



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA

# Progress Profile

October, 2011



# Public Health Foundation of India

Update on Activities and Accomplishments

(Focussing on the Period July 2011 – Oct 2011)

Report Submitted to the Governing Council

October, 2011



## **Chairman's Profile**

# **N. R. Narayana Murthy**

Mr. N. R. Narayana Murthy is the Founder-Chairman of Infosys Technologies Limited, a global software consulting company headquartered in Bangalore, India. He founded Infosys in 1981. Under his leadership, Infosys was listed on NASDAQ in 1999.

Mr. Murthy articulated, designed and implemented the Global Delivery Model which has become the foundation for the huge success in IT services outsourcing from India. He has led key corporate governance initiatives in India. He is an IT advisor to several Asian countries.

He serves on the boards of HSBC, Ford Foundation and the UN Foundation. He served as a member of the Unilever board between 2007 and 2010. He also serves on the boards of Cornell University, Wharton School, Indian School of Business, Hyderabad, and International Institute of Information Technology, Bangalore.

The Economist ranked Mr. Narayana Murthy among the ten most-admired global business leaders in 2005. He topped the Economic Times list of India's most powerful CEO's for three consecutive years: 2004 to 2006. He has been awarded the Padma Vibhushan by the Government of India, the Legion d'honneur by the Government of France, and the CBE by the British government. He is the first Indian winner of Ernst and Young's World Entrepreneur of the year award and the Max Schmidheiny Liberty prize, and has appeared in the rankings of businessmen and innovators published by India Today, Business Standard, Forbes, Business Week, Time, CNN, Fortune and Financial Times. He is a Fellow of the Indian National Academy of Engineering and a foreign member of the US National Academy of Engineering.

Mr. Murthy holds a B. E. (Electrical) from the University of Mysore (1967) and M. Tech. (Electrical) from the Indian Institute of Technology, Kanpur (1969). He has been conferred honorary doctorate degrees by leading universities across the world.

# **From the President's Pen**

## From the President's Pen

Presently PHFI is actively engaged in strengthening health systems and improving public health services across India, through multi-level, and multi-component capacity building. Four Indian Institutes of Public Health (IIPHs) are presently imparting inter-disciplinary and health system connected education through four on-campus and one distance education diploma programmes. The diploma in Public Health Management is closely aligned to the National Rural Health Mission. Plans are well developed for launching the MPH programme and three more distance learning diploma programmes over the coming year. At the same time, short term training programmes are infusing public health related skills into a wide range of public health functionaries, health care providers, health system managers and young researchers. PHFI's faculty is growing steadily, with return of Future Faculty fellows and recruitment of talented professionals from the diaspora.

PHFI has emerged a productive research engine, generating policy and programme relevant knowledge. Research grants and publications have recorded an impressive growth, with wide ranging national and international partnerships contributing the strength of complementary collaborations. A newly established unit on Affordable Health Technologies is expected to provide problem solving innovations for improving health services. PHFI has also played a strong role in policy development, health communication and advocacy. Its assistance and advocacy have led to initiatives for creating a public health cadre in several states. The government of Karnataka is the latest to invite PHFI's support for creation of such a cadre.

PHFI functioned as the designated technical secretariat for the High Level Expert Group on Universal Health Coverage, established by the Planning Commission of India. We are now partnering the Ministry of Health and Family Welfare (GOI) in mounting a major communication campaign on mental health. The National Human Rights Commission and The National Commission for Protection of Child Rights have repeatedly sought and secured public health expertise from PHFI for their investigations in several states (on issues ranging from child deaths in tribal areas of AP to fluorosis in Jharkhand).

The PHFI family is enthusiastically pursuing the mission of strengthening public health in India and is eager to scale up activities and enhance impact. We seek to add to our opportunities and set out to multiply our accomplishments.



**K. Srinath Reddy**

# **Glossary**

# Glossary

List of Abbreviations	i
Academic	01
Research	21
Training	35
Health Communication & Advocacy	42
Health Systems Support	46
Centres of Excellence	51
Other Initiatives	64
Library	84
Partnerships and Institutional Collaborations	87



# List of abbreviations

CoE:	Centre of Excellence
CSIR:	Council of Scientific and Industrial Research
DL:	Distance Learning
GAIN:	Global Alliance for Improved Nutrition
GIS:	Global Information System
GOG:	Government of Gujarat
GOMP:	Government of Madhya Pradesh
IIPH:	Indian Institute of Public Health
ICMR:	Indian Council for Medical Research
SIHMC:	State Institute of Health Management & Communications
MPH:	Master in Public Health
PGDPHM:	Post Graduate Diploma in Public Health Management
PGDHEP:	Post Graduate Diploma in Health Economics, Policy and Financing
PGDBDM:	Post Graduate Diploma in Biostatistics and Data Management
PGDCR:	Post Graduate Diploma in Clinical Research
PGDEPI:	Post Graduate Diploma in Epidemiology
PGDPHN:	Post Graduate Diploma in Public Health Nutrition
PGDHPTC:	Post Graduate Diploma in Health Promotion with Specialization Tobacco Control
PGDHEP:	Post Graduate Diploma in Health Economics, Health Care Financing & Health Policy
PHFI:	Public Health Foundation of India
MDGs:	Millennium Development Goal
MSM:	Men who have Sex with Men
NABARD:	National Bank for Agriculture and Rural Development
NACP:	National AIDS Control Programme
NRDC:	National Research Development Corporation
SIDA:	Swedish International Development Cooperation Agency
SIDBI:	Small Industries Development Bank of India
SIHMC:	State Institute of Health Management and Communication

# **Academic Programmes**

# ACADEMIC PROGRAMMES AT PHFI

## Vision

To contribute toward creating a tangible impact on health status in the state and neighbouring states, leading to improvement in their Human Development.

## Mission

To support government, private sector, and communities in improving health status, by assisting in design, planning, implementation, and evaluation of public health initiatives through education, competency building, health systems research, and advocacy.

### 1. Approaches proposed by IIPHS for positively affecting key health issues

- Impart world class, locally relevant public health education through long-term degree and diploma courses.
- Enhance competency of current professionals by delivering short-term training and on-the-job assistance for health promotion and service delivery.
- Carry out research to generate knowledge, and to apply it in the area of health.
- Contribute to public health practice by providing technical assistance to government and private sector.
- Practise advocacy for public health.

### 2. When fully functional, each IIPH will accomplish these objectives

- Graduate 200 degree and diploma holders, and offer a large number of short-term training programmes each year.
- Have core faculty strength of around 50.
- Utilize PHFI's faculty resources and vast international partnerships.
- Have researchers for demonstration/ action based research.
- Set up a public health laboratory with the latest technology.
- Establish Centres of Excellence for promoting evidence-policy-action linkages in prioritized areas of public health.
- Establish institutional mechanisms for networking with Government, Medical Institutions, leading Private Sector Agencies/NGOs, and professionals with aligned objectives.

## Scaling-up of PHFI institutions and academic programmes

2008-2009	2009-2010	2010-2011	2011-2012
<b>IIPH-Gandhinagar</b> PGDPHM	<b>IIPH-Gandhinagar</b> PGDPHM	<b>IIPH-Gandhinagar</b> PGDPHM	<b>IIPH-Gandhinagar</b> PGDPHM
<b>IIPH-Hyderabad</b> PGDBDM	<b>IIPH-Hyderabad</b> PGDBDM PGDPHM	<b>IIPH-Hyderabad</b> PGDBDM PGDPHM	<b>IIPH-Hyderabad</b> PGDBDM PGDPHM
<b>IIPH-Delhi</b> PGDHEP	<b>IIPH-Delhi</b> PGDHEP PGDPHM PGDCR	<b>IIPH-Delhi</b> PGDHEP PGDPHM PGDCR PGDPHN-DL PGDPHM-SIHMC, Gwalior*	<b>IIPH-Delhi</b> PGDHEP PGDPHM PGDCR PGDPHN-DL PGDEPI-DL PGDPHM-SIHMC, Gwalior*
		<b>IIPH-Bhubaneswar</b> PGDPHM	<b>IIPH-Bhubaneswar</b> PGDPHM

\* PGDPHM is also offered at SIHMC- Gwalior (Technical support is provided by PHFI/IIPHD)

## ACADEMIC PROGRAMMES AT INDIAN INSTITUTES OF PUBLIC HEALTH, GANDHINAGAR, HYDERABAD, DELHI AND BHUBANESWAR, 2011-12

The current academic programmes being delivered at Indian Institute of Public Health- Gandhinagar, Hyderabad, Delhi and Bhubaneswar are as follows:

ACADEMIC PROGRAMMES	INDIAN INSTITUTE OF PUBLIC HEALTH (IIPH)
<b>Regular Programmes</b>	
Post-Graduate Diploma in Public Health Management (PGDPHM)*	Gandhinagar, Hyderabad, Bhubaneswar and Delhi
Post-Graduate Diploma in Biostatistics and Data Management (PGDBDM)	Hyderabad
Post-Graduate Diploma in Health Economics, Health Care Financing and Health Policy (PGDHEP)	Delhi
Post-Graduate Diploma in Clinical Research ( PGDCR)	Delhi
<b>Distance Learning Programmes</b>	
Post-Graduate Diploma in Public Health Nutrition – Distance Learning	Delhi
Post-Graduate Diploma in Epidemiology – Distance learning	Delhi
Post-Graduate Diploma in Health Promotion with Specialization in Tobacco Control – Distance Learning	Delhi

\* PGDPHM is also offered at SIHMC- Gwalior (Technical support is provided by PHFI/IIPHD)

## **Programmes Brief**

### **1. Post-Graduate Diploma In Public Health Management (PGDPHM)**

The Post-Graduate Diploma in Public Health Management (PGDPHM) is offered at Indian Institutes of Public Health, Delhi, Gandhinagar, Hyderabad, Bhubaneswar and also at SIHMC, Gwalior (with technical support by PHFI), besides other partner institutions in the academic year 2011-12. This is a one-year, fully residential course which aims to bridge the gap between existing and required public health managerial capacity amongst health professionals in the country. This programme imparts the knowledge and skills to address and resolve key health management challenges. This programme focuses on management of public health services wherein in-service doctors are nominated by respective state governments. The course structure is modular, with eight months institution-based teaching followed by extensive field-based project work. The multi-disciplinary curriculum includes modules on management viz.: human resource management, finance management, health management information system, modules on public health, biostatistics, demography, epidemiology, behavioural and social sciences, health communication and promotion, and health economics and policy.

### **2. Post-Graduate Diploma in Public Health Management at SIHMC, Gwalior**

As per the MoU signed between Government of Madhya Pradesh and PHFI, IIPH-Delhi is currently assisting the state government in the overall management and conducting of the PGDPHM programme at State Institute of Health Management and Communication, Gwalior (SIHMC). To facilitate the programme delivery, PHFI recruited two full-time faculty members who are currently posted at SIHMC, Gwalior. Additionally, the existing faculty members from IIPH-Delhi travel to SIHMC, Gwalior on a case-by-case basis. As part of its partnership with the institute, we also provide guidance in setting up an updated library, and in utilizing advances in information technology toward building the competencies of the course participants.

### **3. Post-Graduate Diploma In Biostatistics & Data Management (PGDBDM)**

This one-year, full-time programme, is being offered at the Indian Institute of Public Health, Gandhinagar in the fourth consecutive year. The domain of Biostatistics and Data Management is a key one in public health, and PHFI has prioritized a specialized training in this discipline by offering a post-graduate diploma in this area. The course is designed to equip quantitatively oriented students with modern tools of data management and applied biostatistics, training that would lead them towards a career as practicing biostatisticians. The programme also aims to enhance the skills of practicing biostatisticians and epidemiologists in the areas of medical research and public health.

### **4. Post-Graduate Diploma in Health Economics, Health Care Financing & Health Policy (PGDHEP)**

This 9-month programme has been designed as a 3-phase semi-residential course: Phase 1 for 5.5 months (residential); Phase 2 for 2.5 month (project/thesis work at place of work); and phase 3 for 1 month (residential). The overall goal of this course is to increase awareness and appreciation of the need for incorporating analytical perspectives (economics, policy and systems) in various public health issues, and to impart the skills to do so. The programme will provide a fundamental understanding of key issues in health economics, health policy and health systems, for informed decision-making.

## **5. Post-Graduate Diploma in Clinical Research (PGDCR)**

This one-year, full-time programme is offered at Indian Institute of Public Health, Delhi. The programme is designed to focus on the scientific, ethical, and operational issues related to Clinical Research. The course structure is planned in a modular manner requiring intensive year-long institution-based teaching.

## **Distance Learning Programmes**

### **1. Post-Graduate Diploma in Public Health Nutrition – Distance Learning (PGDPHN-DL)**

This course has been designed as a one-year, post-graduate programme, divided into two semesters. The course is being delivered in the hybrid/blended learning mode i.e., through live, e-learning sessions conducted by faculty members, with students logging in from personal computers from sites across India. This course aims to provide comprehensive training in public health nutrition in a global setting with the choice of specializing in a number of topics and in a range of contexts. It provides an integrated programme covering dietary, epidemiological, public health, social and biological aspects of nutritional science. This area of study is particularly suitable for people whose employment overlaps the nutritional area; such as health workers, medical practitioners, dieticians, pharmacists, nurses, health educators and teachers, and those who wish to avail themselves of contemporary ideas in human nutrition.

A total of 116 students are currently enrolled for this programme in the first batch.

### **2. Post-Graduate Diploma In Epidemiology – Distance Learning (PGDEPI-DL)**

The course is designed as a one-year Post-Graduate Diploma programme. It is a distance learning, computer-based online programme, largely self-taught complemented with online lectures and comprehensive printed study materials. The distance learning programme envisioned by Public Health Foundation of India is particularly suited for healthcare professionals working with health systems and engaged in delivery of health services, but disadvantaged by limited access to higher education owing to personal or professional reasons. This programme aims to build a pool of trained public health professionals with a special focus on application of epidemiology in public health.

This programme will start from November 2011. A total of 85 students are enrolled for this programme as on 7<sup>th</sup> October 2011.

### **3. Post-Graduate Diploma In Health Promotion With Specialization In Tobacco Control – Distance Learning (PGD HPTC-DL)**

The Public Health Foundation of India (PHFI) is commencing this one-year Post-Graduate Diploma in Health Promotion with an applied focus on Tobacco Control in the academic year 2011- 12, in distance mode through e-learning under Project STEPS (Strengthening of Tobacco Control Efforts through innovative Partnerships and Strategies). This diploma programme is specially designed for working health professionals with an aim to develop their health promotion and tobacco control skills, which in turn could be integrated into their professional practices. The online training schedule of the programme will allow professionals to study at their own pace, before or after working hours according to their convenience.

This programme is scheduled to commence from November 2011. The admissions are currently open and the course promotion is on-going as of October 2011.

## **Prospective Academic Programmes**

### **1. Master Of Public Health (MPH)**

This two-year master's programme aims to promote public health research in institutional and field settings. The programme prepares health professionals to work in socially, culturally and economically diverse populations by being attentive to needs of vulnerable and disadvantaged groups. Master of Public Health offers multidisciplinary education imparting a broad appreciation of the multiple determinants of health (especially the social determinants) and the skill sets needed for designing and implementing a broad range of multi-sectoral actions required to advance public health. It is designed to instil qualities of leadership among public health professionals, and to teach them to effectively use communication skills for health advocacy. Through this programme we train personnel in programme organization and management, problem solving, and critical thinking in the public health domain.

### **2. Post-Graduate Diploma In Research Methodology (Distance Learning)**

This distance-learning programme aims to train enrolled students in quantitative and qualitative research methodologies in the public health context. This programme equips participants with the essential skill sets needed to formulate a research question; followed by conceptualizing and designing an appropriate study to answer the research question.

### **3. Post-Graduate Diploma In Management Of Reproductive And Child Health Programmes (Distance Learning)**

IIPH-Delhi is currently working on the development of an online course on **Post-Graduate Diploma in Management of Reproductive and Child Health Programs (PGDMRCH)** primarily meant for programme managers. The course will equip the potential students to apply the principles of management in their practice. The duration of the course will be 1 year and the contents will be organized into 10 modules.

### **4. Intensive Professional Programme In Sexually Transmitted Infections And HIV (Distance Learning)**

IIPH Delhi/ PHFI in collaboration with University of Sydney is in the process of developing a distance learning diploma programme in Sexually Transmitted Infections and HIV/ AIDS. The programme aims to equip the professionals working in STI and HIV/AIDS programmes with enhanced knowledge and necessary skills to provide quality services, to implement programmes, and to conduct research in STI and HIV/AIDS.

## **Scholarships**

PHFI offers a certain number of scholarships to needy and meritorious students. The selection of awardees of the scholarships is based on the recommendation of the committee constituted for this purpose. So far, PHFI has offered scholarships to 77 students enrolled in various programmes through

the four IIPHS during the academic year 2008-09, 2009-10 and 2010-11. Out of these, 42 were full scholarships, and 35 were partial scholarships covering a part of the tuition fee. The scholarship amount was funded by PHFI, WHO, Pfizer Inc. and MEASURE Evaluation. A total of over INR 9.2 million has been disbursed through these scholarships. This amount is in addition to the MEASURE Evaluation Fellowships awarded to 2 students in PGDHEP 2010-11 batch, covering their tuition fee, accommodation, study material/books, research project expenses, travel, medical insurance, and other expenses.

## **Directors of IIPHS**

- Sanjay Zodpey, Delhi
- Dileep Mavalankar, Gandhinagar
- G V S Murthy, Hyderabad
- Subhash Hira, Bhubaneswar

Dr. Hira joined PHFI as the Distinguished Professor of Public Health & Infectious Diseases and Officiating Director, IIPH Bhubaneswar in September 2011



# Indian Institute of Public Health, Delhi

## Objectives

The Indian Institute of Public Health – Delhi (IIPH-D) commenced its operations in November 2008 with the launch of the Post-Graduate Diploma in Health Economics, Health Care Financing and Health



Policy. Since then, IIPH-D has expanded its activities and launched the following courses: Post-Graduate Diploma in Public Health Management, Post-Graduate Diploma in Clinical Research, Post-Graduate Diploma in Public Health Nutrition (Distance Learning), and Post-Graduate Diploma in Epidemiology (Distance Learning).

The key objective of the institute has been to implement the vision of the Public Health Foundation of India by linking public health

advocacy, teaching, research and public health practice. With this objective, various short term training programmes, workshops, research activities and publications are being taken up by the institute from time to time.

IIPH-D has successfully conducted many short-term training programmes and workshops in various fields related to public health, and it will continue to do so. The vibrancy of the institute is reflected in the multi-speciality research activities undertaken in collaboration with numerous national and international partners.

IIPH-Delhi has a rich tradition of pursuing academic excellence and value-based education, and it provides an environment conducive to overall skill development. Through its activities, IIPH-D strives to create a public health workforce that responds to the felt needs of the country.

## Staff strength

### 1. Total Number of Staff members: 40

- Number of Non Academic Staff: 11
- Number of Academic Staff: 29

Designation	Number of Faculty Members
Director	1
Professor	1
Associate Professor	4
Assistant Professor	14
Senior Lecturer	7
Lecturer	2
<b>Total</b>	<b>29</b>

## 2. Human Resources Update

- seventeen out of twenty-nine academic staff are part of the Future Faculty Fellowship Programme;
- four faculty members are currently pursuing higher studies (PhD - 3 , DPhil - 1); and
- two faculty members are stationed at SIHMC, Gwalior.

