

Background

The current Indian spending at 4.6% of GDP on health, with public spending at just 0.9% ranks India poorly on a global scale. Skewed doctor nurse ratios, along with 75% of medical doctors operating from urban locations, questions the availability of competent resources for the Indian rural population, which constitutes a massive 72% of the total. The presence of a multi-tier public health infrastructure rooted at the village level, with established referral links up to tertiary care hospitals, has not successfully managed to address the needs of rural markets. 80% of primary health-care needs and 50% of secondary and tertiary requirements are met by the private sector. The private sector at the primary-care provider level is completely unorganized with providers ranging from nurses, alternate medicine practitioners, quacks, technicians etc.

Introduction

With this backdrop one highlights the pertinent need for principal innovations in the Indian health-care sector evaluating both health-care delivery networks and POC (point-of-care) diagnostic innovations to alternate human capital resources. *IKP Centre for Technologies in Public Health (ICTPH)* is a Section-25, not-for-profit Company; registered under the Companies Act, 1956. ICTPH aims to improve the health of poor populations by focusing on designing, developing and delivering innovative solutions in health-care concerning India and the developing world. This is achieved through an inclusive process that scientifically integrates knowledge of factors influencing health and diseases in India, regular evaluation and impact assessment of existing health systems and integration of appropriate technology for optimal health care delivery. ICTPH aims to research provisioning enhanced accessibility to health-care services for rural populations through a three pronged focus on Epidemiology, Human Capacity and Health care Solutions (Fig 1).

Epidemiology

The Epidemiology practice at ICTPH focuses on gathering and analyzing a plethora of information on the current socio-economic conditions, burden of disease, access to health-care and sanitation for specific populations. Currently, ICTPH is establishing its field site through its implementation partner SughaVazhvu and IFMR Trust in Tamil Nadu. Eventually, ICTPH aims to develop and maintain three field sites across India providing socio-economic diversification. These field sites will in turn incubate researchers from across the world to study epidemiological disease referencing along with efficacy assessment of varied interventions (diagnostic, financing, healthcare delivery).

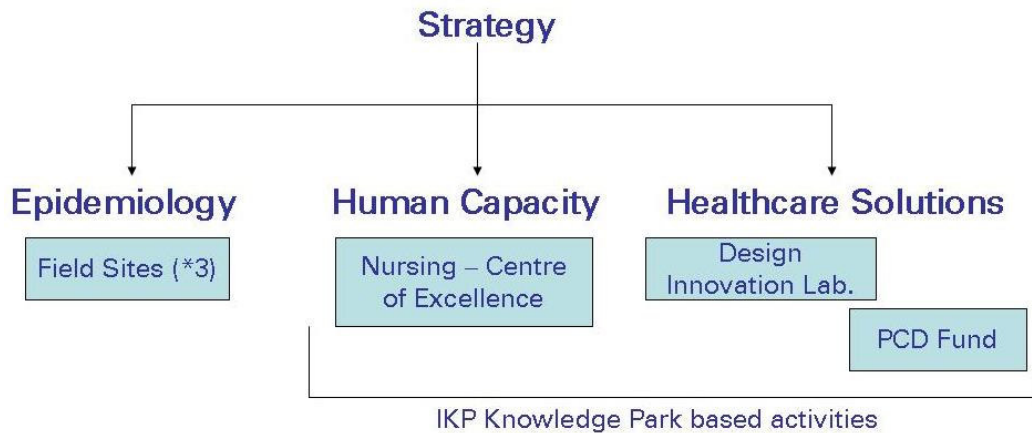


Figure 1: Strategic vision of ICTPH. Envisaged emergence of practice specific centers – Nursing Centre of Excellence, Design Innovation Lab., PCD Fund

Human Capacity

The Human Capacity Practice at ICTPH aims to evaluate feasibility and applicability of alternate human resources for delivering healthcare to rural populations. ICTPH has established a partnership with the Penn School of Nursing at University of Pennsylvania (www.nursing.upenn.edu) to jointly evaluate the Indian Nursing scenario. The goal of this partnership is to initiate pertinent innovation in nurse training and entrepreneurial capabilities of the existing nurse force, adapting the Nurse Practitioner model to the Indian sub-continent. ICTPH also aims to evaluate various CHW (community health worker) programs implemented globally. Nurturing the appropriate balance between technically qualified medical resources and local village outreach volunteers will help attain the optimal balance in both accessibility and affordability of healthcare services.

▪ Nursing Centre of Excellence at IKP Knowledge Park

The Nursing Centre of Excellence at ICTPH is envisaged as a training centre for all modules that are developed in house (Nurse Practitioner Courses) to continued education for field workers and CHW's. Our Centre of Excellence will also invite both National and International Nursing partners both for teaching and joint project research. The Nursing Centre of Excellence will have dedicated resources working in close collaboration with the ICTPH Human Capacity Practice. Global dissemination of ICTPH research findings will be anchored by the envisaged Centre of Excellence.

Healthcare Solutions

The Healthcare Solutions Practice at ICTPH aims to study various rural healthcare delivery systems facilitated both through the public and private sector.

Experimenting with innovative health-financing mechanisms e.g. fixed price health-care; health savings account to credit access will help evaluate systems offering optimal efficiency. With our focus on behavioral financing wherein closely evaluating various incentive mechanisms within the healthcare supply chain will add to better understanding of the involved complexities.

- **Design Innovation Lab**

The Design innovation lab at ICTPH will offer consulting services to various providers through the health sector for developing health-financing capabilities along with implementing and operationalizing support for devised schemes. The design innovation lab will be based at Hyderabad but will be working closely with various field partners.

