

Capacity Strengthening of Health Care Service Providers of Charitable Health Facilities



A Success Story from Bihar, India

Background

A charitable health facility (CHF) is a non-profit hospital that provides affordable treatment to marginalized communities, mostly residing in far-flung regions of the country. CHFs provide curative health care and bring awareness about preventive health care by linking health care with sanitation, empowerment, community engagement, social reforms, and education. However, such hospitals remain largely understudied due to a lack of awareness about their services in the public domain.

In Bihar, India, CHFs have an important role to play in the state's health care system as they provide high-quality health care at a low cost, especially to the poor and marginalized communities. According to Ministry of Health and Family Welfare¹ data for 2020, CHFs account for approximately two percent of all hospitalizations (excluding childbirth) in Bihar each year. These are present primarily in remote areas, and they are increasingly involved in critical public health interventions. One of the reasons for the proliferation of these CHFs is the acute shortage of Primary Health Centers (PHCs) and Community Health Centers (CHCs) in rural areas of the state. As per the Rural Health Statistics (RHS) 2020-21,² in terms of infrastructure, there is a shortfall of 11675 (53 percent) Sub-Centers, 1715 (47 percent) PHCs and 605 (66 percent) CHCs across the state. There is also a shortfall of 1118 specialists (includes surgeons, obstetricians and gynecologists, physicians, and pediatricians) in CHCs. Additionally, 1415 positions are vacant for doctors in PHCs, and 5210 positions are vacant for nursing staff at PHCs in rural Bihar. Besides, the Government of Bihar report shared in 2020-21 states that as of April 2020, the state had a total of 30,857 beds (both public and private hospitals), with only 1,543 intensive care units (ICU) beds (two-thirds of those are in private facilities) serving its massive 104 million population. Furthermore, Bihar has a severe shortage of doctors, with 39 percent of doctors,

46 percent of registered nurses, and 58 percent of auxiliary nurse midwives (ANMs) working in public health facilities.³ Over and above, the debilitating effects of COVID-19 further underlined the need for strengthening the existing health systems in Bihar.

Over the years, CHFs in Bihar have managed to fill in some of the gaps left by the lack of adequate public health facilities to deliver health services to rural, difficult-to-reach, and marginalized communities besides responding to disease outbreaks. During the recent COVID-19 pandemic, these CHFs were the frontline providers of health services to these vulnerable populations.

Recognizing the vast potential and the need for further strengthening the capabilities of these CHFs, PATH provided technical assistance in improving their capacities for effective respiratory and emergency care management. This narrative provides an insight into the successful initiatives of the project that equipped 62 CHFs with the knowledge and skills needed to manage existing critical care patients and prepare for future health care emergencies.

Assessing the knowledge and infrastructure gaps of CHFs: PATH's approach

As the first step, PATH initiated identification of CHFs in Bihar, and 75 CHFs were shortlisted for the intervention. However, 13 CHFs did not qualify the criteria set by PATH for the assessment, thus, 62 facilities were put through the evaluation. Multiple health care organizations, such as Bihar Voluntary Health Association (BVHA)*, Bihar Swasthya Suraksha Samiti (BSSS)*, and State Health Society, Bihar (SHSB)* were engaged to identify and assess CHFs in the state. This was followed by facility assessments of CHFs to understand the capabilities of these hospitals. Key criteria considered while selecting CHFs for intervention included the nature of management (run by a

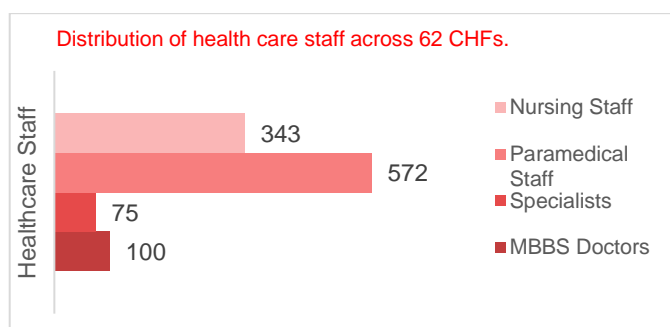
*BVHA is a secular and non-profit organization. Created in 1969 by Fr. James Stuart Tong and Medical Mission Sisters at Patna, the organization works in health care and grassroots development in several districts of Bihar, serving the less privileged in remote regions.

* BSSS is the State Health Agency implementing Ayushman Bharat insurance scheme in Bihar.