## Disciplines in faculty

### Broad Disciplines

1. Epidemiology
2. Biostatistics
3. Occupational and Environmental Health
4. Health Services Management & Administration
5. Social and Behavioural Sciences
6. Nutrition and Food Hygiene
7. Public Health Laws



## Research focus

Research activities at IIPH-Delhi are directed towards addressing the needs of health systems and vulnerable populations. The current research focus is on health system strengthening, human resources in health, migrant health, and research in accessing health care services. Additionally, we also provide technical assistance to states and engage in programme evaluation. Faculty members are also engaged in research related to maternal and child health.

## Details of on-going research projects

Description	Number
Funding secured for new projects in last three months	3
IIPH-D faculty as Principal Investigator in Research Projects	7
IIPH-D faculty as Co-Investigator in PHFI Research Projects	3
Capacity Building Initiatives	5
Technical Assistance Project	2
Total	20

## Teaching

### Academic Programmes

The academic programmes presently being delivered at Indian Institute of Public Health, Delhi are:

#### 1. Regular Programmes

1. Post-Graduate Diploma in Public Health Management (PGDPHM)
2. Post-Graduate Diploma in Health Economics, Health Care Financing and Health Policy (PGDHEP)
3. Post-Graduate Diploma in Clinical Research (PGDCR)

#### 2. Distance Learning Programmes

1. Post-Graduate Diploma in Public Health Nutrition- Distance Learning (PGDPHN-DL)
2. Post-Graduate Diploma in Epidemiology- Distance learning (PGDEPI-DL)

### Partnership between Government of Madhya Pradesh and IIPH-Delhi (PHFI)

This Post-Graduate Diploma in Public Health Management (PGDPHM) was designed to bridge the gap in public health managerial capacity amongst health professionals in the context of the National Rural Health Mission. Four Indian Institutes of Public Health are currently offering this course to health professionals nominated by the state governments. The Government of Madhya Pradesh (GoMP) had expressed a need to develop sustainable, robust and dynamic health care that is adequately equipped to address the state's public health challenges. To facilitate this ambitious plan, PHFI provides technical support to GoMP in delivering the PGDPHM course at the State Institute of Health Management and Communication, Gwalior (SIHMC). The SIHMC is the apex training and research centre for health personnel in Madhya Pradesh, with a mandate to improve the efficiency of health personnel for better service delivery, and to engage in health-system research. The activities at SIHMC, Gwalior, fit into the state's long-term plans to overcome the shortage in managerial skills. The institute offers a variety of opportunities for skill development of public health professionals, and there is a visible investment in infrastructure and personnel by the state government. As part of its partnership with the institute, we also provide guidance in the setting up of an updated library and in utilizing advances in information technology towards building the competency of participants in courses.

The 2<sup>nd</sup> course of PGDPHM commenced at SIHMC, Gwalior on 2<sup>nd</sup> August 2011.

## Research and academic achievements

IIPH-Delhi is currently engaged in 20 research projects, out of which the funding for 3 projects was secured between July and September 2011. IIPH-D faculty members are principal investigators in 7 projects and co-investigators in 3 of the PHFI projects. Additionally, they are involved in 5 capacity-building initiative projects and 2 technical assistance projects. A total of 17 research proposals were submitted by IIPH-D faculty during this period, out of which 2 have received approval. The institute is optimistic about procuring funding for the proposals which are currently under review.

IIPH-D faculty members are also credited with 10 research publications during this period. Additionally 7 papers by IIPH-D faculty have been accepted for publications in various journals, 17 papers have been submitted for publication, 2 abstracts have been presented in conferences and 4 abstracts have been accepted for presentation at international conferences.

IIPH-D has a total of 77 students enrolled currently for its 3 regular programmes (PGDPHM, PGDHEP & PGDCR), and 201 students enrolled for its distance education programmes (PGDPHN-DL & PGDEPI-DL).

Totally 8 training courses/workshops were organized by IIPH-Delhi between July and September 2011. A total of 167 participants across the country were trained through these training courses/workshops.

# Indian Institute of Public Health, Gandhinagar

## Aims & Objectives

- Address the need for a trained public health workforce in India that can supplement on-going efforts to provide health services and ensure their reaching those who are most needy.
- Strengthen the overall health system in the region and country through education, training, research, advocacy and policy initiatives.

## Scale

The institute has 10 full-time and 2 part-time faculty members with expertise in the fields of public health, medicine, social and behavioural sciences, communication, engineering, and health management.

## Activities

The main thrust of the institute is public health capacity building. An important component is offering a one-year Post-Graduate Diploma in Public Health Management (PGDPHM) meant for in-service and private candidates. In addition the institute also trains health and medical professionals in research methodology, monitoring & evaluation, and bio-ethics through its annual short-term training programmes.

Currently the institute's faculty members are involved in public health research with a focus on nutrition programme evaluation, maternal and child health, heat health, tobacco control, health insurance and medical education.

The institute also engages with government, NGOs, and other agencies such as UNICEF, in the areas of public health, women and child development, and climate change, so as to provide support in policy formulation, programme implementation and capacity building.

## Sources of Funding

In addition to support from its parent body, PHFI, the institute has received liberal support from the Government of Gujarat. Funding has also been received in the form of research grants from various international and national organisations such as Global Alliance for Improved Nutrition, the Bill and Melinda Gates Foundation, European Community, Wellcome Trust-PHFI, SIDA, NRDC, Johnson & Johnson, SIDBI, ICMR, CSIR, NABARD, Deepak Foundation, and Ananya Finance for Inclusive Growth. Grant for supporting students' fellowships has been received from Deepak Foundation, Sir Dorabji Tata Trust and Pfizer, through PHFI.

## Research & Academic achievements

- **Public health practice:** Faculty members of the institute engage in public health policy making, advocacy, and capacity building, through membership in various groups such as: group for the formulation of the 12<sup>th</sup> Plan for the health sector in Gujarat; Steering Group for Health for the 12<sup>th</sup> Five Year Plan by the Planning Commission, GOI – Sector Innovations Council for Health; the Technical Advisory Group for Maternal health by GOI (as Chair); national team formed by GOI on Acute Flaccid Paralysis Review for the National Polio Eradication Programme; team formed to monitor the implementation of the Honourable Supreme Court order by the state of Gujarat on compensation to silicosis victims; and State Oversight Committee for all MSM-related HIV prevention & control interventions for GOG.

IIPH-G with PHFI organized a Workshop on Regional Dialogue on Strengthening Health Systems on 16th June 2011 in Ahmedabad, with over 50 participants from the western region, for release of the Lancet series on India.

IIPH-G along with Freedom from Hunger and Microcredit Summit Campaign successfully completed organizing an International workshop on “**Linking Health and Microfinance in India: Improving Incomes and Promoting Universal Health Care Access for the Poor**”, in Ahmedabad, with more than 65 delegates attending

Faculty members have played active roles in the preparation of national / state /local level policy documents on various aspects such as: draft State Action Plan for Climate Change for GOG; Regional Consultation for NACP-IV strategy design “**grass root level capacity building**” for Deepak Foundation; and as reviewer of research proposals for NIPI.

- **Public health education:** The institute has successfully trained 77 participants under PGDPHM including about 50 medical officers from GOG and 20 from Govt. of MP. Over 250 medical/health professionals have been trained under various short-term programmes run by the institute. In addition to the purpose of capacity-building, these efforts have also created a pool of personnel, trained at IIPHG, and now back in their government departments working with health systems.

Faculty members have served as resource persons in a number of national and regional workshops organized in various parts of the country on qualitative research in health, health research and health management, and TI-peer educators training. Members have also served as examiners for MPH and MPhil in universities.

- **Capacity building:** Faculty members have also participated in various capacity-building workshops to upgrade their own skills and capacities. Some areas and programmes have been: qualitative research, ‘Australian Leadership Award’ programme, STATA, Bio-ethics, Costing of health interventions – Bangkok, and GIS.
- **Public health Research**
  - **Recently completed and on-going grants:** IIPH-G faculty members have successfully secured grants from various international and national funding agencies and government departments to undertake research, and organise workshops and consultations. A select list of themes and agencies include: research on maternal mortality in India with funding from the European Union; safe motherhood and child survival from Deepak Foundation; child nutrition from GAIN; HR issues surrounding Female Health Workers at the behest of GOG; Health insurance from GOG and GOI; Climate Change and Heat Health Research with support

from Natural Resources Defence Council, USA; Transition Assessment of Targeted Interventions for HIV/AIDS for NACO and MDACS.

- **Recently secured grants:** Study of pre-term births in Gujarat from ICMR; three small grants from the recently announced PHFI-UKC Wellcome Trust support
- **Potential future grants:** In addition IIPH-G faculty members have successfully applied for at least five additional grants from various agencies with concepts already approved.
- **Publications & conference presentations:** Faculty members have published/communicated 22 academic papers in reputed international and national journals of repute including Lancet, International Journal of Medicine and Public Health, and Public Health. Members have also participated and presented five conference papers.

# Indian Institute of Public Health, Hyderabad

## Objectives

- Realize the vision of establishing a hub for public health education, research, advocacy and practice in the state.
- Strengthen existing professionals in public health by creating high quality continuing education programmes and learning content in India.
- Produce a large number of committed public health professionals who can significantly contribute to meet the health needs of the country.

## Staff Strength

- Academic Staff – 26 Members
- Administrative Staff – 19 Members
- Project Staff – 10 Members



## Sources of Funding

Training, research, administrative and operational support for the institute is covered extensively using core funding from the research projects that are being evaluated and executed by the institute. The research projects are funded by international institutions such as CBM, Bloomberg School of Public Health, and Health Protection Agency. Institutional funding also comes from the state governments.

## Teaching

- **Post-Graduate Diploma in Public Health Management**

The latest batch has started studies on 15<sup>th</sup> Sep 2011 and 13 participants have enrolled. The Government of AP has issued a GO for another 11 participants. The Karnataka Government has issued a GO for 3 participants. All these participants will be joining the course in the 3<sup>rd</sup> week of October, raising the strength of the batch to 25 members.

- **Post-Graduate Diploma in Biostatistics & Data Management**

In the 3<sup>rd</sup> week of October 2011, 11 candidates are likely to join the course.



## Research and Academic Achievements

- IIPH-H faculty published 41 research articles in various national and international journals. Faculty released 24 project reports from January to October 2011.
- IIPH-H also conducted 16 workshops/training programmes in this year.

### Prospective Programmes:

#### (A) Immediate (next 6 months):

- financial management of projects and evaluation of operational research;
- pilot seeding specific grant-writing skill refinement for consortium projects (national - ICMR and Indo-UK/Indo-US/NIH); and
- cluster randomised trials with community and clinical support guideline / decision for CVD and COPD.



#### (B) Intermediate (Next one year)

- advanced meta-analysis skills;
- principles and practice strategies for field site cohorts (rural Pune and rural parts of Mahabubnagar); and
- distance learning modules on Public Health Disability, Epidemiology and Biostatistics.

#### (C) Long Term - 2 years from now

- Cochrane consortium guidelines group for Respiratory Health and Respiratory Rehabilitation for COPD patients;
- CoE for Respiratory Health – collaboration between UPMC (Pittsburgh), Addenbrooks (Cambridge), CRF and PHFI; and
- developing public health management case studies on (a) 'why managers and leaders are different' (b) group activities for live and real life problems – e.g.: GHMC projects, developing solutions for problems that actually exist by visiting field areas and solving them through the method of 'Learn by doing'.

# Indian Institute of Public Health, Bhubaneswar

Indian Institute of Public Health, Bhubaneswar is one of the four institutes set up by PHFI as a part of its charter to build public health capacity in India. The IIPH, Bhubaneswar, commenced its academic activities from August, 2010. A key objective of the institute has been to implement the vision of the PHFI by linking public health advocacy, teaching, research, and public health practice. The Post-Graduate Diploma course in Public Health Management (PGDPHM) was launched on 2nd August 2010. In addition to this, various short term training programmes, workshops, and research activities are being undertaken by the institute.



*World No Tobacco Day Celebration by IIPH-Bhubaneswar*

## Objective

Implement the vision of the PHFI to build public health capacity, and to add demonstrable value to government's health improvement strategy, by linking public health advocacy, teaching, research, and public health practice.

## Staff strength (Academic and Administrative)

- Faculty Composition:** At present there are six full time faculty (two women and four men) who are involved in teaching as well as training and research activities in the institute. Four of the faculty have MD/PhD qualification, one has a master's degree, and one is currently a PhD Scholar. Four faculty members have a medical background, and two have social sciences background.
- Administrative Team Composition:** There are 7 members in our administrative team including Finance and Administrative Officer, Programme Officer and assistants, IT officer, and office support staff.

## Disciplines in faculty

Indian Institute of Public Health-Bhubaneswar has a multidisciplinary team of faculty with both medical and non-medical backgrounds specialized in areas such as health systems and financing, policy formulation and analysis, access to health care and equity, epidemiology, biostatistics, nutrition, demography, MDGs, M&E, health promotion, social sciences, STI/reproductive health, infectious diseases, international health, and human resources. The team has expertise in conducting both quantitative and qualitative research.

## Research focus

The present focus areas of research are health system strengthening, access to health care, human resources for health, disease control especially malaria, immunization, tobacco control, health promotion, and programme management.

## Funding

During the past one year, IIPH-Bhubaneswar has received grants from the State governments of Odisha and Chhattisgarh and donor agencies, namely, UNICEF, Wellcome Trust Programme, Bloomberg Initiative (HRIDAY-SHAN) and Intel-World Ahead group for conducting research activities and project work.

## Teaching

At present, the institute offers a one-year PG diploma course in Public Health Management.

### Batch:

For the academic year 2011-12, there are totally 21 candidates comprising 18 nominations from the Government of Odisha, 2 self-sponsored candidates and 1 candidate from the Government of Chhattisgarh. The course has already started from 16<sup>th</sup> August 2011. All participants are required to submit their dissertation based on field research with a focus on problems relevant to their own context. Most of these research activities are small operational research studies.



*PGDPHM students in Computer Lab at IIPH-Bhubaneswar*

The total number of 20 participants was in academic year 2010-2011.

## Research and Academic achievements

In its first year, the institute has taken up six research projects with funding from International agencies namely, UNICEF, Intel, Wellcome Trust, HRIDAY-SHAN (Bloomberg Initiative). Out of the six projects, one funded by Intel has been completed with timely submission of project report, and the rest are in progress. Similarly in the training portfolio, IIPH-B has already conducted five batches of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) TOT, two batches of Field Epidemiology Training Programmes (FETP) and one batch of Supportive Supervision TOT in collaboration with Government of India as well as state government, with funding support from Govt. of India and UNICEF. Two regional workshops, one on "Human resources for health", and the other

on “Research methodology in health sciences”, and one CME on Meta-analysis, were organized by the institute. These events received enthusiastic response from participants, both from within and outside the state. IIPH-B has been proactively engaged in community interventions and in providing technical support to the state governments on various issues of public health importance. Under the academic programme, of the first batch (2010-11), 19 candidates from Odisha and Chhattisgarh successfully completed the PGDPHM course, while in the current academic year, 21 candidates are enrolled. Faculty members are involved in research and training in addition to teaching in the PGDPHM programme. Most faculty have participated in research, and presented research papers in different national and international conferences with publications in peer reviewed journals.

## **Policy engagement**

The institute plans to become engaged in policy research and advocacy with an aim a) to inform and empower State Policy Makers and Programme Managers for strategic action; b) to generate an evidence base for policy recommendations; and c) to proactively engage with stakeholders in order to develop advocacy platforms for key public health issues and actions.

Develop an alumni network of participants of the PGDPHM course and other short-term training courses, so as to strengthen public health capacity through these change agents.

# Research

# Research

## Overview

The Public Health Foundation of India (PHFI) has a mandate to establish a strong national research network of public health and allied institutions, which would undertake policy and programme relevant research that will advance public health goals in priority areas. Research has been an important pillar of PHFI's activities during the past five years. Since inception, researchers at PHFI have published over 387 peer-reviewed journal articles (Figure 21), and 22 books, chapters and monographs

In 2011, PHFI researchers published over 155 publications in peer-reviewed journals, including a special series published by the Lancet. Of the total PHFI publications, 118 were in publications with an impact factor of three or greater, and 86 were in publications with an impact factor of five or greater (Figure 22).

## Research Staff

To lead, manage, and support diverse projects, PHFI has a multidisciplinary team of researchers, with medical and non-medical backgrounds (management, psychology, economics, finance, statistics, social work, pharmacy), who specialize in technical areas such as health economics, health systems and financing, policy analysis, epidemiology, clinical research, genetics, nutrition, biostatistics, demography and some others. Our researchers also work on adolescent health, equity issues, urban health, community-based initiatives, women's empowerment, mental health, oral health and climate change. PHFI currently employs more than 237 faculty and research staff. We are working to expand our research staff to more senior researchers, as explained below.

## Research Focus

Research projects at PHFI span a wide range of disciplines, diseases, determinants and health system components encompassing a range of public health issues relevant to India, ranging from maternal and child health to communicable diseases including HIV/AIDS, chronic diseases, health economics and others. New research projects are starting to look at social determinants of health, health governance, health information system, health policy/governance, health services, health economics/financing, and human resources. Figure 19 provides a distribution of research projects at PHFI during the last four years.

PHFI's research is conducted at the headquarters in New Delhi and the four IIPHs, and four Centres of Excellence that include:

- The South Asia Network for Chronic Diseases (SANCD), funded by a grant from the Wellcome Trust, UK.
- Center of Excellence for Prevention and Control of Cardio metabolic Diseases in South Asia, funded by a grant from the National Institutes of Health, USA.

- A South Asia Centre for Disability Inclusive Development & Research (SACDIR) has also been established.
- Ramalingaswami Centre for Social Determinants of Health is also operational and several research projects have been initiated by this Centre.

Activities of the Centres of Excellence are reported separately.

## Research Environment and Productivity

PHFI strives to maintain a strong research environment even though their research staffs are spread across many locations. In order to build scale and collaborations, PHFI has started organizing bi-annual research symposiums that bring all research staff together to present their work. The first symposium was held in March 2011 and the next symposium is due later this year. These gatherings allow researchers to share information and formulate strategy, research priorities and research platforms for PHFI at an institutional level.

PHFI is planning a series of regular seminars, which thus far have been occasional. Web-based networking across campuses is planned in order to allow participants from other locations.

## Research Management

There have been important improvements in the process of research and grants management at PHFI. Research management at PHFI including financial aspects of research and record keeping are being standardised and systems for research proposal submission are being streamlined. A new system for keeping track of researcher time billed to projects is being introduced in a few months. This will enable better compliance with international standards expected by funders.

## Funding

During the past year, PHFI was awarded several competitively adjudged research/project grants from international agencies including Wellcome Trust, National Institutes of Health, Bill and Melinda Gates Foundation, Norwegian Government, Bloomberg Global Initiative, World Health Organization, World Bank, USAID, and UNICEF. Major national funding agencies include Ministry of Health and Family Welfare (MoHFW), Indian Council of Medical Research (ICMR), National Human Rights Commission (NHRC), Department of Science and Technology (DST), and various State level organizations. The majority of funding for research at PHFI comes from three large capacity building projects which include the Wellcome Trust capacity building grant, the Wellcome Trust funded South Asia Network for Chronic Disease research (SANCD) and National Institutes of Health funded Centre of Excellence for chronic cardiovascular and pulmonary diseases.

