly.

Seemant Jauhari, Managing Partner of HealthXCapital said, "HealthXCapital is proud to be a part of an exciting journey which shall enable a new model for Neonatal care to be offered remotely by the best available neonatologists present in cities to multiple paediatric clinics located in distant areas. The clinical decision support and predictive analytics based on real time data showcases the power of digital health disrupting traditional models of care delivery."

Ted Tan, Deputy CEO, Enterprise Singapore, praised Child Health Imprint's progress to date, saying, "CHIL is rapidly becoming one of the most crucial and significant technology platforms in Asia."

The team is backed by some of the world's top neonatologists, such as Dr. Yao Sun (UCSF Benioff Children's Hospital) , Dr. Jonathan Palma (Lucile Packard Children's Hospital, Stanford), Dr. Satish Saluja (Gangaram Hospital) and Dr. Su Jin Cho (Ewha Womans University School of Medicine , Seoul).