- **PCD Fund**

The PCD (Point-of-Care Diagnostic) Fund will be launched to specifically fund pertinent diagnostic projects for both communicable and non-communicable diseases. Also, ancillary services like EHR (Electronic Health Records) integration, resource training, field trials, process and design development support along with rendering business acumen for enhanced outreach will be provided by the Fund Management Team. The PCD Fund Management Team will be an independent entity working in close collaboration with the core ICTPH team to benefit from their technical and field site expertise.

ICTPH – Organizational layout

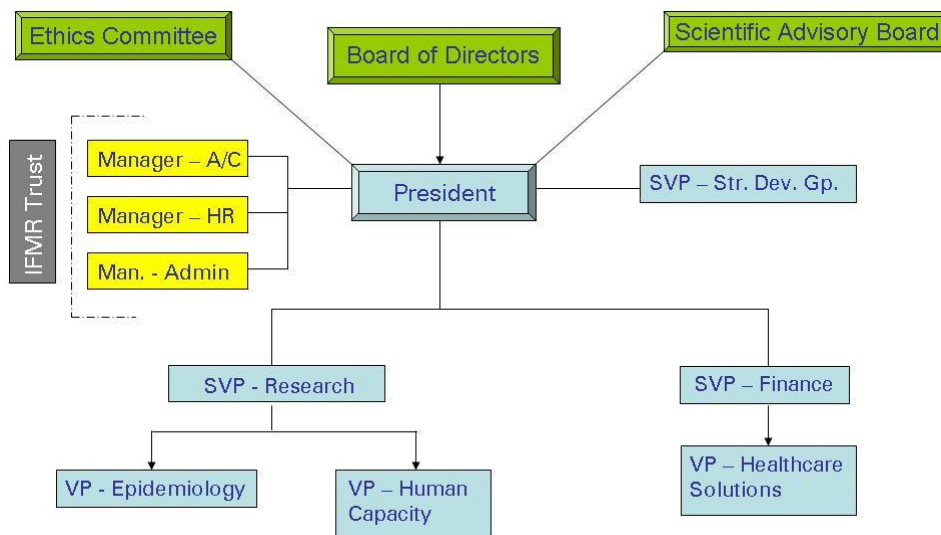


Figure 2: Organizational structure of the core Team at ICTPH

As discussed in previous sections with the three prong strategy at ICTPH, the focus areas will evolve in three independent practices. SVP-Research (Senior Vice President) will guide both the Epidemiology and Human Capacity Practice (*Fig. 2*). Each practice will house up to a maximum of 20 members. SVP – Finance will guide the Healthcare Solution activities and also oversee incorporation of both the PCD Fund and Design Innovation Lab. The accounting, HR and Administrative services will be outsourced to IFMR Trust. Only managers will be appointed at ICTPH for coordinating these activities.

Table 1: Total people strength at ICTPH and its subsidiaries

ICTPH People			
Core Team		Ancillary Activities	
President	1	Nursing Centre of Excellence (NCE)	10
Senior Vice President	3	Design Innovation Lab.	5
Vice President	3	PCD Fund	10
Assistant Vice President	6	Visiting Faculty at ICTPH	5
Research Associates	18		
Research Analyst	18	Trainees	
Manager	3	NCE - Nurses	50
Total	52	NCE - CHW	50
		ICTPH - Interns	20
		ICTPH- Epi. Field Staff	15
		PCD Incubatees	20
		TOTAL STRENGTH	289

A total strength of 289 people, both the core team and ancillary unit members included is envisaged at ICTPH (*Table 1*).

The ICTPH Campus

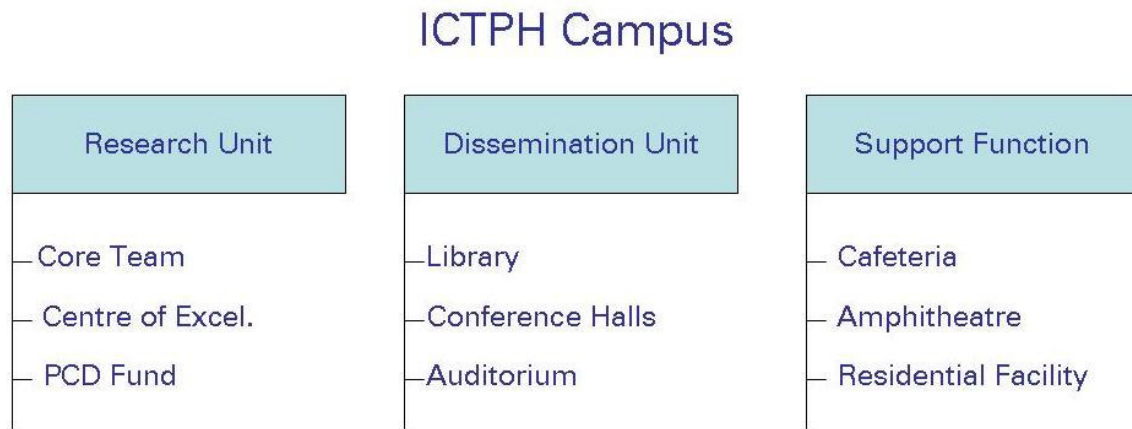


Figure 3: Outlining the ICTPH Campus at IKP Knowledge Park, Hyderabad.

The ICTPH Campus (*Fig. 3*) at IKP Knowledge Park will host all the activities listed in previous sections. The independent units i.e. Research, Dissemination and Support will govern a smooth functioning of all the envisaged practices. The research unit will house the day-to-day activities at ICTPH including the Nursing Centre of Excellence and the PCD Fund teams. The Dissemination unit will work towards organizing regular seminars and conferences for establishing a continuum through in-house research and relevant international developments.