Research projects are listed separately, but some of the new projects are described briefly below:

- Earlier this year, PHFI initiated an Engender Health - BMGF supported project "**Quality Roadmap for Institutional Births**". The overall purpose of the Quality Roadmap initiative is to enable full benefits of increasing institutional births through embedding quality improvement interventions at the facility levels in the health system.

- **MATIND** is an EU funded, collaborative research project between five partners: Karolinska Institute, Sweden; IIPH-G, Ahmedabad; RD Gardi Medical College, Ujjain; Liverpool School of Tropical Medicine, UK and Zhejiang University, China. This project will evaluate two innovative large scale programmes, which were set up to decrease maternal mortality among women living BPL in India operating through the use of different innovative demand-side financing mechanisms.
- PHFI is a leading partner in the project **"The Transform Nutrition Research Program consortium"** funded by International Food Policy Research Institute (IFPRI). The project is primarily concerned with questions around how to scale up direct nutrition programmes, how to leverage resource flows in agriculture, social protection, and women's empowerment for nutrition, and how to create an enabling environment for nutrition.
- PHFI under the **"Landscape analysis of research institutions in India"** is planning to map out and scan different existing research sites which exist in order to assess potential for the future larger research projects and interventions. The project is funded by BMGF.
- PHFI, along with the University of Washington, is an anchor of the next edition of the **Disease Control Priorities Project**, a global effort that has informed priority setting and resource allocation in health since 1993 when the first edition was released.
- PHFI with support from International Development Research Centre has initiated a study on **"Identifying sources, pathways, and risk drivers in ecosystems of Japanese encephalitis in an epidemic-prone North Indian district"**. This study focuses on micro-ecosystems present in Kushinagar district of Uttar Pradesh to understand how various risk drivers come together to determine JE occurrence and transmission in human populations.
- Supported by Duke University - Bill and Melinda Gates Foundation, PHFI initiated **"Bihar Evaluation of social franchising and Telemedicine (BEST)"**. The main objective of this study is to design a rigorous prospective evaluation that will estimate the impact of the World Health Partners (WHP) programme in Bihar.

## Ethics

PHFI has a standing Institutional Ethics Committee (IEC) in New Delhi. IIPH-Gandhinagar, IIPH-Hyderabad and IIPH-Delhi have ethics committees to review their research proposals, while IIPH-Bhubaneswar is in the process of setting up its ethics committee. The IEC provides guidance and promotes ethical conduct in all research undertaken by researchers at PHFI. PHFI takes seriously the responsibility of building a strong culture of ethics in the organization. To this end, research ethics training workshops which cover both the principles and process of ethics approval at PHFI are conducted regularly and all researchers are encouraged to attend.

## New Collaborations

PHFI researchers collaborate with a large number of external partners and institutions, both domestic and international. PHFI recently signed a MOU with the Council of Scientific and Industrial Research (CSIR) to undertake collaborative research, especially in the area of Tuberculosis, Indian Systems of Medicine and Chronic Diseases. It will also help train CSIR Scientists in health research methodology and to establish an International Collaborative Centre on Affordable Health.

PHFI has in the last few months received approval for funding of over 20 new research projects from organisations such as NIH, BMGF, UNICEF, WHO etc.



## Research Projects at a Glance

The following section summarizes only those research projects that PHFI has successfully been granted in the last three months (July to September, 2011) and those that have been successfully completed in the same period.

### Epidemiology

#### Ongoing

##### **INDIA RESEARCH SITE LANDSCAPE ANALYSIS**

Geographical location: ACROSS INDIA (20-25 locations)

Although India lacks a full-fledged demographic and disease surveillance study site, as in other parts of Asia and in Africa, a significant number of field sites for public health research have been initiated in India over the last few years. These sites have achieved varying degrees of success in research productivity and policy impact, yet there is significant demand for multipurpose study sites that can serve a variety of research purposes, ranging from disease surveillance needs to establishing burden to the ability to test the efficacy of health system and delivery interventions. Multipurpose cohorts or study sites can enable cost-sharing across multiple studies, establish strong baselines for comparisons across time and serve as platforms for training researchers. The Public Health Foundation of India and the Gates Foundation have a shared interest in such multipurpose cohorts/platforms for similar purposes. Exploring the strengths and weaknesses of existing study sites on multiple criteria is an initial step to setting up platforms, either in conjunction with existing efforts or in entirely new locations.

The overall objective of this project is to map and scan the sites which exist in order to assess potential for larger research projects and interventions in the future. This will be accomplished by: 1) Mapping all relevant field sites and demographic field sites in India; 2) Selecting 20-25 sites based on certain defined criteria and with the help of an expert committee; 3) Surveying these sites to gain further information on the study population, past, current and planned studies, the publication record, project principal investigators, baseline data, institutional arrangements and associated strengths and weaknesses, links to the local community and medical facilities, logistical strength, the availability of local facilities to facilitate a larger research operation, and other variables to be determined by an expert group convened at the start of the project; 4) Generating video graphic and photographic records of the 20 selected sites including geo-coding them; 5) Building strategy on how these 20 (or less) sites will then be systematically strengthened and scaled up to serve as platforms for research.

Project duration: Aug' 11 – Aug' 12

The project is being supported by Bill and Melinda Gates Foundation and is led by Prof. RAMANAN LAXMINARAYAN

##### **PHASE-1, PREPARATORY PHASE, FERROUS SUCROSE IN PREGNANT ANAEMIC WOMEN IN INDIA (FeSPAWE)-A RANDOMIZED OPEN LABEL STUDY**

Geographical location: HARYANA, ODISHA AND DELHI

The overall aim of the study is to provide reliable evidence on the safety, effectiveness and efficiency of IV iron sucrose in the treatment of moderate and severe iron deficiency anaemia in pregnant women in India, in improving maternal and foetal outcomes.

The study will be done in three phases: 1) Phase I- Preparatory phase; 2) Phase II- Study implementation phase; 3) Phase III- Data analysis and dissemination phase

Specific objectives of phase I: Formation of Technical Advisory Group (TAG)/ Steering Committee; Data Safety Monitoring Board and Trial coordination team; Finalization of the study protocol and tools; Obtaining clearance from the ethics committee; Developing a study manual for the operations, recruitment and training of the project team.

Besides this, an observational study on the use of iron sucrose is being conducted in two districts of Tamil Nadu covering all health facilities. This will provide useful inputs that can feed into the clinical trial.

Project duration: Jun' 11 – Oct' 11

The project is being supported by World Health Organization, India and is led by Dr. SANJAY ZODPEY

## Population health and health promotion

### Completed

#### COMMUNITY-BASED MATERNAL DEATH AUDIT (MDA) IN ONE DISTRICT OF UTTAR PRADESH

Geographical location: UTTAR PRADESH

Maternal death audits (MDA), have been shown to contribute to the reduction in maternal deaths, by providing insight into why women die. MDAs have been carried out in the states of Kerala and Tamil Nadu, where they have been identified as an important tool used to achieve one of the lowest MMRs in the country. Keeping in view that UP has one of the highest maternal deaths in the country, the Government of Uttar Pradesh (GoUP) is in the process of initiating MDA in the state, based on the Government of India (GoI) guidelines to provide an in-depth understanding of processes and causes leading to maternal deaths, including social-cultural, economic factors, and medical causes. The Government of Uttar Pradesh (GoUP) has requested that Public Health Foundation of India (PHFI) to conduct a community-based maternal death audit in Unnao district of UP. Information collected from the MDA will provide vital information that will enable policy makers to make strategic decisions on interventions that will have the greatest impact on reducing maternal mortality.

The objectives of this study include: 1) To identify operational issues and potential solutions to conducting maternal death audits at community level based on government guidelines; 2) Identify the main causes and processes leading to maternal deaths, medical or otherwise; 3) Make recommendations to the government on ways to improve maternal health services at the community and or facility level.

A community-based MDA will be carried out based on maternal deaths identified in the last year from the district hospital, zanaana hospital, sub-divisional hospital, and community health centers in Unnao district. Information will be collected by using the United Nations emergency obstetric care (EmOC) indicators in each of the facilities mentioned. The Verbal Autopsy tool will be used as stated by the

GoI in their guidelines. The data collected will be analysed to identify the chain of events and processes leading to maternal deaths.

The project has been completed. The project report has been submitted to donor agency, including a policy brief on transport issues in pregnancy. A detailed presentation was made at USAID where all the findings were presented successfully to the USAID health officials. Approval of the study findings by USAID is awaited after which the research will be submitted to an appropriate journal for publication.

Project duration: May' 10 – Jul' 11

The project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR)-United States Agency for International Development (USAID) and was led by Dr. SUNIL S. RAJ

## **REGIONAL ASSESSMENT OF MULTI-SECTORAL PARTICIPATION AND WORKSHOPS TO SENSITIZE AND ENGAGE OTHER SECTORS IN THE CONCEPT OF HEALTH PROMOTION AND NON-COMMUNICABLE DISEASES (NCD) PREVENTION**

Geographical location: DELHI, MUMBAI, CHENNAI, KOLKATA, CHANDIGARH, ODISHA

In recent times, non-communicable diseases (NCD) have emerged major causes of morbidity and mortality in the low and middle income countries. The overall aim of this initiative is to adopt health promotion principles for NCD prevention and identify avenues to integrate these health promotion activities into existing national programmes. This can be achieved by engaging multi-sectoral stakeholders, mobilizing action by key stakeholders involved in health communication and promotion and NCD prevention, and by raising the visibility of NCD prevention and its knowledge levels. The upcoming UN General Assembly in September 2011 is addressing the threat posed by NCDs globally, and especially in low and middle-income countries.

Goal: This project organized multi-sectoral regional meetings at the country level to sensitize stakeholders on NCD issues, and to formulate India's position for the UN high level meeting plus develop recommendations.

Objectives : 1) To conduct situational analysis of existing health promotion and prevention programmes on NCD in selected districts of five states and to conduct regional workshops in four regions; 2) To collate information on existing international and national resources for health promotion; 3) To create a consultative platform at the regional level for national consensus, prepare India's stand for the national workshop in August 2011 and the UN summit in September 2011; 4) To collate recommendations from regional consultations and develop a recommendation paper to be used at the national consultation; 5) To engage the media to enhance visibility of health promotion in NCD prevention.

A literature review of multi-sectoral partnerships in India and other countries on NCDs, health promotion and other issues has been completed. In-depth interviews with the stakeholders in Chandigarh, Kolkata, Chennai and Bhubaneswar and focus group discussions (FGDs) with NGOs in Kolkata and Chennai have been conducted. Transcripts from in-depth interviews and FGDs have been analysed and reports prepared. Regional workshops were conducted in Chandigarh, Kolkata, Chennai and Mumbai on July 15, 18, 23 and Aug 5, 2011 respectively. Key stakeholders from various departments and organizations were invited to sensitize them to the growing burden of NCDs and to

consult with them on the involvement of multiple sectors for NCD prevention and control. Eminent researchers/leaders from the Ministry of Health and Family Welfare, WHO, various departments from State Governments and various sections within the State health departments and private hospitals were invited as resource persons and participants to these workshops. The final report was presented at the National Summit on NCDs held on August 23 and 24 at New Delhi, and is being submitted to WHO.

Project duration: May' 11 – Aug' 11

The project was supported by World Health Organization and was led by Dr. MONIKA ARORA

## **Determinants of health**

### **Ongoing**

#### **IDENTIFYING SOURCES, PATHWAYS, AND RISK DRIVERS IN ECOSYSTEMS OF JAPANESE ENCEPHALITIS IN AN EPIDEMIC-PRONE NORTH INDIAN DISTRICT**

Geographical location: UTTAR PRADESH

Japanese encephalitis (JE), a vector-borne disease that causes neurological infection in humans, is a developmental issue with multiple linkages to poverty, socio-economic status, gender, environment, and urban-rural population distribution. Because the JE transmission is primarily restricted to rural areas, where 70% of India's population lives, it is of special importance in the Indian setting and South Asia as a whole. The northern state of Uttar Pradesh contributes the majority of reported JE cases in India. Our study will focus on micro-ecosystems present in Kushinagar district of Uttar Pradesh to understand how various risk drivers come together to determine JE occurrence and transmission in human populations. We will select three villages from each of the high, medium and low terciles of one block for a total of nine villages. Using a mixed-methods approach, we will study human-animal-ecosystem interactions by focusing on the two subsystem aspects of JE: the domestic biotope and the peri-domestic biotope. In the domestic biotope, we will attempt to understand how human-animal interaction and cohabitation influences the vector's inclination to bite and transmit JE to humans. In the peri-domestic biotope, we will focus on the vector-environment relationship and JE transmission. The long-term objective of this research study will be to provide an in-depth evidence base for informing the design of effective, interventions to improve health and livelihoods by preventing and controlling JE in India and in the larger South Asian context, focusing on human-animal health interactions, social and environmental influences, and a micro-ecosystem perspective.

Project duration: Jul' 11 – Oct' 14

The project is being supported by International Development Research Centre (IDRC-CRDI) and is led by Dr. MANISH KAKKAR

## **CLIMATE CHANGE AND HEAT HEALTH RESEARCH**

Geographical location: GUJARAT

India currently faces a challenging array of health threats, ranging from floods to heat waves. Current domestic and global climate science is largely focused on efforts to mitigate climate change. Given the predictions of increased temperatures, rising sea levels, and changing disease patterns, there is

also a pressing need for increased scientific research and study of adaptation to climate change with a particular focus on public health—especially for the most vulnerable populations. Preparing for, and responding to health emergencies caused by changing climate will be critical to saving lives and protecting developing economies. In March 2011, the Public Health Foundation of India and the Natural Resources Defense Council conducted a workshop, “Climate Change: Heat and Health, Assessing Vulnerability” in Gujarat, which was sponsored by the U.S.-Indo Science and Technology Forum. This workshop brought together leaders in the field to discuss strategies for the development and implementation of vulnerability assessments and related preparedness plans. In continuation of the workshop activities, the Indian Institute of Public Health - Gujarat (IIPH-G) intends to undertake Climate Change and Heat Health related research activities. These activities include: Heat health vulnerability assessment of the general population of Ahmedabad; heat health vulnerability assessment of highly exposed occupational groups in Ahmedabad; short term outreach to build community resilience to heat stress; engage with city officials to plan and implement specific infrastructure adaptation strategies; health system vulnerability assessment and preparation for future extreme heat events; long term heat health awareness programme; and evaluation and refinement of the heat vulnerability assessment and response. This research grant will allow IIPH to hire a health researcher and coordinator who will (in addition to the existing team at IIPH-G) follow up with the City and Climate Change Department with respect to the discussion at the IIPH-NRDC workshops; identify other relevant projects and activities happening in the city; seek out data from surveys conducted and assess available data; organize focus groups and workshops; build and extend networks of NRDC’s contacts in India; assist with the ground level aspects of logistics support; participate in all IIPH-NRDC activities, such as weekly calls, programme planning and project design; and explore funding opportunities.

Project duration: Mar’ 11 – Apr’ 13

The project is being supported by Natural Resources Defense Council and is led by Prof. DILEEP V MAVALANKAR

## Health Systems and Policy

### Completed

#### **IMPROVING MATERNAL, NEONATAL AND CHILD HEALTH (MNCH) OUTCOMES THROUGH BETTER DESIGNED NUTRITION POLICIES AND PROGRAMS**

Geographical location: BIHAR & UTTAR PRADESH

At a global level, progress in improving maternal, neonatal and child health (MNCH) outcomes has been slow due to persistent high-levels of maternal under nutrition, especially anaemia and underweight. In light of this, a landscaping project is being undertaken in three countries, including India, to improve MNCH outcomes through better designed policies and programmes that enhance nutrition throughout the life cycle, with a focus on maternal nutrition. In India, the study is being undertaken in the states of Uttar Pradesh and Bihar.

The project seeks to answer three key questions: 1) the coverage, intensity, and quality of MNCH interventions taking into account such contextual factors as education, location, and social exclusion; 2) what are the barriers to accessing MNCH interventions (e.g. remoteness, cost, coverage) and quality of services (e.g. staffing, training, supervision, remuneration, etc); and 3) what are the

perceived needs of women (from adolescence on) for access to MNCH interventions, and how does this influence their demand and access?

The field work and transcriptions of the data have been completed and submitted to Emory University. A dissemination workshop has been planned in January 2012 for sharing the results with key stakeholders.

Project duration: Aug' 10 – Aug' 11

The project was supported by Emory University-Bill and Melinda Gates Foundation and was led by Mr. ANURAAG CHATURVEDI

## **On going**

### **TECHNICAL ASSISTANCE FOR IMPROVING FUNCTIONING OF THE INSTITUTE FOR PUBLIC HEALTH JHARKHAND IN JHARKHAND**

Geographical location: JHARKHAND

In response to a request from the Government of Jharkhand (GoJ), the Public Health Foundation of India (PHFI) is planning to provide technical assistance (TA) for improving the functioning of the State Institute of Health and Family Welfare (SIHFW), also called the Institute of Public Health (IPH), with the intention of establishing a strong health institution in Jharkhand. Based on the current status of the IPH, PHFI will design short and long term strategies and provide TA for their implementation to ensure sustainable in-service training and capacity building for healthcare functionaries in the state by this institution. PHFI will assist the state in the following ways: 1) strategic planning to identify an operationalization framework with linkages to strategic partners; 2) helping with the policy changes required for the operationalization of IPH; and 3) designing priority training programmes for identified cadres in this first phase which will be for duration of six months.

PHFI is committed to implementing the long term strategy for making IPH fully functional within three years.

Goal: To provide Technical Assistance to the Government of Jharkhand to establish a strong Institute of Public Health in Ranchi, Jharkhand.

Objectives: 1) Identify short and long term strategies for improving the functioning of IPH; 2) Design Training Needs Assessment (TNA) and assist GoJ in carrying it out for selected cadres of Human Resources for Health (HRH), managerial staff under the Department of Health and Family Welfare and those under the National Rural Health Mission; 3) Develop a "Management Development Programme" (MDP) for leadership development based on the results of the TNA; 4) Develop guidelines for designing and conducting in-service training courses and monitoring their outcomes.

Project duration: Jun' 11 – Nov' 11

The project is being supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and is led by Dr. ABHAY SARAF

## **EVIDENCE-BASED INTERVENTIONS FOR ACCELERATED ACHIEVEMENT OF MILLENNIUM DEVELOPMENT GOALS (MDGs) IN ODISHA**

Geographical location: ODISHA

Odisha continues to be one of the high priority States owing to poor health indicators. Eleven high priority districts contribute to more than 60% of infant mortality of the State. The Government of Odisha has launched Integrated Management of Neonatal and Childhood Illnesses (IMNCI) as an important child survival strategy since 2005-06 in sixteen priority districts. For strengthening the quality of the immunization programme, a pilot intervention has been carried out in which health personnel in selected districts have been trained in supportive supervision. There is also a need for building the capacity of district officials on IMNCI, supportive supervision and maternal & child health (MCH). This project addresses those needs. It has three broad components: (1) Capacity building of district officials on IMNCI, supportive supervision and induction of MCH coordinators on maternal and child health; (2) Strengthening monitoring and supervision of routine immunization and IMNCI implementation in four high priority districts (Bolangir, Koraput, Nuapara and Malkangiri) which includes hand-holding support in these districts and a scientific assessment of pre and post-intervention differences; and (3) Assessment of supportive supervision training in selected districts of Odisha through an in-depth qualitative study.