* SHSB has been established to guide its functionaries towards receiving, managing (including disbursement to implementing agencies e.g., Directorate, of Medical & Public Health District Societies, NGOs, etc.) and account for the funds received from the Ministry of Health & Family Welfare, Government of India. The SHSB is implementing the mandate of National Health Mission in Bihar

nongovernmental organization (NGO), a faith-based organization, etc.), location (a flood-prone region and proximity to the Nepal border), populations served by the hospital, health services offered by the CHF, and ability to provide COVID-19 care and respiratory care management services. Primary data was collected on several facets of a CHF's operations, like general infrastructure, oxygen infrastructure, availability of human resources, types of services, COVID-19 services, and outreach and catchment areas, among others.

The assessment of these facilities shows several CHFs have limited manpower to cope with the demand for healthcare in the region. Out of 62 CHFs, only 21 facilities have doctors with an MBBS degree, and in 16 facilities, specialist doctors are employed. Two-thirds of the facilities have either full-time doctors or nurses. The assessment confirmed the presence of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) doctors in nine facilities, the availability of anesthesiologists in five facilities, and intensivists in two CHFs. The graph below shows the distribution of healthcare providers in 62 CHFs that were assessed for this intervention.



Apart from the above assessment, a baseline analysis was undertaken by PATH in collaboration with All India Institute of Medical Sciences-World Health Collaborating Centre for Emergency and Trauma Care (AIIMS-WHOCET), New Delhi, to map the knowledge and skill gaps of health care providers working in these charitable hospitals. AIIMS is an India's premier health care institution and a public medical research university and hospital. The Department of Emergency Medicine at AIIMS, Jai Prakash Narayan Apex Trauma Centre, New Delhi, has been designated as the WHOCET in the South-East Asian Region. This unique center is working to establish an integrated, high-quality, cost-effective,

and long-term emergency care system to improve the outcomes of the acutely ill and injured.

In September 2021, 30 health care personnel (60 percent male and 40 percent female) from 30 CHFs were evaluated on their knowledge and skills in respiratory and emergency care. These health care workers included doctors, nurses, outpatient department technicians, operation theater technicians, and lab technicians, among others. About twenty-five questions were asked to these health care providers, and it revealed that although most were willing to treat critical care patients, approximately 40 percent lacked the necessary knowledge. Furthermore, while 80 percent were aware of initial critical care patient handling, only 57 percent were aware of the respiratory and airway management of such patients. Besides, 56 percent of providers were unaware of an alternate method of intubation. Additionally, 33 percent were unaware of the instruments or devices used for respiratory management. More than 30 percent of health care providers were unable to operate an oxygen cylinder, concentrator, humidifier, or face mask. The assessment findings revealed a large scope for improvement in their knowledge and skill and that they required support in the capacity strengthening of these health care providers.

Collaboration with AIIMS-WHOCET as training partner

In October 2021, PATH and AIIMS-WHOCET entered into an agreement to provide a series of trainings to the health care providers in the CHFs. The objective of the trainings was to impart high-quality training on critical care by technical experts from AIIMS-WHOCET and equip these CHFs with advanced knowledge of emergency critical care, including COVID-19.

Capacity strengthening of health care providers through a series of trainings.

After the training session plans were developed and verified by the technical experts of AIIMS-WHOCET and PATH, the training and capacity-building sessions were rolled out in two phases. A hybrid approach (virtual and physical) was used to address the training needs of health care personnel. Moreover, as emergency and respiratory care are time-sensitive and require seamless

integration of knowledge, skills, and efficiency for effective management of critical cases at charitable hospitals, the trainings initially were imparted through virtual sessions. Considering the training load and geographical distribution of facilities, seven knowledge hubs were developed in select districts to assist the facilities in proximity and address knowledge and skills gaps.

Phase I – The first phase of the training sessions were rolled out in November 2021. The training plan had 11 topics, such as overview of critically ill patient care and management, improved respiratory and emergency care management, equipment training, COVID-19 management and awareness, neonatal resuscitation, infection control, training of trainers in respiratory and emergency care management, among others. Each topic had specific learning objectives and outcomes to measure the effectiveness of each training session. Participants were also put through pre- and post-training assessments to understand the change in knowledge because of the training sessions.