Project duration: Jul' 11 – Jun' 12

The project is being supported by The United Nations Children's Fund (Unicef) & Public Health Foundation of India and is led by Dr. BHUPUTRA PANDA

## **TECHNICAL ASSISTANCE FOR ASSESSMENT AND MAPPING OF HUMAN RESOURCES IN HEALTH IN JHARKHAND**

Geographical location: JHARKHAND

Goal: for the state of Jharkhand to establish a sustainable strategy to have a competent health work force as per the Indian Public Health Standards (IPHS).

This project aims to develop a larger health work force strategy. However, considering the priority needs of the state it will focus on short term strategies for optimizing the performance of the cadre responsible for maternal, newborn and child health and nutrition (MNCHN) related services. MNCHN has been identified by the State as a priority to meet the National Rural Health Mission (NRHM) targets as well as for the achieving the larger Millennium Development Goals (MDG).

Objectives: 1) To assess the availability, distribution and competence of Human Resources for Health (HRH) within the Department of Health and Family Welfare (DHFV), Government of Jharkhand (GoJ); 2) To identify and study factors affecting performance of HRH based on the workforce life cycle strategy, prioritizing the cadre responsible for delivery of MNCHN services; 3) To compile national and international evidence for promising/best practices to address identified performance issues of HRH; 4) To develop a draft outline for short and long term HRH strategies for GoJ approval

Expected results: 1) Data on availability, distribution and competence of HRH disaggregated by tribal and non-tribal districts; 2) Classification of factors affecting performance of HRH in Jharkhand disaggregated by cadre; 3) Options for addressing identified factors affecting performance through evidence review; 4) Draft short and long term HRH strategies developed for GoJ.

Proposed deliverables/products: 1) Factsheets on HRH by cadre describing availability, distribution and competence; 2) Compendium of factors affecting HRH performance and options for improving performance; 3) Draft HR policy based on findings and recommendations from the study.

Project duration: Apr' 11 – Oct' 11

The project is being supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and is led by Dr. SANJAY ZODPEY

## **BIHAR EVALUATION OF SOCIAL FRANCHISING AND TELEMEDICINE (BEST)**

Geographical location: BIHAR

The Bihar social franchising and telemedicine project is a social franchising model of health service delivery that links informal sector providers across the state and refers their patients to MBBS physicians using telemedicine technologies. Over the next four years, this project, headed by World Health Partners (WHP) will establish a large-scale, sustainable health service delivery network consisting of 15,000 rural health providers, 12,000 rural and urban pharmacies, and 2000 telemedicine/tele-diagnostic centres. It will do so by engaging existing informal and formal private sector providers to improve detection, diagnosis, and treatment of four diseases prioritized by Gates (TB, Kala-Azar, childhood diarrhoea, and childhood pneumonia). PHFI's role is that of a technical partner with the COHESIVE (Collaboration for Health Systems Improvement and Impact Evaluation in India) team for the evaluation of this project. The main objective is to design a rigorous prospective evaluation that will estimate the impact of the WHP programme in Bihar. We will also estimate specific parameters of the WHP programme that can be used to maximize financial sustainability and replicability/scalability of the programme, estimate willingness to pay for health care services and for improvements in health care quality, as well as for the understanding of how additional incentives can be given to improve the performance of WHP network providers.

Project duration: May' 11 – Apr' 12

The project is being supported by Duke University-Bill and Melinda Gates Foundation and is led by Dr. MANISH KAKKAR

## **IMPROVING MANAGEMENT OF FACILITY BASED NEWBORN CARE IN BIHAR**

Geographical location: BIHAR

The objective of the project is to develop and implement a quality assurance mechanism to improve facility based new born care in the state of Bihar. The entire process of developing the model and tools will be based on a literature review of the methods and techniques used by different organizations in India and across the globe. The findings from an assessment done on Special Care New born Units in India by Indian Institute of Public Health – Delhi will serve as key inputs for developing and finalizing the model. The guidelines on facility based new born care already developed by the Ministry of Health and Family Welfare will also be taken into consideration. Draft tools will be prepared by the team and discussions held with experts in India for their approval before they are used by the units.



An online system of data transmission will be created for the unit heads to submit monthly and quarterly reports. These will be analysed by the project team and feedback given to the respective units within 7 working days.

Expected outcomes: 1) Monitoring mechanism for improvement of quality of services in New born Care Corners (NCC), Neonatal Stabilization Units (NSU) and Special Care New born Units (SCNU); 2) Medical colleges as the hubs for the monitoring and mentoring of facility based new born care; 3) Policy brief on 'Developing a quality assurance system for facility based new born care'.

Project duration: Aug' 11 – Jul' 12

The project is being supported by The United Nations Children's Fund (Unicef), Bihar and is led by Dr. SUTAPA B. NEOGI

### **DEVELOP/ADAPT AND FIELD TEST CAPACITY BUILDING PACKAGE FOR REPRODUCTIVE AND CHILD HEALTH (RCH) PROGRAMME MANAGERS**

Geographical location: DELHI

The World Health Organization has developed three global packages on programme management related to maternal, child and adolescent health. The current project aims to develop a comprehensive reproductive child health programme management package relevant to the Indian context. It will be a short course to enhance the capacity of programme managers currently deployed at regional, state and block level programme management units in the public health delivery system in India. The methods adopted for developing this package will include adaptation and integration of material from the three WHO packages, as well as the addition of new material relevant to programme management. The development of the package will be done by a consultative process, taking the opinions of key experts in the field. Once the package is ready, it will be field tested by conducting a training programme using the modules developed for this course. The modular package also will be used for developing a self-learning interactive DVD at a later stage.

Project duration: Jul' 11 – Dec' 11

The project is being supported by World Health Organization and is led by Dr. SANJAY ZODPEY

# Training

# TRAINING

Capacity-building in public health is one of the primary mandates of the Public Health Foundation of India. Currently four long-term academic programmes are being offered by the Indian Institutes of Public Health.

Besides the proposed diploma courses, there is a need for conducting short-term courses on various public health areas of topical importance. Benefits of short-term courses are as below.

- Short-term training has a low turnaround time and has a high impact, especially for the large number of public health personnel serving the government.
- The changing epidemiologic scenario of public health problems requires short-term courses that target specific training needs of the health workforce.
- New health programmes are being initiated by the government and new strategies being adopted in ongoing health programmes, changing priorities and workforce needs.
- The National Rural Health Mission is focusing attention on managerial and data management related issues at all levels.
- Large numbers of personnel in the health and allied workforce need to upgrade their knowledge and skills in order to keep pace with the advancement of public health technology.
- There is a felt need for competency-based short-term training courses for improving the effectiveness and quality of health care.

Keeping these needs in view, PHFI caters to the demand of various agencies and central and state governments to build the capacity of the public health workforce.

## Objectives

The Training Division of the Public Health Foundation of India has been established with the goal of fulfilling the short-term training needs of public health practitioners and professionals of health and allied sectors in India. The Training Division has the following objectives:

- to organize short-term training programmes on critical public health issues in collaboration with other public health institutions, client agencies, central and state governments;
- to collaborate with States' Training Institutes for capacity building initiatives (State Institute of Health and Family Welfare);
- to develop linkages with the Government of India, multilateral, bilateral and international organizations for development of a training portfolio;
- to develop linkages with local governments in the states not covered by Indian Institutes of Public Health, and to conduct short-term training programmes at offsite locations;

- to coordinate with the IIPs for developing and delivering locally and centrally allocated short-term training;
- to conduct monitoring and evaluation of training programmes and training needs assessments;
- to provide consultancy services to other agencies as and when requested; and
- to promote the concepts of continuing medical education and e-learning among health and medical practitioners.

## Team

The Training Division comprises a core team of seven members, with 2 members having joined recently. Five new members will be joining the division in the current year, taking into account the ever expanding role and responsibilities of the division.

Apart from the core team of 7, a dedicated team of 16 personnel are working in the Secretariat for the "Certificate Course in Evidence Based Diabetes Management". In the near future two additional members will join the Programme Secretariat.

## Our Competencies

- We deploy a state-of-the-art learning platform, currently with presence in 4 states and having the capability to deliver customized programmes with efficient and effective training management capability – the combination of these capabilities making PHFI an ideal learning partner.
- We deliver need-based and client-based content with interactive teaching methods and field-based experiential learning – making PHFI training appropriate for public health sector professionals and others to take on effective leadership roles and responsibilities in an ever-changing world.
- Our teams consist of more than a hundred internationally and nationally trained in-house experts, working on research and academic projects with national and international partners. Additionally we have access as and when required to external faculty members from the best institutes, within India as well as outside the country, to be actively involved as subject-matter experts.
- We offer a diversity of training topics and programmes – and we are thus a 'one-stop-solution' to public health capacity-building needs.
- We practice quality assurance guided by the principles of total quality management for all training programmes, thus enabling us to achieve continual quality improvement.

## Training Focus Areas

The National Training Strategy, Government of India, emphasizes need-based capacity building of the public health workforce. PHFI's Training Division conducts formal and informal training needs assessments of various public health workforces of health and allied sectors in India. Based on observed training needs, the following areas are identified for capacity building of the public health workforce.

## Funding for Training

Funds for training come from different sources that consist of central and state governments and their departments, international, multilateral and bilateral agencies and foundations, as detailed below:

- Government of India: AYUSH, IDSP, NVBDCP;
- state governments under NRHM: Meghalaya, Sikkim, Manipur, Assam, Uttarakhand, Maharashtra, Odisha, Jammu & Kashmir, Andhra Pradesh and Gujarat;
- other government agencies: MCI, CSIR, ICMR, DST and so on;
- international organizations and agencies: World Bank, USAID, The University of Queensland, John Hopkins School of Public Health, DFID, FHI, Economic and Social Research Council – UK, BMGF, UNICEF, MEASURE Evaluation (USAID), MCH STAR (USAID), Wellcome Trust, EPA; UK, LSHTM, Packard Foundation, International Union Against Tuberculosis and Lung Disease (IUATLD); and
- the private sector: MSD Pharmaceutical Pvt. Ltd.

## Our Achievements

Active collaboration is continually carried on between PHFI central team and IIPs in terms of design and development of content and curriculum. Faculty and content are shared as needed and while considering areas of expertise and availability. Due to these collective efforts, over the years, the portfolio of training across PHFI has witnessed significant growth both in terms of the number of training programmes, as well as numbers of participants trained.

Training is conducted at IIPs (Delhi, Hyderabad, Gandhinagar and Bhubaneswar) and offsite at locations specified by state governments. Convenience is kept in mind with a view to reduce the cost of training. One of the major advantages of offsite training is the feasibility for a large number of participants to attend.

PHFI lays emphasis need-based quality training for the public health workforce. As a result, there is an increase in demand for, and delivery of, training programmes conducted by PHFI every year. In the year 2010-11, 59 training programmes were conducted compared with 27 training programmes in the year 2009-10. In the current year 2011-12 (till September), 39 training programmes have been conducted.

3177 health professionals were trained through need-based training programmes during last year, whereas in the current year, till September 2011, 2182 health professionals have already been trained.

PHFI caters to both the sectors, i.e. government and non-government. The number of training programmes is increasing for both the sectors whereas the spectrum of training is increasing for the government sector.

PHFI has conducted training programmes for AYUSH, IDSP and NVBDCP for Government of India; and for the states of Meghalaya, Sikkim, Manipur, Assam, Uttarakhand, Maharashtra, Odisha, Jammu & Kashmir, Andhra Pradesh, and Gujarat.

The number of participants in these training programmes (government and non-government) is also increasing as the number of training programmes increases.

Training person-days have been increasing every year. In the year 2010-11, there was 176 % increase in training person-days compared with the previous year. In the current year (2011-12, till September), 11681 training person-days have already been generated.

## **Certificate Course in Evidence Based Diabetes Management (CCEBDM)**

1208 primary care physicians spread across 57 cities in 18 states have completed the one-year Certificate Course in Evidence Based Diabetes Management (CCEBDM) from August 2010. The training was conducted once a month on a designated Sunday in 100 regional training centres. Centres with one or two faculty members who were renowned diabetologists / endocrinologists have each trained up to 20 participants during once-a-month contact sessions. The course concluded in July 2011, and was highly appreciated by all the stakeholders. Based on the success of the programme and upon consequent huge demand, we will be launching the second cycle of the course from November 2011 for around 1500 participants. PHFI along with Dr. Mohan's Diabetes Education Academy, Chennai, is delivering this programme with the support of a 16-member dedicated Secretariat Team based at IIPHD/PHFI. MSD Pharmaceutical Private Limited has provided an unrestricted educational grant for development and launch of this course.

The course has the following aims:

- to develop core skills and competencies in primary care physicians for the practice of evidence-based diabetes management; and
- to establish networks between primary care physicians and existing specialized diabetes care centers in India for improving patient outcomes in diabetes care.

## **Other Major Partnerships**

- **Government of Madhya Pradesh**

A MoU has been signed with Madhya Pradesh government for strengthening the capacity building initiatives at the State Institute of Health Management and Communication, Gwalior (SIHMC). The

PGDPHM course started from August, 2010, and various short-term training courses are planned in the near future.

- **Government of Jharkhand and MCH STAR**

The Training Division, PHFI, also began a partnership initiative to strengthen the Institute of Public Health, Ranchi, Jharkhand; by providing technical support through conducting training needs assessment, and through the subsequent designing and delivering of state-specific short-term training with support from MCH STAR (USAID Project). Similarly, at the request of Govt. of Jharkhand, the launch of a PGDPHM course and placing of qualified PHFI faculty in the Institute of Public Health, Ranchi, is also planned. Other short-term training programmes are also envisaged. All these initiatives are in an advanced stage of approval by the state government.

- **Measure Evaluation, University of North Carolina**

Under this partnership, MEASURE Evaluation and PHFI have agreed to cooperate to develop the following activities: to design, to implement, and to evaluate a series of short-term regional workshops; to explore, to design and to launch a distance-learning certificate course in M&E; and to seek opportunities for conducting policy-relevant collaborative evaluation, research and technical assistance on M&E. Two ToTs and three training programmes have already been conducted on population, health and nutrition, HIV/AIDS and GIS in public health.

# **Health Communication and Advocacy**



# HEALTH COMMUNICATION AND ADVOCACY

## Division Focus

PHFI promotes health-seeking behaviour through health communication and community programmes.

The resulting information and knowledge compose the fulcrum of the power to change. Meaningful health communication can make a singular difference to people's health and well-being. The guiding principles of this work at the Health Communication Division are:

- The health of individuals and communities depends on people's choosing to exhibit health-seeking behaviour, giving rise to greater demand for provision of health services of high quality and sufficient quantity.
- Health-seeking behaviour often needs support in the form of credible information that can lead to in-depth knowledge and then to action.
- The public health response, including health systems and services, can be strengthened if strategic health communication and promotion efforts are formalized as a major aspect of public health education and training, with an additional focus on in-depth planning and implementation mechanisms.
- Behaviour Change Communication (BCC) and Information Education Communication (IEC) require much greater attention than they receive at present. All these are needed, namely: resources, a research focus; and long-term action with a special emphasis on strengthening in-country institutional capacity.
- Strategic advocacy based on sound knowledge and factual information can make a significant impact on catalysing positive change.

## Funding

There exists a diverse donor base, spanning the Government of India and state governments, UNDP, the World Bank, WHO, UNICEF, Packard Foundation, the Bill and Melinda Gates Foundation, UNFPA through the National Human Rights Commission, the World Justice Project, and the European Union. Total external funding (2006-2011) was to the tune of INR 4.43 million.

## Staff

Manning consists of seven core staff, complemented by at least one or two interns for part of the time and with active expert consultant support at all times, based on project funding support.

## Capacity strengthening

**Strengthening professional capacity** for health communication and advocacy through short and long term training and educational programmes is central to the Division's efforts. Some of our efforts toward strengthening professional capacity are:

- the PGDPHM Health Communication and Promotion module, which has grown from a 10-day duration to a three-week course;
- building skills for health communication, BCC techniques, technical and operational skills for IEC efforts within the NRHM, communication skills as specific to different national programmes such as the National Vector Borne Diseases Programme, the School Health Scheme, or training programmes for instructors of Anganwadi Workers under the ICDS; and
- Work with apex training bodies at the centre and state level (National Institute of Public Cooperation and Child Development, State Institute of Health and Family Welfare).

## Policy engagement

**Advocacy** to strengthen the enabling environment is seen as closely aligned to in-depth health communication efforts. Policy analysis, applied research and advocacy efforts are aimed at raising the discourse around public health in India, framing relevant evidence for suitable action by key stakeholders and shining a spotlight on core advocacy issues that may contribute to tackling some of India's major public health challenges. Advocacy capacity to strengthen Maternal and Child Health action and Universal Health Coverage – all of these activities reflect the Division's core mission. Partnerships to harmonize actions for nutrition in India (as a collaborative effort with IFPRI) will be a core focus during 2011-15.

**Strategic planning** to integrate formal principles of health communication into health systems processes and policy is another major cornerstone of the work at the Division. Several efforts have focused on developing strategic BCC plans: a strategy note on the need for a paradigm shift in the approach to mainstreaming HIV/AIDS responses into different sectors of governance; developing the Communication Strategy for the ICDS Phase IV Reform Project of the Ministry of Women and Child Development; development of a Communication and Advocacy Strategy for the Prevention and Control of Zoonoses in India; and field assessments to inform a communication-and-social-marketing strategy for popularizing the use of sanitary napkins among adolescent girls in rural India.

## Engagement with stakeholders

PHFI strives for multiple stakeholder engagement: Government officials at national and state level (bureaucrats, technical officers, programme implementers); political leadership (national and state-level); non-governmental organizations as partners, target groups and stakeholders; health communication and education experts and technical partners (national and international); health workers and health professionals (at various levels); and direct and indirect engagement with communities and civil society.

## Achievements

- Best Indian health website award to the Healthy India website [www.healthyindia.org.in](http://www.healthyindia.org.in), PC Web World Awards 2008; recipient of regular financial support from MoHFW for four consecutive years.
- Developed the Communication Strategy for ICDS IV with a focus on a paradigm shift and reform within the ICDS.
- Intensive outreach and multi-stakeholder engagement on key issues within achieving health for all as related to the Lancet India special series of January 2011.
- Technical partner to National Mental Health Programme; path-breaking effort to break the stigma around mental illness in India.
- Offering a three week course module on health communication, advocacy and journalism under the Post Graduate Diploma in Public Health Management.
- Rapidly cementing partnerships with key stakeholders and institutions with similar mission and mandate.
- Work carried out in six Indian states.

# **Health Systems Support**

# HEALTH SYSTEMS SUPPORT

## Aims and Objectives

The aims and objectives of the Health Systems Support Unit (HSSU) are:

- to establish strategic partnerships with Central and State Governments and other stakeholders in the arena of strengthening Health Systems;
- to initiate programmatic and research activities relating to strengthening health systems, including Emergency and Disaster preparedness in hospitals and related communities;
- to carry out operational research, operational improvement and quality improvement activities with private and public agencies on health services including hospital services; and other themes of public health relevance;
- to handhold and partner with non-governmental organizations to work on health services;
- to promote alignment of educational programmes of PHFI with present and future National Health Programme needs; and
- to engage in setting up of monitoring and management frameworks in public health systems.