“ Just a word to say a big thank you for arranging the training program yesterday. It was very good and well arranged. My staff profited much from it. Your team was excellent in their commitment. Thank you once again. May God Bless You.
 - Dr Teresita Powath
 In-charge, Mary Ward Health Centre, Buxar

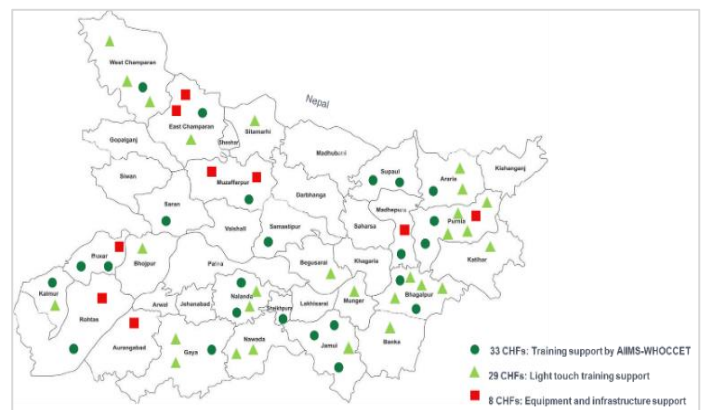
Phase II – The second phase of the trainings were rolled out in January 2022. Apart from the sessions on the basics of emergency and respiratory care that were imparted during Phase I, Phase II included training on medical devices, consumables, and accessories such as the multi parameter patient monitor, ECG machine - 12 channel, laryngoscope set, neonate, ICU bed - motorized with mattress, infusion and syringe pump, ambu bags, among others.

The **key highlights** of the two phases of training and capacity strengthening sessions are as follows:

- ▶ A total of 33 training sessions were organized and 1275 personnel were trained and oriented on

different aspects of emergency and respiratory care management.

- ▶ About 59 participants from 29 hospitals took part in another workshop organized by PATH and AIIMS-WHOCCT on "Role of Charitable Hospitals in Strengthening Health and Wellness Centers in Bihar". This workshop was graced by the Executive Director, SHSB, State Nodal Officer for Health and Wellness Centers (HWCs), and State Tuberculosis Officer, besides subject matter experts from AIIMS-WHOCCT.
- ▶ The clinical trainings provided to the health care providers in Phase I of the training sessions helped in managing more than 300 patients and saving 38 critically ill patients during the third wave of the COVID-19 pandemic. The case-based consultations could be arranged by the PATH state team between these CHF's and AIIMS-WHOCCT facilitate effective case management.
- ▶ Service providers (clinical, paramedic, and allied staff) from 12 CHF's were provided training on management of infection control and prevention in real-time scenarios for respiratory care management of the COVID-19 pandemic.



The above map of Bihar shows the CHF's which were provided with trainings by PATH and AIIMS-WHOCCT.



The above images provides glimpses of capacity strengthening activities in CHF.

Sustaining the knowledge and upskilling through skill labs and partnerships

The COVID-19 pandemic has emphasized the significance of strengthening the capabilities of health care providers, particularly doctors, nurses, and technicians operating various health equipment, not only during the emergency but also for any future potential health crisis. To keep the health care providers updated on the clinical and technical aspects of health care services, it is important that refresher courses and mentoring sessions are provided to them at regular intervals. Through this intervention, PATH has put in place the following mechanisms to ensure that the health care providers of these CHFs can update their knowledge and skills at regular intervals:

- Skill labs were set up in five CHFs of Bihar to provide theoretical and practical training on critical care.

PATH has established five skill labs in five CHFs, namely Mary Ward Healthcare Centre, Buxar; Gems Multispecialty Hospital, Rohtas District; Madhepura

Christian Hospital, Madhepura; Christian Medical Center and Hospital, Purnia; and The Duncan Hospital, East Champaran. The skill labs are set up to provide both theoretical and practical training on various clinical aspects of critical care, as well as hands-on training on medical equipment. The goal of these skill labs is to provide continuing medical education (CME) for health care providers through virtual and in-person training sessions. Through these skill labs, health care providers can be apprised of the most recent medical practices in critical care, receive refresher training, and become acquainted with the medical equipment used for treatment of such patients. In a step towards developing these as CHFs as training hubs for emergency care management, PATH has submitted a proposal to the Government of Bihar to train the Community Health Officers of HWCs on emergency care in these skill labs.

- Partnerships with premier health institutions for training on respiratory and emergency care management.