## Activities

The main focus of the Health Systems unit is to engage with the health machinery of the central and state governments and associated stakeholders such as developmental partners, professional associations, the industry and non-governmental organisations among others; in order to achieve closer participation in health policy design, programme implementation, service delivery and management support. Some illustrative activities include strengthening state health Directorates through appropriate training programmes, creation of resource materials and advocacy kits, conducting operational best practice workshops, and hands-on participation in making family-friendly services operational in public health facilities.

The hospital services unit, an associate of the health systems support unit, focuses on handholding public and private sector hospitals on a wide range of hospital-management-related topics such as overall governance and strategy, quality and patient safety, operational turnaround, disaster preparedness and management, patient satisfaction, and standards-setting and accreditation among others. The unit aims to expand the footprint to include relevant collaborative technical and industry partners, where relevant.

Efforts are also underway to partner closely with the research division in developing and implementing hospital and health systems strengthening proposals.

## Sources of funding

The core secretariat of the HSSU was entirely supported by the PHFI corpus for the first several months, post establishment. The approval of two major projects during the last three quarters has however been able to offset a large part of the operating costs: **1)** The Rockefeller Foundation funds

based on an HSS proposal for the establishment of the PHFI Secretariat of the **High level Expert Group on Universal Healthcare Coverage: 2)** Approved action per a cabinet note for a strategic road-mapping activity to **establish one National and eight regional Institutes of Paramedical Sciences**, technical consultation of which was awarded to the Health Systems Support Unit at PHFI. The national project budget is around INR 11 billion.

The unit has recently been co-located under the leadership of the Training Division, due to the exit of the previous unit head. It is hoped to achieve additional efficiencies and economies of scale in the coming months. The division, however still needs its own corpus through one or multiple large grants that would provide long-term sustainability and security for its activities.

## Achievements

- **Successful completion of the sub-group report under the High Level Expert Group on Universal Healthcare for India**

The HSSU conceptualized and developed one of the original proposals associated with the Rockefeller Foundation for funding support of the secretariat of the HLEG. This high-profile initiative of the Planning Commission on Universal Health Care has been structurally divided into six distinct terms of reference for thematic report management purposes. The HSSU faculty served as the secretariat to the expert group responsible for reworking the physical and financial norms needed to manage cost, quality and access to universal healthcare. Highlights of the activities included literature review of over 400 publications, support for normative costing exercises in seven districts across six states, study of national health policy evolution, and an analysis of six national and eight international health insurance packages to arrive at an illustrative universal healthcare entitlement list for India, together with associated cost approximations over the subsequent two plan periods.

- **Successful presentation of the final recommendations to the Ministry of Health and Family Welfare on Augmenting the National Allied Health workforce Capacity**

The PHFI-HSSU is the project partner for the Government of India MoHFW on this path-breaking initiative, called the National Initiative for Allied Health Sciences (NIAHS). This is a mammoth project for augmenting the supply of skilled paramedics and for promoting quality of care through standardization of paramedic (allied health) education and curricula across the country. The project involves a one-time grant-in-aid to government medical colleges for capacity building to commence and to eventually increase the intake of students in undergraduate and post-graduate paramedical courses. In a span of less than six months, the HSSU project team undertook several large-scale activities including extensive desk review, field visits to eighteen national institutes of excellence, focus groups with over seventy allied health workers groups, data analysis of over a hundred medical colleges and ten expert consultative workshops involving over 300 public and private stakeholders. The HSSU team presented the final recommendations regarding the establishment of one National and several regional institutes of paramedical sciences that would be responsible for conducting 26 UG and 7 PG courses for allied health professionals. The recommendations were extremely well received by the MoHFW leadership. The final report is expected by the last week of December 2011.

- **Global dissemination and scale-up of the programme for improving Hospital Infection Control and Patient Safety**

PHFI organised an international panel of faculty drawn from SHARE, BD and national experts to collaborate to conduct a hands-on workshop on effective Infection Control practices, participants being ten Delhi and ten Andhra hospitals under the aegis of the respective State Government Ministries of Health and Family Welfare. The programme received excellent feedback. Close to seventy senior leaders from twenty public hospitals were exposed to international tools and techniques in infection management and made to create a measurable annual road map through a participative team-building approach. The findings from the analysis at these hospitals were presented at the First Global Forum on Antibiotic Resistance co-hosted by PHFI in October 2011. A handbook on practical infection control techniques for hospitals was published and released at this event.

- **Successful completion and scale up planning for Hospital Disaster Preparedness**

The HSSU faculty in September 2011 successfully accomplished a capacity building initiative with the Aga Khan Foundation hospitals in Mumbai, to train the entire senior and middle management, staff and volunteers of over 1000 people, on disaster preparedness and response. Highlights of the project included the establishment of a Hospital Disaster Management Team, the successful completion of a full-scale hospital evacuation drill, fire response coordinated in conjunction with all local stakeholders such as the fire department of Maharashtra, police and the community and finally, the inculcation of the Incident Management System (ICS) as a formal management tool in disasters. In addition, the Aga Khan Foundation Executive Board ordered the immediate implementation of all recommended system changes, amounting to an annual budgetary allocation of INR 20 million.

- **Recommendations for the Operational Turnaround of the Red Cross Hospital, Delhi**

A detailed recommendation report for full-scale hospital rejuvenation was submitted to the Chairman of the Board of the Indian Red Cross Society (a position held by the Hon. Lieutenant Governor of Delhi). The report, presented by the hospital services leadership to the Board, was extremely well received. PHFI is also providing guidance in making some of the leadership and structural changes recommended. The hospital has also served as the pilot research site for health system-related research activities in a national costing analysis of hospital surgical units.

- **Commencement of an evaluation of Nutrition Initiatives of the Government of Gujarat under the Integrated Child Development Services (ICDS) Scheme**

The Gujarat Government has been pioneering several initiatives in the area of child nutrition. The evaluation study awarded to HSSU aims at these objectives: to understand the perception of beneficiaries about take home foods, to assess the impact of ICDS interventions on the nutritional status of children, and to study in detail the present training capacity of the state to strengthen infant and young child feeding (IYCF) practices.

- **Collaborative research on Health system strengthening**

HSSU has been part of the study planning and design on two large scale research projects: a) A three-year 100-hospital study in UP to assess the effectiveness of a checklist for the newborn, in

collaboration with Harvard Medical School and the Bill and Melinda Gates Foundation; b) A two year RSBY study on consumption behaviours of insured vs. provisioned participants across three Indian states, in partnership with University of Chicago, Illinois, with a sample size comparable to the US RAND study on health insurance.

- **Active leadership as part of the 4th Common Review Mission of the National Rural Health Mission**

PHFI was a key participant and contributor to the fact finding and review process, the analysis and overall evaluation report writing of the 4th CRM that concluded in January 2011. Several senior leaders from PHFI contributed their public health expertise to the reform review agenda. This overall engagement with the Ministry and the National Health System Resource Centre was handheld by the Health Systems Support Unit.

## **Conclusion**

The Health Systems Support Unit is a key addition to the capacity-building activities as undertaken by PHFI as a response to public health challenges in India. The HSSU is backed by: strong research that attempts to understand, to quantify and to adapt itself to public health challenges; educational institutions that respond to these needs by designing and training public health professionals and communication; and advocacy that focuses on designing and delivering impactful messages to the public. Thus, through its focus on implementation and practice in the on-going task of ensuring effective public health delivery systems for the people of India, the HSSU completes the loop.



# **Centres of Excellence (CoEs)**

# **SOUTH ASIA NETWORK FOR CHRONIC DISEASE (SANCD)**

## **Aims & Objectives**

The mission of SANCD is to promote and strengthen chronic disease research capacity in South Asia through sharing skills and knowledge between network partners, with the aim of improving the prevention and control of chronic disease in the region.

## **Objectives**

- To establish and maintain an infrastructure and capacity of core interdisciplinary scientific staff.
- To build on 'state of the art research' based on a combination of excellent research methodology, research laboratory services, health databases and research governance.
- To conduct aetiological research (including genetic epidemiology), translational research, health care evaluation studies, including RCTs, evidence synthesis, health systems and health policy research.
- To mentor and provide career structures for researchers at all stages of their careers.
- To establish a network to facilitate dissemination of best evidence to support health care provision in chronic disease, the setting of priorities and practices for policy makers, practitioners and researchers.

## **Scale**

We have a staff of 26 with researchers' expertise ranging from demography, epidemiology, genetic and epigenetic epidemiology, health economics, biostatistics and qualitative methods to systematic reviews. In conjunction with CCDC, we have established a Genetics and Biochemistry Laboratory (GBL), where DNA and RNA extraction as well as biochemical analyses of various biological specimens are processed for various research projects, by a staff of 12 people.

## **Activities**

The main focus of SANCD is to facilitate and carry out interdisciplinary public health research on chronic diseases in South Asia, through a network of 8 institutions in the region (Centre for Chronic Disease Control (CCDC), New Delhi; SNEHA, Mumbai; Aravind Eye Hospital, Pondicherry; Sangath, Goa; Voluntary Health Services (VHS), Chennai; International Centre for Diarrheal Diseases, Bangladesh (ICDDR,B); Institute for Research and Development, Sri Lanka (IRD); and Aga Khan University, Pakistan). Faculty and exchange programs are also facilitated by international partners in

the UK (London School of Hygiene and Tropical Medicine (LSHTM), London; University of Bristol, Bristol, Newcastle University; University College, London (UCL)).

## Sources of funding

Core funding is provided by a 5-year Wellcome Trust Strategic Award on Research Capacity Strengthening awarded to Professor Shah Ebrahim. Other funding for research has been granted based on competitive applications from sources such as the UK Department for International Development, the National Institutes of Health, Department of Biotechnology and the Wellcome Trust.

## Achievements

- Recruitment of a highly qualified team of researchers spanning a range of critical disciplines in public health (demography, epidemiology, anthropology, genetics, economics, health systems, biostatistics, qualitative methods, systematic review, biochemistry).
- Establishment of several large-scale studies in various South Asian populations evaluating the genetic and environmental influences of chronic diseases with private, public and government partnerships (Dry blood spot extension of NNMB Survey to create bio-bank of 10,000 individuals (NIN- partner); Population-based measurement of chronic disease risk factors in rural households of Matlab, Bangladesh, Goa and Chennai (ICDDR,B, Sangath, VHS –partners); Multi-generation epidemiological cohort in 29 villages following siblings, parents and children from the 1980's Hyderabad Nutrition Trial (CCDC, NIN – partners).
- Establishment of a Genetics and Biochemistry Laboratory (GBL), in collaboration with CCDC, for DNA & RNA extraction, their quantification, storage and processing, a genotyping platform, and biochemical analysis of biological samples for various projects.
- Received multiple competitive research awards from UK Department for International Development (DfID; Meta-analysis of social health insurance schemes in developing countries), Department of Biotechnology, India (COPD Consortium) and the Wellcome Trust (eg, Evaluating methodology of developing a complex randomized trial in mental health, using Medical Research Council (MRC) guidelines (Sangath, LSHTM - partners).



- Led scientific conferences, workshops, training, annual meetings as well as exchange programs for staff (eg, epigenetics training at Universities of Bristol and Newcastle, advanced epidemiological methods and statistical genetics at LSHTM) and international faculty (eg, Mixed Methods, 5-course Introduction to STATA, Systematic Reviews). A scientific advisory board and mentorship programme comprised of international leaders in Public Health have provided additional resources for SANCD staff and researchers.
- Acceptance of scientific abstracts, oral and poster presentations and peer-reviewed journal publications & reports across a range of topics from SANCD scientific staff (see 2011 Publications).

## How does SANCD status impact on outcomes?

- Substantive research findings on burdens of non-communicable diseases and effects of migration on health status impact on preventive health programmes.
- Attract competitive awards for building research capacity
- Builds exchange of scientific expertise and mentoring between the UK, the US and India, especially in fields, such as genetics, epigenetics, biostatistics and economics.
- Increased exposure to SANCD scientific interests and networks in the region and abroad; attracts new researchers, potential collaborators and potential funding opportunities.
- Development of software to extract complex nutritional data from food frequency questionnaires based in Indian diets (Aravind- partner).
- Increased national and international profile developing as a centre of excellence on chronic diseases in the South Asia region.



# Centre of Excellence in Cardio-metabolic Risk Reduction in South Asia (CoE-CARRS)

The Centre of Excellence in Cardio-metabolic Risk Reduction in South Asia (COE-CARRS) at Public Health Foundation of India is one of the 11 Centers of Excellences worldwide funded by jointly by the National Heart, Lung and Blood Institute (NHLBI), USA and Chronic Disease Initiative, UnitedHealth Group, USA. Public Health Foundation of India (PHFI) and Emory University are the lead partners with All India Institutes of Medical Sciences (AIIMS), Aga Khan University (AKU), Karachi and Madras Diabetes Research Foundation (MDRF) functioning as network partners. The Centre for Chronic Disease Control, New Delhi (CCDC) functions as the Scientific & Executive Secretariat of CARRS.



*CARRS-Surveillance Investigators meeting, Hyderabad 2009*



*CARRS-Translation Trial Investigators meeting, Mysore 2011*

## Objectives

The broad aims of this centre are to conduct translational research, build capacity and connect Science with policy with special focus on cardio-metabolic diseases prevention and control in South Asia.

## Achievements

- The research team at CARRs is led by 7 eminent academicians in South Asia and US. In addition, nine other Research Scientists lead the research projects at CARRS
- In a short span on two years, CARRS, along with its Scientific & Executive Secretariat - Centre for Chronic Disease Control (CCDC), New Delhi – has received funding for seven grant applications channelizing an overall funding of 42 crores for 2010-2015



*Screenshot of CARRS-Decision Support System Software for Diabetes management*

- The CARRS Surveillance Study has completed its baseline survey in Delhi, Chennai and Karachi enrolling approximately 12,000 participants thereby establishing one of the largest cohort in South Asia to study the trends and characteristics of cardio metabolic diseases in the South Asian population
- Started the first translation trial in South Asia involving 10 hospital sites to test the effectiveness of non-physician Care-Coordinator led diabetes care with the help of an IT based decision support software with an overarching aim to improve the quality and out-reach of diabetes care in South Asia



*A CARRS Survey camp for Bio-specimen collection and anthropometry and Blood Sample Collection*

- Contribute internationally and lead a clinical trial in India of low-cost, fixed-dose combination medication for the secondary prevention and selected individuals with high risk. If found successful the daily cost of medicines will come down to Rupees 3/- a day from the current cost of multiple drugs which is around 20/- Rupees a day.
- With the assistance from the Indian Council for Medical Research and the Medical Research Council of UK, CARRs/CCDC to lead a clinical trial to develop a low-cost cardiac rehabilitation program India that applies traditional wisdom of Yoga involving 4000 patients and 16 cardiac centers all over India.
- CARRS has been accredited as an International Clinical Research Training Site by the Fogarty International. The center has trained 1 Fogarty Fellow and 6 Fogarty Scholars so far. Currently 1 Fogarty Fellow and 2 Fogarty Scholars are undergoing training. The trainees have made 12 publications and 3 grant application during their tenure.
- Initiated an Annual Teaching Seminar on Cardiovascular disease Epidemiology which is currently planning the fourth round of the Seminar in 2012 in India.
- CARRS established a state-of art genetic laboratory infrastructure jointly with CCDC, South Asia Network of Chronic Diseases (SANCD) which is another Center of Excellence under the Public Health Foundation of India.
- Since 2010, CARRS team published more than twenty five scientific papers in high-impact international and national journals

## Funding

The core funding of the Center is from the National Heart, Lung and Blood Institute of USA and UnitedHealth Group which will cease by June 2014. CARRS also receive project specific funding from the Indian Council for Medical Research, European Union, Canadian Institute of Health Research,

Medtronic Foundation and the Wellcome Trust. The Center for Chronic Disease Control, New Delhi which currently functions as the Scientific & Executive Secretariat of CARRS provides office space and bear General and Administrative expenses.

## Staff

CARRS is led by a team of eminent investigators from India, Pakistan and USA. Profs. Dorairaj Prabhakaran and KM Venkat Narayan are the lead investigators of CoE-CARRS from PHFI and Emory University respectively. Prof. Nikhil Tandon, Dr. V Mohan, Dr. Masood Kadir, Dr. Mohammed Ali and Prof. KS Reddy represent the collaborating institutions viz. All India Institute of Medical Sciences, Madras Diabetes Research Foundation, The Aga Khan University, Emory University and PHFI/CCDC respectively. In addition, nine core research scientists, 10 Physician Scientists from 10 collaborating hospital sites and a field team composed of 30 staff work at various project locations.

## Capacity strengthening

CARRS along with CCDC offers a number of training opportunities in cardio-metabolic disease epidemiology and prevention across the life-course, in cross-connecting subject areas (nutrition and lifestyle, environmental health, obesity and diabetes, stroke and other vascular diseases) and population science disciplines (epidemiology and biostatistics; clinical trials; translation research, social sciences, and economics) with an overarching aim of strengthening the limited research capacity in India. Various training programs include the Fogarty International Clinical Research Training Program, Annual teaching Seminar on Cardiovascular disease Epidemiology, the **NIH-D43** funded Interdisciplinary trainee program on Post-doctoral Fellowships and Junior Faculty Fellowships.

Apart from this the research projects of CARRS/CCDC serves as platforms for training/mentoring Post-doctoral fellows, Doctoral fellows, Master degree students, post graduate diploma students and interns supported by PHFI. Short – term trainees are accepted from US universities (Emory, North-western, Alabama, Harvard etc) on an annual basis to launch and sustain research partnerships between the institutions.

## Policy engagement

CARRS/CCDC is actively engaged in policy advocacy in India. Under the leadership of Prof. Srinath Reddy, CARRS contributed to formulating India's position in the 2011 UN Summit on Non-Communicable Diseases. Further Drs. Reddy, Dr. Prabhakaran, Dr. Nikhil Tandon and Dr. Mohan have assisted the Government of India and state governments in various capacities to formulate and implement non communicable disease prevention program. Members of the group have also assisted the WHO and World Bank in Chronic Disease policy issues

### • Engagement with stakeholders

- CARRS/CCDC, is along with the Government of Himachal Pradesh is to start a cardiovascular diseases and diabetes program in the Solan district covering four Community Health Centers and 1 Civil Hospitals from February 2012 onwards. The program will have a strong training component for the health care professional and strategies to build local capacity for the

screening and management of hypertension and diabetes with added measures to improve quality of care including long-term follow-up.

- CARRS/CCDC is currently consulting with the Government of Haryana to start three distinct programs in the state: a mHealth intervention at the government Community Health Centers to strengthen the National Program on Cancer, Diabetes, Cardiovascular diseases and Stroke; a Community Health Worker led cardiovascular disease risk reduction program at the community level; and a behaviour-change intervention targeting salt intake reduction at village level.