Apart from the previously mentioned collaborations with AIIMS-WHOCCET, PATH established partnerships between these CHF's and other technical organizations such as AIIMS Patna, National Neonatology Forum, and Indian Academy of Pediatrics for refresher trainings and mentorships.



Media clip on collaboration of CHF's with health institution.

These collaborations had not only helped to strengthen the capacities of these CHF's health care providers but had also strengthened consultations and case referrals with these premier health care institutions. Mechanisms for digital consultations of

cases are also being explored. PATH had also facilitated an agreement between two charitable hospitals (Duncan Hospital, Raxaul and CMCH, Madhepura) and the SHSB to facilitate capacity strengthening and trainings for the nurses, accredited social health activists (ASHAs), and ANMs.

Lessons learnt.

Deriving from the intervention activities to strengthen the capabilities of health care service providers of CHF's, the key lessons learned from this intervention are as follows:

- Investments in capacity strengthening of charitable hospitals can go a long way in ensuring health equity.

As mentioned earlier, CHF's are the frontliners when it comes to providing affordable health care to the poor and marginalized. Additionally, it was evident from the COVID-19 pandemic that public health care systems alone are not adequate for saving lives during health emergencies. It is therefore prudent that these charitable hospitals be provided with technical (includes infrastructure building support and capacity strengthening of health care providers) and financial support by linking them to various government schemes to build a more holistic and resilient public health system.

- Establishing a multi-stakeholder mechanism enables a robust health system.

Collaboration with national- and state-level health care institutions has helped in leveraging their knowledge and technical expertise for the capacity strengthening of healthcare providers at charitable hospitals. The training conducted by PATH in partnership with AIIMS-WHOCCET has enhanced the knowledge and skills of health care service providers in the critical care management of CHF's. The establishment of skill labs has also ensured continuity of training and learning. Thus, the capabilities of all stakeholders were leveraged for effectively strengthening the CHF's for responding to emergency care.

Conclusion

CHFs are one of the mainstays for ensuring equitable and affordable health services for marginalized communities in Bihar, as one-third of these hospitals are in flood-prone areas and some of them serve the bordering districts of Nepal, Uttar Pradesh, and Jharkhand. Engaging CHFs for improved critical care will not only strengthen the existing health systems but also address equity gaps. The imminent possibility of a potential health emergency in the future further substantiates the requirement for interventions focused on strengthening health systems and integrating marginalized players like CHFs into the larger public health arena. Comprehensive training and collaborations with premier health care institutions will ensure that these CHFs are self-sustaining and capable of providing emergency critical care in case of high demand. The establishment of skill labs and knowledge hubs in a few districts will ensure continued learning in critical care and facilitate the exchange of knowledge between hospitals. Collaboration with the BVHA will help in organizing training sessions for grassroot organizations and health care workers to ensure continuity in training and learning.

References

1. Ministry of Health and Family Welfare (2020). Health and Family Welfare Statistics in 2019-20. Government of India, New Delhi. Available at: <https://main.mohfw.gov.in/sites/default/files/HealthandFamilyWelfarestatisticsinIndia201920.pdf> [Accessed 2nd March 2023]
2. Ministry of Health and Family Welfare. Rural Health Statistics (RHS) 2020-21. Link: <https://hmis.nhp.gov.in/downloadfile?filepath=publications/Rural-Health-Statistics/RHS%202020-21.pdf> [Accessed 2nd March 2023]
3. Government of Bihar (GOB), (2020). Bihar Economic Survey 2019-20 [pdf] Finance department. Available at: <https://state.bihar.gov.in/finance/cache/12/Reports/Economic-Survey-2020-EN.pdf> [2nd March 2023]



Provisioning and strengthening public health care is a great leveler; and helps in reducing health inequalities - however significant gaps exist. Primary Care is the cornerstone of achieving equitable health delivery and access to quality health care by all - with a focus on the poor and marginalized needed. PATH initiatives to strengthen the healthcare ecosystem in the state is a great help for disadvantaged section of the society.

- Dr. Alex Phillip
In-charge, Christian Medical Centre & Hospital, Purnia



PATH is a global nonprofit dedicated to achieving health equity. With more than 40 years of experience forging multisector partnerships, and with expertise in science, economics, technology, advocacy, and dozens of other specialties, PATH develops and scales up innovative solutions to the world's most pressing health challenges.

path.org

Address
2201 Westlake Avenue
Suite 200
Seattle, WA 98121 USA

Date Published
August 2021