## Other efforts

Evidence-based and context-specific educational and intervention resources, tailored to the Indian context, for practitioners and public health professionals are not available in India. CARRS/CCDC is attempting to address this gap. A list of such resources is listed below:

- Manuals on lifestyle intervention for the prevention of type 2 diabetes in women with gestational diabetes in India
- Medical Officer's manual on guidelines on prevention and management of cardiovascular diseases, diabetes, and stroke
- Electronic Decision Support System for the management of diabetes at secondary care settings
- Module on the Role of risk factors for WHO (SEARO) for policy makers as part of the SEAR capacity strengthening programme
- Manual for Policy Makers titled 'Powering India's Growth- Diet and Physical Activity'.
- CARRS-Surveillance Study Manual
- CARRS-Translation Trial Study Manual
- A fully-fledged website of CARRS (<http://www.coecarrs.org>) has been made operational



# **The Ramalingaswami Centre for Social Determinants of Health**

## **Achievements**

The research projects initiated in 2010 under this Centre on which several investigators, public health specialists and research fellows are working continued during this reporting period. For the major project on synthesizing the evidence on social determinants of health in India,

Majority of relevant data from India on education, employment, and air and other pollution, transportation and infrastructure, social protection, gender equity and governance have been converted into useable formats for detailed review as a step towards planned analysis. Using longitudinal data covering the past two decades, we are assessing the association of changes in trends of social determinants with changes in mortality and morbidity outcomes on a large scale in India in composite analyses that include all relevant social determinants in the same multilevel multivariate models. The aim of this analysis is to document the best opportunities available to improve health and reduce health inequalities by identifying social, environmental or economic factors that influence health.

Extensive analysis to examine disparities in the social determinants of health during childhood between the girl and boy child in India is presently underway. The effect of social determinants on morality for boys and girls is being examined for the states in India. The goal of this analysis is to understand what aspects of social policy have beneficial impact in reducing child mortality and to identify aspects of social policy and programmes that are associated with reducing disparities in mortality between the girl and boy child in India.

A report on social determinants of health was prepared as part of the activities of the High Level Expert Group on Universal Health Care in India being coordinated by PHFI.

# South Asia Centre for Disability Inclusive Development & Research (SACDIR)

**South Asia Centre for Disability Inclusive Development & Research (SACDIR)** is a centre of excellence established under the aegis of the Public Health Foundation of India (PHFI) in technical collaboration and support from the London School of Hygiene and Tropical Medicine (LSHTM), and its component institution, the International Centre for Eye Health (ICEH), London, UK. SACDIR is located in the premises of IIPH, Hyderabad.

## Objectives

- **Training & Education**

- a. Train and reorient health care personnel to concerns of persons with disabilities;
- b. Run short and long term training course/ modules on disability, potentially disabling conditions & inclusive development
- c. Organize modules on application of the International Classification of Functioning (ICF) recommended by WHO

- **Research**

- a. Develop the evidence base for documenting the prevalence and magnitude of disabilities within the South Asia context;
- b. Conduct high quality need-based epidemiological, operations, sociological and outcomes-based research to improve the quality of life of persons with disabilities;
- c. Augment research capacity in the South Asia Region through skill transfer.

- **Program Development**

- a. Evaluation of existing programs for persons with disabilities in India and other South Asian countries;
- b. Develop innovative modalities for identifying persons with disabilities and providing appropriate care;
- c. Conduct cost effectiveness analysis of specific interventions for disabled persons.

- **Advocacy**

- a. Advocate at appropriate congregations and forum for disability inclusive development;
- b. Assist and influence policy development initiatives to foster disability inclusive development in the country and the region.

## **SACDIR has four broad functions**

1. Developing research capacity in the region and provide evidence for action.
2. Augmenting skills of existing and new professionals through need-based training modules.
3. Assist in programme development and evaluation in South Asia Region, with a major focus on India.
4. Help governments, NGOs and other stake holders in policy formulation and advocacy.

## **Sources of Funding**

The Centre is funded through research grants and course fee for short courses. Faculty and infrastructure costs are being met by PHFI.

## **Achievements**

SACDIR since its informal inception last year and formal launch in October 2010 has been involved in its core activities as proposed in its plan.

- **Institutional Development**

Execution of an Annual/Short course Project contract (Limited to a maximum of 12 month period) between SACDIR, PHFI and Christian Blind Mission (CBM), Germany through its South Asia Regional Office for South India and Srilanka, Bengaluru, Karnataka

MoU with Sri Devaraj Urs Academy for Higher Education in Research, Kolar for increased collaboration in mutually benefiting activities.

- **Training and Education:**

SACDIR in the past few 2 months conducted following short term courses and trainings:

- a) Short course on Public Health Planning for Hearing Impairment – October 2010
- b) Conference on Working towards a Disability Inclusive Society in Andhra Pradesh, India – December 2010
- c) Research Methodology Course - March 2011
- d) Rapid Assessment for Avoidable Blindness Training for Kolar – March 2011
- e) Short course on Public Health Approach to Disability - July, 2011
- f) Short course on Public Health Planning for Hearing Impairment – October, 2011

- **Research:**

Epidemiological and Evaluation research projects that were undertaken as part of the SACDIR centres is enclosed as a table below

Research Project Title	Support/Funding	Progress so far
Incidence of cause specific blindness in Andhra Pradesh	London School of Hygiene & Tropical Medicine - Sight savers	Field work to be completed.
Validation of Key Informants for identifying children with disability in Bangladesh and Pakistan	CBM through LSHTM	Field work completed in Bangladesh.
Multi-centric Collaborative Study on the impact of Global warming and Ultra Violet Radiation (UVR) exposure on ocular health in India	Indian Council for Medical Research (ICMR)	Ethical clearance has been received and field work will start soon.
Review of the rural and urban mental health program undertaken by the Banyan	The Banyan Trust	Phase I of data collection completed
Barriers to employment and employability for persons with disabilities in Hyderabad, Andhra Pradesh, India.	Christian Blind Mission (cbm), Germany through its South Asia Regional Office for South India and Srilanka, Bengaluru, Karnataka	An operational manual for project & questionnaires for both employees as well as employers has been prepared and submitted to CBM. SERP & few IT companies have been contacted for necessary permissions for conducting pilot study. Waiting for permissions.
Gender as a determinant of the uptake of services in persons with disabilities in persons with disabilities.	Christian Blind Mission (CBM), Germany through its South Asia Regional Office for South India and Srilanka, Bengaluru, Karnataka	Worked on training manual. Worked on Tools Visited SERP and got official permissions and approvals. Selected village for pilot study and taken approval to start the study in Rampally village Working on posters for training the Key Informants.
The public health impact of folate deficiency and strategies to improve maternal and child health outcomes in India	Research Grant under the PHFI-UKC Wellcome Trust Capacity Building Programme	We are applying for ethical clearance. Partners meeting conducted to finalize further course of action.
Eye Health within the Public Health System in India: A review of its functioning in five identified locations in the country	Operation Eyesight Universal	Training manual developed, Tools for inquiry developed
Transformational role of the Non-Government Organization (NGO) sector in Inclusive Development and Social Change: Evidence for Policy and Practice	Sight Savers International	Project accepted for implementation, Contract being drawn up
Public spending on eye health in India: Review of health programme spending at central, state and district level	Sight Savers International	Project accepted for implementation, Contract being drawn up

## **Engagement with Stake holders**

Regular engagement with funding agencies and implementation agencies including Govt. of AP is being promoted. Primary stake holders including persons with disabilities are regularly consulted on the directions to be taken by the Centre and in developing a vision, mission and long term strategy for the Centre.

## **Other Initiatives**

# **HIGH LEVEL EXPERT GROUP ON UNIVERSAL HEALTH COVERAGE (Set up by the Planning Commission)**

With the aim of incorporating a comprehensive plan for health in India within the 12th Five-Year Plan, the Planning Commission of India, under approval by the Prime Minister, constituted a High Level Expert Group (HLEG) on Universal Health Coverage (UHC) in October 2010, which has been assigned the task of reviewing the experience of India's health sector and suggesting a 10-year strategy going forward. The terms of reference (ToRs) related to : (1) human resources for health; (2) physical and financial norms for quality and access; (3) improved management of health; (4) community involvement and public-private partnerships; (5) reforms of the pharmaceutical sector; and (6) health financing, insurance and financial protection. In addition to this, the HLEG felt the need to provide additional situational analyses and recommendations pertaining specifically to the (7) social determinants of health, as well as (8) gender and universal health coverage.

Public Health Foundation of India (PHFI) has been appointed the Secretariat by the Planning Commission of India, to provide technical and logistical support to the High Level Expert Group in preparing its report.

The HLEG's findings, supported by research of the PHFI secretariat are to be presented to the Planning Commission at the end of October 2011 as a summary of discussions and recommendations which will provide a framework for Universal Health Coverage, to be progressively implemented over 2010-2020.

The Planning Commission has also requested PHFI to collate the reports and recommendations submitted by seven working groups constituted by the commission, various health related components of the 12<sup>th</sup> plan. This integrated draft, along with the HLEG report, will be used by the Steering Committee on Health for the assisting the development of the 12<sup>th</sup> plan document.

## **Achievements**

An initial progress review was presented to the Planning Commission at the end of January 2011 as a summary of discussions and suggested ways forward to achieve provision of health care for all.

Technical experts with a background in health systems, an understanding of regulatory frameworks, laws and procedures of certification, accreditation and costing with special reference to the delivery of health services in the private sector were also consulted. Health economists with background in health financing assisted on development of systems of financial protection and reforms in policies related to production, import, pricing, distribution and regulation of essential drugs, vaccines. Other experts were positioned to support work on the investment plan for meeting the human resource requirements, physical and financial norms for quality, universal reach and access of health care services and other terms of the expert group.

Apart from intensive evidence synthesis, a number of national and international consultations were held with and position papers received from institutions and individuals representing civil society, the private sector as well as international organizations like the World Health Organization (WHO) and the World Bank. Recognizing that the Medicos Friends Circle (MFC) has developed approach papers for UHC, an interaction with MFC at their conference in Nagpur was organized. Similarly, interaction with

the representatives of CII, FICCI and ASSOCHAM were also arranged to facilitate the review process. The PHFI–HLEG secretariat arranged a number of multi-stakeholder consultations to inform and review the interim report prepared by secretariat of the HLEG.

A number of meetings were held of the larger HLEG, sub-groups focusing on ToRs and individuals from the HLEG along with members of the secretariat to further explore many of the topics and develop an evidence base for the arguments and recommendations in the HLEG report.

Consultations with the Ministry of Health, members of the Planning Commission throughout the drafting process have ensured that continuous feedback is received and that the development of recommendations is transparent. Additionally, at the most recent meeting of the HLEG, informal press briefings were also undertaken to ensure clarity on the direction of the recommendations and priorities of the HLEG, prior to the final release of the report.

Background papers authored by many PHFI researchers and faculty-members in collaboration have provided the evidence base for the recommendations of the HLEG. Abstracts have been accepted for presentation at a number of fora, such as the Health Reform Asia conference in December 2011.

## Plans for the future

Funding has been secured from the Norwegian Foreign Ministry for advocacy and pilot research projects connected to universal health coverage. It is anticipated that a number of public outreach (assemblies, press junkets), regional consultation (meetings, presentations) and dissemination (reports/manuscripts, conferences, conclaves, etc.) activities will be underway in the coming year.

More recently PHFI has also been charged with reconciling the recommendations of a 40 member **High Level National Steering Committee on Health** with twelve terms of reference which has been appointed formulate the Twelfth Five Year Plan (2012-2017) for the Health Sector. The various proposals produced by this group will eventually be amalgamated with the Universal Health Coverage report to produce a comprehensive vision and action plan for India's health sector reflected in an approach paper for the 12<sup>th</sup> Five year plan.

In addition to this, pilot projects and follow-up research, building on the work of the secretariat to date, will also be pursued (eg. Modelling exercises on disease burden projections, health outcomes and financial risk protection mechanisms, toolkits for the development and uptake of recommendations, mechanisms for enabling great community participation, piloting of key recommendations at the district level, development of a framework to determine essential care packages at the state level).

Given that the Universal Health Coverage (UHC) project is an important policy shaping exercise and an opportunity to influence the development and implementation of healthy policy for the country, it is expected that PHFI will move forward in earnest with an agenda to inform champion and implement universal health coverage for India. Activities are planned supporting a range of initiatives, from the state and non-state sector to this end, in order to build an international reputation and standard of evidence-based health systems policy-making.



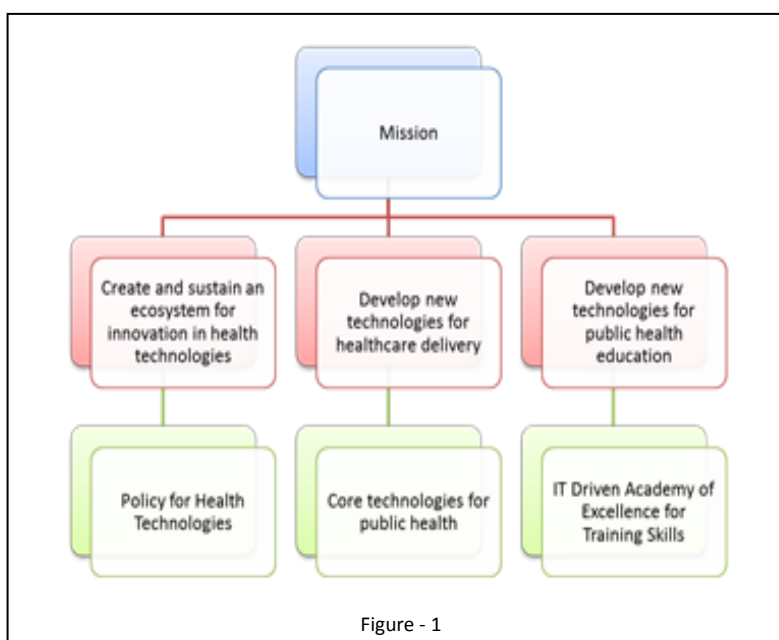
# AFFORDABLE HEALTH TECHNOLOGIES

Affordable Health Technologies is a new division of PHFI which work towards developing technology that can enable patients, healthcare workers and healthcare systems' health programs and prevention programs. The division aims to investigate the role of technology in informing public health policy and practice and is a strong advocate for policy for health technologies in public health. The division is led by Dr. Kanav Kahol. Dr Kahol was an Assistant Professor in the School of Biological and Health Systems Engineering in Arizona State University and an Assistant Professor Adjunct in Mayo Clinic, USA. He completed his PhD from Arizona State University. Broadly, his research in healthcare encompasses a wide spectrum of state of the art information technology, mobile technology and sensor technology for public health. It includes applications such as simulation and games for training and education, social networking tools, and feedback and monitoring systems that involve wearable sensors and mobile computing. Dr Kahol leverages these state of the art technologies to advance optimal human-machine symbiosis frameworks towards inculcating best practices in medical education and promoting patient compliance and patient access through information technology. Through rigorous testing and field experiments Dr Kahol's research has successfully shown that use of such technology is crucial in medical education and practice.

Affordable Health Technologies drive innovations that are defining future approaches to information, education and knowledge management in clinical care, and public health. The need for health technology infrastructure, personal health technologies and e-enabled

health delivery and financing is well recognized in the healthcare arena but often lack of coherent health technology policy, well designed technologies and the lack of a technology proficient workforce is a barrier to fully realize the benefits of health IT. In the affordable health technologies division of Public Health Foundation of India, we aim to develop a multi-pronged approach for the Indian public to leverage health technologies to obtain better health. Our mission is three fold shown in Figure 1.

Our mission comprises of creating the right ecosystem for health technologies adoption, creating core technologies as well as defining a methodology to create systems that address the needs of public health system and using technology for better education of the healthcare workforce.



## 1. Policy for Health Technologies

### • Achievements

- a) **Health technology infrastructure for universal healthcare:** Achieving universal healthcare requires a significant amount of investment into the health technology

infrastructure. Technologies under the umbrella of health information technology (HIT) enable secure collection and exchange of health data about individuals. This collection and exchange is the backbone of providing quality healthcare and access to all. By empowering individuals and increasing system transparency, enabling pervasive healthcare delivery, developing a robust payment system and enabling epidemiological and scientific research, eHealth has to lie at the core of any major or minor investment in healthcare.

Today HIT is remarkably underutilized. While India boasts of a sizeable talent pool in software and hardware, there is very little development and deployment work in the eHealth space. Private players are taking the lead on certain initiatives but without a government vision and plan, pilot initiatives can lead to insular silos of information and technology. This can be limiting to the vision of universal healthcare. While the government has invested in certain disease specific portals and management information systems, the true potential of eHealth will require a significant amount of investment both by the public and private sector coupled with a comprehensive vision in the rollout of eHealth infrastructure and the ecosystem to support eHealth investment and use. In the report on realizing the vision of universal healthcare, we have outlined certain initiatives towards health technology policy that will ensure universal healthcare. These initiatives are meant to provide a working plan for leveraging mHealth and eHealth over the 12<sup>th</sup> five year plan.

- b) **Cost effective health technology deployment:** Development of methodologies for cost effective technologies and having the appropriate policy framework to support widespread adoption of such technologies is an important endeavour for India. However, our current policy framework is not geared towards the technology needs of the healthcare system. The Indian population deserves access to medical devices and medical technologies that can improve our health at low costs. Working with South Asian Network for Chronic Diseases, Health Technology Assessment International and industry partners, we are developing various initiatives in introducing cost effective technologies. Initiatives include developing capacity in health technology assessment, advocacy of cost effectiveness and performing cost effectiveness analysis for health technologies in India.
- c) **Supporting The Right to eHealth:** From a technology perspective, the Indian demographic is poised to embrace technology in large capacities in the next few years. As our mobile penetration reaches levels above 100%, 3G revolution makes internet pervasive and affordable devices such as AAKASH Tablet enable access to smart technologies, it is important for our public health system to leverage technologies to their maximum extent to guarantee the right to health. We believe that citizens in India have a right to meaningful use of health information technology. This includes
  - 1) **Right to E-Scheduling:** Citizens should be given access to scheduling services over the phone, SMS and internet.
  - 2) **Right to E-Consultation:** Citizens should be given access to technologies that enable e-consultation for primary care.
  - 3) **Right to E-Analysis, Diagnosis, Prognosis and Health Tips:** Citizens have the right to technologies that enable better decision making through use of data mining and decision support algorithms. Continuity of care offered through technology enabled guidance should be supported.

- 4) **Right to E-Records:** Citizens have a right to their health records and have on demand access to the health records.
- 5) **Right to E-Privacy and Security:** Citizens have a right to privacy and security of their health records.
- 6) **Right to E-Billing:** Technologies supporting e-billing including mobile billing need to be integrated in the healthcare system. Health insurance must enable technologies to ensure cashless services.
- 7) **Right to E-enabled Drug and Device Managements.** Citizens should be allowed electronic access and clinical management of their prescriptions for drugs and devices.
- 8) **Right to E-Information and Communication:** Health communications health tips should be provided through electronic sources like SMS, emails. Personalization of such services will be required for addressing the unique needs of every individual.
- 9) **Right to E-Community Health:** Social milieus, support groups, should be made accessible through technology platforms. Community health centres need to be technology enabled for supporting an expanded set of primary care services.
- 10) **Right to E-Interventions:** Behaviour change interventions can and must be technology enabled. For example dietary management and exercise management software on mobile phones can help address several concerns of non-communicable diseases like diabetes and cardiovascular diseases.

Through publications, advocacy and developing technology infrastructure plans to guarantee eHealth services, we are enabling design of services for the Indian population of the very near future.

- **Capacity Development**

On Oct 31st 2011, we will host a workshop on health technologies assessment which will be conducted by Dr. John Gabay from Health Technology Assessment International. The workshop will cover fundamentals of HTA and develop capacity within PHFI for the same.

- **Policy Engagement**

The report on universal healthcare was presented to the planning commission which has a significant portion on health technology policy. We have also helped prepare comments for the report on tertiary care for the Ministry of Health and Family welfare from PHFI on the health technology infrastructure. We support the formation of a national mission of Health IT which will oversee research and operationalization of innovative technologies for better health.

**Engagement with Stakeholders:** As described above, we have been working with planning commission and MOHFW towards health technology policy. We have also provided inputs in the National Allied Health Services report on use of technology and training of allied health services in health technology policy. In addition we have engaged with industry. We are working with American Chambers of Commerce, GE, Johnson and Johnson in that regard

and have also engaged with CII on health technology regulation. Initial meetings with the Central Drug Standards Control Organization have also been established for future work in this domain. We are in the process of forming relations with Indian companies in health technology sector. Internationally we are working with Baylor University Houston Texas with Dr. Hardeep Singh and Dr Dean Sittig on comparing health technology infrastructure in USA and India and writing grants and papers about it.

## 2. Develop Core Technologies for Public Health System

### • Achievements

a) The work of the division in terms of technology development focuses on two basic areas

(1) empowering the healthcare worker through technologies and

(2) empowering the patient through technologies. The first research thrust focuses towards design,

development and evaluation of technologies that enables healthcare workers (clinical and nonclinical) in villages and urban areas to proactively deliver, document

and design healthcare diagnostics and interventions. Through the use of technologies such as tablet PCs, mobile phones, gaming consoles, cable TV and satellite TV boxes, we are working on a set of novel technologies that can increase the outreach of our healthcare system. Healthcare workers form the core of our health system and include doctors, nurses, paramedics, Associated Nurse Midwives, ASHAs etc. Our vision is that we create a new breed technology enabled and technology literate public health workforce. Through our educational mission, we are creating a cadre of public health managers that encourage and inculcate a culture of health technology innovation. This allows us to create technology that is usable and is employed at different levels of the healthcare delivery pyramid. Our premier project in this space lies in design, development and evaluation of a health Tablet system

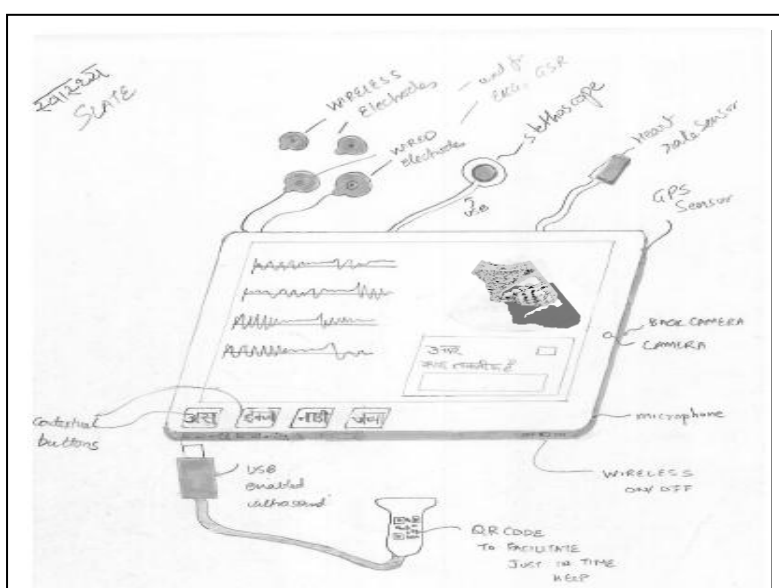


Figure – 2: Swasthya Slate Concept

b) **Swasthya Slate System.** Our aim in this project is to employ affordable tablet platforms, interface healthcare diagnosis sensors to the tablet and provide software for decision support systems and best practices. The ruggedized, tablet design will include provisions for working on several exchangeable battery packs that can be charged separately. Our aim is to interface several sensors such as electrocardiogram sensors, electro-encephalography sensors, heart rate sensors, galvanic skin response sensors,

electromyogram sensors, stethoscope, ultraviolet light etc to the readily available android tablet. The software will include complete systems for enrolling health of the population along with disease specific software. We will also have special software to support national priorities such as mother child tracking system etc. The tablet will generate clinical and healthcare data which will be augmented by GPS data and image data used for both diagnostic purposes and documentation/surveillance purposes. The system also has questionnaire etc that are critical in assessing public health and delivering quality care. For the purposes of wide reach, the system will offer operating instructions etc in local languages. We also envision using QR codes as a way of offering just in time help to the operator in case of need for guidance. The QR Code is a camera recognizable bar code which can be used by the operator through the system or their mobile phone. Once detected by the software QR code can offer audio narration as well as visual guidance on how to use the system. This when augmented by training of the operators can be a useful aid in ensuring high usage.

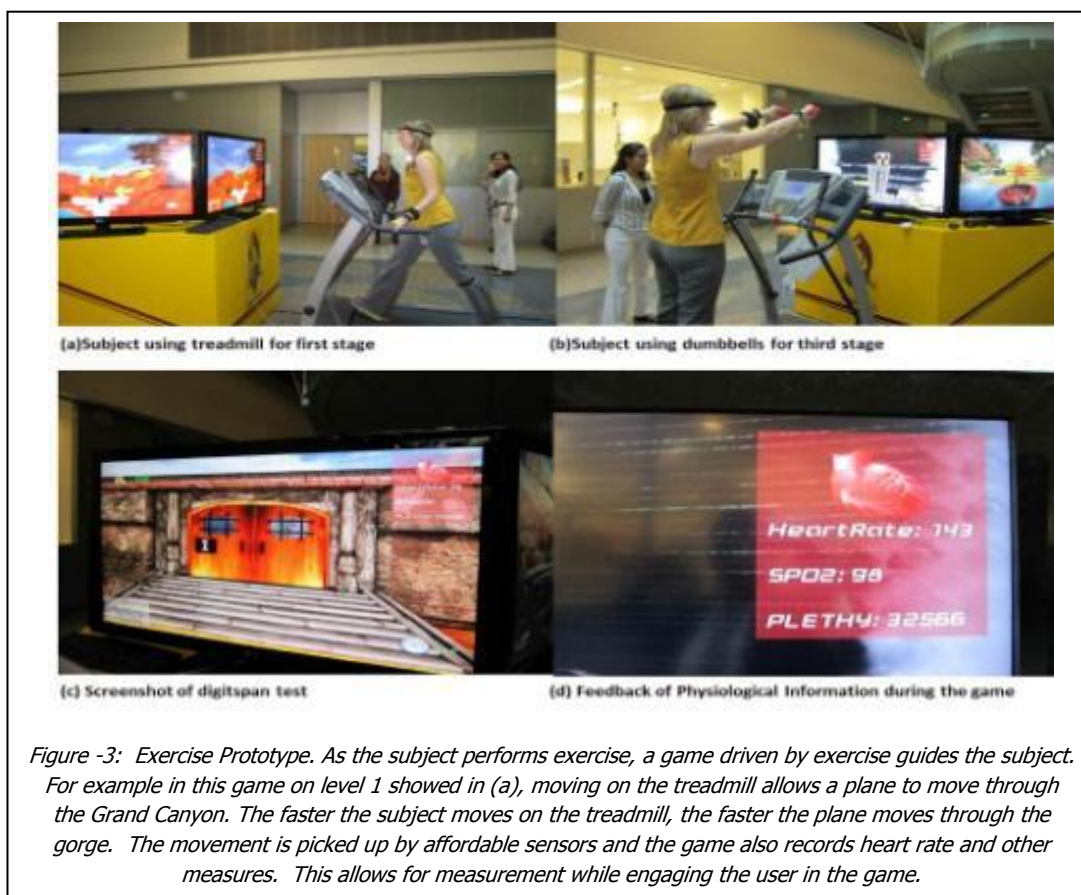
The vision is to build this device and present it to the healthcare workers for everyday use. Cost is a major factor in the design and we will work with the health economists in Public Health Foundation of India to ensure a cost effective model of design, development and evaluation. Our pilot study would involve validation in both rural and urban areas of 4 states to cover a sizeable sample size. The vision is shown in Figure 2.

### 3. Empowering the Patient through Technologies

Our second focus lies in design, development and evaluation of technologies for enabling patients to take care of their own health. We believe that a huge opportunity lies in empowering patients and allowing patients to be co-designers of health rather than simple receivers of health. This is especially true for the rapidly increasing lifestyle diseases which form one of the largest components of disease burden. We can empower the patient by (a) allowing them to keep track of their own health and (b) allowing them to participate in decision making of their own health interventions where necessary and (c) by providing tools for patients to improve their understanding and use of the healthcare system. The following projects are exemplars of this effort.

- a) **Technologies to support right to eHealth:** We are developing a set of core technologies for allowing e-scheduling, e-analysis and e-records. Working with Department of Defense and Media Labs Asia, we are in the process of defining projects on various facets of right to eHealth and performing trials for it. We are also in initial stages of projects with Central Scientific and Industrial Research on developing a DOTS Vending Machine for Tuberculosis.

- b) **Exercise Monitoring Systems:** Using smart phones accelerometer, we have developed several technologies that can document the physical activity of users and share this through informatics architecture with their patients. Specifically helpful for cardiovascular patients and diabetes patients, this system is an important aid in self-correction and feedback for the users.



- c) **Video Game Based Health Education and Health Interventions:** By leveraging the entertainment value of video games, we have developed games for young students who within the story line of the game learn about health management and also use active gaming to encourage exercise. Data generated by these games is stored in the informatics framework to allow for longitudinal analysis especially the active gaming data which can be employed by doctors to study longitudinal exercise patterns and account for lifestyles into diagnosis and disease management. Our first project in this domain submitted as a fellowship application to the Wellcome Trust is on gaming as an intervention for urban diabetes and obesity. Diabetes management requires long term behaviour change. Games provide environments that seek patients' attention, participation, motivation and retention and offer dynamic adaptation. They provide real time feedback which links action with results. They have natural, easy and fun to use interfaces that can seamlessly integrate recreation with disease management. From a clinical perspective, games can address several unmet needs. Games engage a user through streamlined narratives, multimodal experiences, and the motivation to succeed. Games can help address educational needs by incorporating educational elements into the gameplay. Modern games allow online storage of scores enabling clinicians to keep track of patients through online monitoring and alerts. Using technologies of active gaming like the Nintendo Wii® and the Microsoft Kinect system, we have developed a system that engages users, provides them means for persuasive exercising and measures and provides access to vital to inform better clinical decision making by the clinician. Figure 3 shows the

prototype system deployed with Center for Sustainable Health in Arizona under the guidance of Nobel Laureate Dr Leeland Hartwell.

Pilot tests showed that gaming actually burns more calories and has better sustained interest levels than conventional exercising in all age groups. At PHFI we hope to develop India-centric games and systems for urban population. We will deploy such systems in malls, parks, gyms and healthcare centres for allowing patient access.

- **Funding**

We have dedicated funds of Rs 15L for this initiative from our research department to develop the Swasthya Slate. Funding for gaming project has been applied to the Wellcome Trust through a fellowship application for Dr Kanav Kahol. We have also applied for funds to the Department of Research for Defense Organization and Ministry of Information Technology for the projects in this space.

- **Capacity Strengthening**

We are in the process of establishing a teaching relationship with IIT Delhi to cover health technologies and technologies for health and wellness.

- **Policy Engagements**

While the core of this activity lies in development, we are working with the National Innovation Council to suggest a policy for affordable health technology development in India. We will engage with Ministry of Information Technology through Dr RaoAyagiri and Dr Ramaraju who leads the Media Labs Asia project.

**Engagement with Stake Holders:** Working relationship with companies such as GE, Intel, IBM and local manufacturers have been established. We are hoping to form a consortium of academia and industry towards affordable health technologies research and development. Our relationship with ministries would help in this venture.

## 4. Technologies for Public Health Education

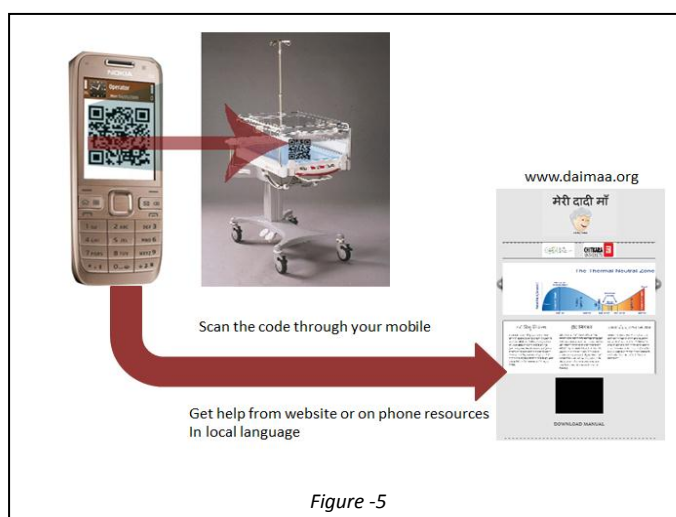
- **Achievements**

In order to develop viable solutions for these four focus areas we need a comprehensive coordinated strategy to deliver skills education remotely and safely, allow procedure standardization leading to best practices, objective measurement of skills and proficiency, and training for optimum usage of equipment and resources. With the availability of cheap computing infrastructure, readily available bandwidth and growth of technologies such as medical simulation, virtual reality, movement analysis, computer graphics, persuasive technology and mobile computing it is possible to envision the future of advanced medical education that fully leverages the opportunities presented by these tools. There is a need to focus resources and develop these technologies for medical education and training for all levels of the healthcare workforce from senior physicians to paramedics. Such an effort will both lower the healthcare costs by decreasing medical errors and improving efficiency. PHFI is poised to seize this opportunity through development of a medico-technological infrastructure aimed to provide high quality high fidelity training onsite and remotely to the

Indian medical workforce. We have been funded by the National Skills Development Corporation of India in alliance with Confederation of Indian Industries to build a world class simulation center called Center for Advanced Medical Education and Learning (CAMEL) and a fleet of mobile simulation units called CAMEL CARAVAN to offer high fidelity skills training for healthcare professionals. The strategic vision of Center for Advanced Medical Education and Learning (CAMEL) is to enhance patient safety and the quality of medical care through the use of innovative, high impact training and research in simulation. The goals of CAMEL include

- a) Increase the safety, efficacy and effectiveness of patient care through innovative, interdisciplinary training
- b) Allow for learning in a safe, non-threatening, and controlled environment
- c) Teach basic and advanced practical skills in patient managements
- d) Build confidence and increase the performance of clinicians
- e) Increase exposure to critical, yet low frequency patient encounters in order to minimize the risk to patients
- f) Increase effective communication among all members of our healthcare team
- g) Develop simulation as a tool for the assessment of clinical skills
- h) Use focused, methodologically sound research to measure the impact of simulation activities on learning and ultimately, clinical practice
- i) Significantly enhance quality improvement initiatives using simulation activities
- j) To provide a hands on experience for implementation of best practices and solidify the process of continuous measurement and improvement
- k) To provide opportunities for remote learning and distance education through state of the art information technology tool
- l) Develop indigenous technologies available at affordable rates to support goals 1 through 11.

The proposed centre will fill in a major need for medical education in India. By providing training to medics at different levels both in rural and urban areas, it will augment the current educational system by not only providing services in terms of simulation center, remote education facility but also help in operations by focusing on best practices and train to use the available resources. This will lead to unprecedented improvement in quality of care and training a large cadre of healthcare workforce through well-defined protocols efficiently.



### Just in Time Training Systems:

We have also recently developed applications for continuity of training. An Android App called DAI MAA has been developed by two engineering students from Chitkara University to allow for Just in Time Training. The app uses a custom QR code placed on equipment. When the QR code shown in figure 5 is scanned through the Android phone, it takes the user to a website which contains an



instructional video in local language on how to use the equipment. For example the QR code in figure 5 is scanned by the application which uses the camera on the phone to perform the scanning, it takes the user onto a website which explain usage of babywarmers in Pahari dialect for Himachal Pradesh. We have developed content for various local languages and such QR codes are being produced as stickers which can be put on devices by manufacturers or hospital administrators.

**Dai Maa App:** Dai Maa app offers real time on the spot training for healthcare professionals. The QR Code shown on top right image is a unique code that is unique to a product and region. In this case, it is for a baby warmer to be employed in Himachal Pradesh. The code available as a sticker is placed on the baby warmer. The healthcare worker in himachal Pradesh who want to use a baby warmer can scan this code through our Dai Maa app which uses the phones camera to detect and recognize the code. Once it is recognized, it takes the user to a website which explains the use of baby warmers in local language (in this hindi) and a video which contains instructions in local dialect (in this case Pahari).

- **Funding**

The project on CAMEL is funded through the National Skills Development Corporation. The DaiMaa App is currently programmed by students on voluntary basis and will be applied for funding in the upcoming quarter.

- **Capacity Strengthening**

The project is centred around capacity building. Our first project in the CAMEL would be to train general duty assistants (GDAs) for hospital management and improve their skills.

Upon successful completion of the two-week course, a GDA will be able to function effectively as a valued member of the healthcare team, meeting the needs of the patients within the approved scope of practice allowed for a GDA. Following are some activities that a GDA is expected to conduct:

- 1) Assist the hospitalized patient with the activities of daily living;
- 2) Transfer the patients from bed to chair, chair to bed or bed to bed;
- 3) Transfer patients from one area of the hospital to another;
- 4) Assist the patient with ambulating with or without assistive device;
- 5) Position the patient in bed to prevent complications;
- 6) Meet the hygiene needs of a patient;
- 7) Assist the patients with activities related to elimination (urine and bowel);
- 8) Prepare a patient care unit for admission and discharge;
- 9) Collect and dispose laboratory specimens; and
- 10) Maintain infection control measures
- 11) Communicate in a manner appropriate for a GDA as a member of the healthcare team. Effectively communicate the needs of the consumer to other healthcare professionals. Act as the patients'/residents' advocate using the communication skills taught within the program.

- 12) Collect data necessary for the healthcare team to make informed decisions regarding the appropriate care plan for the patients.
- 13) Incorporate the skills learned in the program into the healthcare environment as per the nursing care plan established for the healthcare consumer. Maintain at all times the consumer's rights, safety, and medical asepsis.
- 14) Continue to learn beyond the program's goals and take their knowledge and training confidently into the healthcare community.

- **Engagement with stakeholders**

Our relationships with CII, NSDC are the primary drivers of the project. We have also engaged with the government of Jammu and Kashmir which is developing a simulation centre in Dhobiwan Srinagar and we are providing consultation services to develop curriculum and acquire mannekins. We have engaged with international partners like Mayo Clinic, BannerHealth and University of Washington in this endeavour.

# Capacity Building

## Ongoing

### PHFI-UK CONSORTIUM WELLCOME TRUST CAPACITY BUILDING PROGRAMME

Four committees involving members from PHFI/IIPHS and the UK Consortium Universities steer the work of the PHFI-UK Consortium Wellcome Trust Capacity Building Programme. The Teaching & Training Committee, Research Committee, Evaluation Committee, and the Executive Committee work in close consultation with one another.

### Achievements

Ten candidates have been received Masters training up to September 2011 under this Wellcome Trust Strategic Award. As expected, each candidate completed the master's study within one year. Post completions of their Masters, the candidates returned to India and have been placed in at PHFI/IIPHS in various capacities. One candidate recently started his Masters programme at the London School of Hygiene and Tropical Medicine.

Twelve PhD/DrPH candidates are currently in various stages of their doctoral study under this Wellcome Trust Strategic Award. Each candidate is expected to complete the doctoral study in three years, which includes one year in the UK and two years of research/field work in India. These candidates are presently undergoing their research phase in India and are associated with PHFI/IIPHS. Four candidates are due to start their doctoral study this year. Three3 more candidates have been selected for the doctoral study and are currently awaiting placement at the UK universities.

Two short courses on qualitative research and STATA were conducted in Delhi in collaboration with UK faculty in 2011. The plan is to develop and deliver 6 short courses each calendar year for the remainder of the programme.

Seven India-based research fellowships have been awarded so far to PHFI/IIPH faculty/research staff. The fellowships are based at PHFI and/or IIPHS and are expected to be completed within two years. Each research fellow is paired with a supervisor in India and UK. UK-based research fellowships were announced recently and applications for the current round are being received.

Two large research grants and nine small research grants were awarded recently. The research under these grants is based at PHFI/IIPHS, includes collaboration with UK partner institutions and is aimed at capacity building in public health research at PHFI/IIPHS.

## Completed

### REACHING EVERYONE: STRENGTHENING PUBLIC HEALTH EDUCATION

Geographical location: INDIA & AUSTRALIA

The Nossal Institute has significant links with PHFI. A Memorandum of Understanding between the two organizations is in place and specifically identifies educational support as a joint activity. Over the last two years the Nossal Institute has provided a full scholarship to a junior staff member of PHFI to study for a Master's degree at Melbourne University. In addition, PHFI and the Nossal Institute hosted a PHFI ALA (Australian Leadership Awards) fellowship in pandemic preparedness in 2008. There are currently two joint research activities underway: 1) an evaluation of a five year HIV programme in north east India; and 2) the preparation of an investment case for scaling up interventions for maternal and child health in five states of India. It is expected that these activities will increase the educational support networks that already exist between the two organizations, and potentially broaden that network to include other institutions contributing to the Melbourne based curriculum design. This activity aims to address the recognized need within India of strengthening basic health service delivery.

Objectives: development of PHFI staff skills; establishment of a professional education framework for PHFI teaching faculty for teaching skills development and strengthened delivery of public health teaching and support services; and promoting gender equality in public health teaching and content.

The proposed activity is designed to: 1) strengthen the competencies of those designing and delivering public health curricula; and 2) establish systems for sustainable institutional strengthening to scale up quality public health education.

The Nossal Institute for Global Health, University of Melbourne collaborated with PHFI to enhance capacity in quality public health teaching: 1) Eight faculty members from PHFI and the three IIPHs went to the Nossal Institute to enhance their capacities. This focused on processes and structures for systems strengthening at the institutional level; curriculum development; teaching and student assessments; development of a professional education framework for PHFI teaching faculty for teaching skills development and establishing an effective system to evaluate public health teaching across PHFI institutes; 2) The faculty benefited from the quality courses offered in the post-graduate courses and trainings. Senior faculty, Deans, Directors, Vice Chancellors and senior administrators from the University of Melbourne and Deakin University spent time together and regularly interacted on systemic, administrative, academic and business development and other ideas; 3) The University of Melbourne expressed interest in collaborating on student exchange programmes.

Prof Catherine Bennett from Deakin University, Melbourne and Alison Morgan, from Nossal Institute, Melbourne, conducted master classes for PHFI faculty who teach epidemiology and who will be teaching epidemiology in the forthcoming MPH course. Directors of IIPHs, Hyderabad and Gandhinagar nominated two faculty members each, who travelled to Delhi to attend these Master training classes. One faculty member each from Bhubaneswar and Gwalior also attended.

Project duration: Jan' 10 – Jan' 11

The project was supported by Australian International Health Institute (The University of Melbourne) on behalf of Nossal Institute of Global Health - AusAID Public Sector Linkages Program (PSLP) and was led by Dr. SANJAY ZODPEY

## **LINKING HEALTH AND MICROFINANCE INDIA: IMPROVING INCOMES AND PROMOTING UNIVERSAL HEALTH CARE ACCESS FOR THE POOR**

Geographical location: GUJARAT

The Indian Institute of Public Health Gandhinagar, Freedom from Hunger and Microcredit Summit Campaign organized a cross-sectoral workshop (26 - 27 July 2011) to examine the potential for linking health providers with organizations providing microfinance services, so that health financing could reach millions of the poor in India. This would enable access by the poor to essential health services directed at improving the health of women, children and families. It would also protect families from the costs of poor health.

The predominant legal forms of microfinance institutions (referred to hereafter as MFIs) in India where opportunities exist to add health services on to other financial services are: 1) NGOs or non-governmental organizations formed either as trusts or societies; 2) Non-profit MFIs (also known as NGO-MFIs), that are generally section 25 companies; 3) For-profit MFIs, registered as non-banking financial companies (NBFC) regulated by the Reserve Bank of India.

Adding health services to microfinance offers the opportunity of increasing institutional growth and social performance while improving client performance and loyalty. Thus a growing number of MFIs and Self Help Promoting Institutions (SHPIs) are adding health services.

Bringing together Indian leaders from the microfinance sector, SHPIs, the public health field, innovative health practitioners, and government policy makers in a dialogue to explore intersecting objectives, work, and the potential for synergy will result in the following: 1) Help the health sector realize the enormous potential of the microfinance sector in reaching millions of the Indian poor to improve health knowledge and practices and access to health care services and products; 2) Help microfinance institutions providing services to the poor realize that they can deliver to and/or create linkages to health-related services (health education, access to health products and services) with self-help groups members and MFI clients in a cost-effective and sustainable manner, significantly benefiting their clients as well as their own social and financial performance; 3) Identify opportunities for advancing collaboration between health and microfinance institutions providing services to the poor, possible challenges and potential next steps for moving forward.

Fifty six senior officials from microfinance, the self-help group movement, the health sector, the Government of India, apex institutions and donors/social investors attended the event.

Several key themes emerged from the workshop. While there are numerous examples of MFIs and SHPIs integrating health services, the level of integration is not uniform and in many cases reaches only a portion of their clients. There is a need for greater adoption of health interventions and taking them to scale within organizations. There was a call to formalize a learning association for microfinance and health to facilitate: the exchange of information on various products and services and delivery approaches; the collection and sharing of evidence from evaluations and other learning opportunities; and increased communication and learning among practitioners. The social investors and donors participating in the workshop noted the communication gap between the two sectors. It was felt that a State of Practice report that can filter best practices, document bottom up approaches in integrating health and microfinance, and identify quantifiable social returns for integrated services is the logical first step to address the need of the sector.

Project duration: Jul' 11 – Jul' 11

The project was supported by Freedom from Hunger, Microcredit Summit Campaign, Johnson and

Johnson, Small Industries Development Bank of India, National Bank for Agriculture and Rural Development, Ananya Finance for Inclusive Growth, Council of Scientific and Industrial Research and was led by Mr. SOMEN SAHA

## **DEVELOPING AND IMPLEMENTING TRAINING PROGRAMS IN MONITORING AND EVALUATION (M&E) AND STRENGTHENING PHFI'S CAPACITY TO CONDUCT M&E ACTIVITIES.**

Geographical location: DELHI

The Public Health Foundation of India (PHFI) and MEASURE Evaluation, of the Carolina Population Center, University of North Carolina at Chapel Hill (USA), have established a partnership for developing and implementing training programmes in monitoring and evaluation (M&E), and strengthening PHFI's capacity to conduct M&E activities. PHFI and MEASURE Evaluation will jointly design the curriculum and also conduct an M&E class which will be a part of PHFI's 2010-11 Post Graduate Diploma Programme in Health Economics, Health Care Financing and Health Policy (PGDHEP).

MEASURE Evaluation will award up to three full international fellowships (or up to 2 fellowships for international students and 2 fellowships for Indian nationals) for the 2010 - 11 Diploma programme. These fellowships will support qualified applicants from USAID assisted countries. PHFI, using funds made available under this subcontract, will support the costs of tuition, books, airfare, research expenses, health insurance, accommodation, and a living allowance for the MEASURE Evaluation fellowship recipients.

PHFI will collaborate with MEASURE Evaluation to conduct, monitor and evaluate a class on the M&E of population, health and nutrition programmes as part of the 2010-11 (PGDHEP) and, possibly, other long term programmes mutually agreed upon by PHFI and MEASURE Evaluation. The M&E class will cover the basic concepts and practices used in developing plans for performance monitoring and impact evaluation, and provide information about recent developments in M&E tools and techniques. The Diploma-level class is designed to strengthen the capacity of professionals involved in the M&E of population, health and nutrition programmes in the Asia region.

Two students who were awarded the MEASURE Evaluation Fellowships have completed the PGDHEP course at Indian Institute of Public Health –Delhi. (IIPHD) Both have reported joining their previous employers and are intending to work in the area of M&E, utilizing the skills acquired in the course. In addition to the fellowships, the grant has been used to build up the library at IIPHD through purchase of books related to M&E and research methods.

Project duration: Jan' 10 – Jan' 11

The project was supported by University of North Carolina at Chapel Hill-United States Agency for International Development (USAID) and was led by Mr. SUNIL GEORGE

## On going

### **REGIONAL WORKSHOP ON GEOGRAPHIC INFORMATION SYSTEM(GIS) APPLICATION IN PUBLIC HEALTH**

Geographical location: DELHI

General Objective: To introduce fundamental concepts of the use of Geographic Information System(GIS) within the public health context, and build practical experience in the use of GIS software and spatially referenced data for effective analysis, interpretation and presentation of information.

Specific Objectives: At the end of the course the participants will acquire: 1) Familiarity with the use and application of GIS in the field of health; 2) Experience with the use of the GIS package for analysis, interpretation and presentation of data from their own workforce.

Course Contents: 1) Concept of GIS; 2) Use of GIS in public health; 3) Preparing a database for GIS; 4) Preparing GIS output from the data provided; 5) Application of software like Quantum Geographic Information Systems (QGIS), DHIS-II, Google Earth etc.

The course will be taught by experts from MEASURE Evaluation at the University of North Carolina at Chapel Hill, faculty members of the Public Health Foundation of India, and other experts from government and non-government agencies working in GIS in India.

Project duration: Aug' 11 – Nov' 11

The project is being supported by The University of North Carolina at Chapel Hill (UNC-CH) - United States Agency for International Development (USAID) and is led by Dr. ABHAY SARAF

### **TO DEVELOP A SOUTH-EAST ASIA REGION (SEAR) PROGRAMME MANAGEMENT COURSE FOR ADOLESCENT SEXUAL & REPRODUCTIVE HEALTH (ASRH) AND HIV AND YOUNG PEOPLE (HIV/YP)**

Geographical location: DELHI

While adolescents constitute a special group, requiring special interventions, the lack of adolescent-friendly health services is common in the South East Asia region (SEAR). For effective interventions to protect and promote adolescent/young people's health, professionals are needed who understand and are sensitive to the special issues and requirements of adolescents, and who are equipped to undertake optimal measures for adolescent/young people's health.

The proposed integrated course aims to equip participants with the knowledge, conceptual frameworks and tools to strengthen health sector policies and programmes for Adolescent Health and Development (AHD) in SEAR countries, as well as develop their capacity for managing such programmes. The target participants will come from the following: policy-makers, programme and health care service providers working at district/ state and central levels in the government sector, NGOs/community based organizations, academic institutes and other relevant sectors. The course will deal with specific health issues of adolescent/ young people with special focus on sexual and reproductive health, HIV/AIDS in young people, and other public health priorities like non-communicable diseases. The pedagogical approach will combine lectures, power point presentations country specific case studies and group discussions. The proposed course will be developed by

combining the strengths of the three courses already developed i.e: (i) the WHO-SEARO & United Nations Population Fund (UNFPA) training programme for managers on adolescent/young people's health including sexual and reproductive health and HIV; (ii) London School of Hygiene & Medicine (LSHTM) course in Adolescent Health in low and middle income countries; and (iii) UNICEF's course on Adolescent Health. The course will be developed through a series of consultations and discussions with key stakeholders and will be customized to suit the requirement of the region. The course will be piloted by the Public Health Foundation of India for two weeks. Five participants from India and five from other SEAR countries will be invited for this pilot course.

Faculty at PHFI and IIPs have been identified to run this course and a matrix of lectures has been created.

Project duration: Aug' 11 – Nov' 11

The project is being supported by World Health Organization and is led by Dr. MONIKA ARORA

## **BUILDING INTER-SECTORAL TRAINING AND RESEARCH CAPACITY FOR COMBATING ZONOTIC INFECTIONS IN INDIA**

Geographical location: DELHI

Zoonotic diseases are of growing national and international significance with regard to health, food safety, trade, security and economics. Up to 60% of the known agents infecting humans are zoonotic in origin and up to 75% of the emerging infections (e.g. avian influenza H5N1, Severe acute respiratory syndrome (SARS), Ebola/ Marburg etc.) are zoonotic in origin. Prevention and control of zoonoses thus requires a multi-dimensional, integrated system-wide approach that is more complete and efficient compared to compartmentalized models operating under sectors.

Roadmap to Combat Zoonoses in India (RCZI) Initiative was thus launched in March 2009 as national level endeavour on multi-sectoral collaborative research, capacity building and advocacy for prevention and control of zoonoses. The Public Health Foundation of India is the nodal agency for RCZI. The current project seeks to consolidate and expand upon the achievements of RCZI in the last year through research, training and advocacy initiatives.

The expected objectives of the project are: 1) To consolidate and foster multi-sectoral partnership and linkages through coordination meetings of the Joint Working Technical Group; 2) To peer review the multi-sectoral capacity building training package for district officers on Integrated Prevention and Control of Zoonoses; 3) To pilot test the training package on Integrated Prevention and Control of Zoonoses; 4) To peer review the framework for targeted advocacy on 'recommendations for revision of medical curriculum for re-orientation of zoonoses related content; 5) To peer review the recommendations for medium to long term communication strategy for zoonoses prevention and control in India.

The expected outcomes (and products) of the project are as follows: 1) Inter-sectoral coordination mechanism established under the previous year's activities of RCZI (Joint Working Group) consolidated; 2) Short term and long term capacity building tools developed (three day training package for scale up developed and framework for advocacy for the revision of medical and veterinary curricula finalized); 3) Health communication and health promotion strategic frameworks developed for dissemination (medium to long term health communication strategy).

Project duration: May' 11 – Sep' 11



The project is being supported by World Health Organization and is led by Dr. MANISH KAKKAR

## **NATIONAL LEVEL WORKSHOP TO REVIEW RECOMMENDATIONS FROM RAPID PROGRAMME REVIEW OF ADOLESCENT HEALTH IN INDIA**

Geographical location: DELHI

Adolescents constitute a special group requiring special interventions. There is, however, a lack of adolescent-friendly health services and inadequate policy orientation to meet adolescent/young people's health needs in the South East Asia region. Therefore, the Public Health Foundation of India (PHFI) conducted a rapid programme review (RPR) to examine the existing programmes and policies relating to adolescent health and development (AHD) concerns in India the main objectives being; (1) to analyze the policies, environment, programmes and interventions related to AHD particularly in the government ministries; (2) to assess the present scale of implementation of such interventions and the extent of convergence at the grass roots level; and (3) to identify the opportunities and challenges for establishing inter-sectoral linkages amongst programmes in multiple ministries.

An extensive literature review of the existing adolescent programmes and policy issues has been completed and reveals that they are scattered across different government departments and ministries such as the Ministry Of Health and Family Welfare, the Ministry of Youth Affairs and Sports, the Ministry of Human Resource Development and the Ministry of Women and Child Development (MWCD) at the Central and State levels. In addition the Government of India has ratified and endorsed all major international conventions and declarations relevant to adolescents such as United Nation's Convention of Rights of the Child (UNCRC). However, currently there is no specific policy that aims to promote AHD comprehensively, and the lack of convergence between already existing programmes was evident.

It was also evident that some areas such as reproductive and sexual health, HIV/AIDS and nutrition were given more importance in national programmes i.e. Adolescent Reproductive & Sexual Health Programme, School Health Programme, Menstrual Hygiene Scheme, Integrated Counselling & Training Centres (ICTCs), Rajiv Gandhi Scheme for Empowerment of Adolescent Girls - SABLA, Ministry of Women and Child Development (MWCD) and Anaemia Control Programme. However, programmes on other key concerns such as tobacco, alcohol and substance use, mental health and violence and injuries were limited and implementation varied among states.

The results of this program review and data collected through qualitative methods at the states have been shared with WHO. A national workshop is planned in October 2011 to disseminate these results to all central and state officials.

Project duration: Jul' 11 – Oct' 11

# **Library Resources**

# Library Resources

## Libraries of PHFI and IIPHs

The Resource Centre including the libraries of Public Health Foundation of India (PHFI) and Indian Institutes of Public Health (IIPH) Hyderabad, Gandhinagar, Bhubaneswar and Delhi are rapidly emerging. The aim of the Resource Centre of PHFI is to develop a special library for academics, researchers, faculty, staff and students of IIPH and other scholars to access digital resource materials as well as get books and journal articles related to public health.

## Accomplishments and Strengths

Public Health Foundation of India Resource Centre and Library (PHFIRC) implemented the KOHA Open iSource Software absolutely free which has all the features of commercial software, thus saving nearly 10 lakhs. Books and reports have been catalogued and processed in the software for easy access to resources of the Library.

Online Public Access Catalogue: <http://122.180.103.107/cgi-bin/koha/opac-main.pl>

NewsNIC Software was acquired from National Informatics Centre. Selected Public Health related newspaper clippings is updated each day and emailed to all staff of PHFI and IIPHs. Nearly 15000 news clippings are now available in the archives. A web portal for users is created to get access to resource materials so that users can get to know what is available in the library from their own desktops [www.freewebs.com/phfirc](http://www.freewebs.com/phfirc)

Implemented DSPACE software free of cost with support from IT section of PHFI and customized the WEB OPAC as per PHFI web page by an expert who gave his time for free. This is for carrying out archiving of institutional repositories. <http://122.180.103.107:8080/dspace>

Institutions	No of Books	No of Books Donated	No. of titles with multiple copies	Cost of books from 2008 to 2011
PHFI	1155	681	75/160	12,94,361.00
IIPH-DELHI	1119	570	80/80	2,05,017.00
IIPH-Bhubaneswar	96	73	8/20	1,45,679.00
IIPH-Hyderabad	491	171	491/620	
IIPH-Gandhinagar	506	213		
SANCD	66		3/6	
<b>Total</b>	<b>3433</b>	<b>1708</b>		<b>16,45,057.00</b>

PHFI has solicited and networked with UNICEF, UNFPA, WHO, WORLD BANK and US Library of Congress on health for the IIPHs Libraries to receive books and resource materials as donations and in exchange programs.

A format for procurement of books and other resources was developed and circulated to all. The Annual Library Budget for all PHFI and IIPHs Libraries was prepared and approved.

Enabled the activation of DELNET (Developing Library Network) for getting access to union catalogues and databases from 1200 libraries across India. Users can now avail of their services by

making online request of books and journal articles that are not available with us with the PHFI Librarian as the moderator.

Reference service is being carried out and selective dissemination information is done by sending emails. Books, journals, film CDs and journal articles are being circulated to all staff on request.

## **Other Significant Activities**

Purchasing books/CDs and resource materials such as statistical softwares for all IIPHs and PHFI is an ongoing activity and a format for request for books purchase is available for faculty and staff. The complete details have to be filled in the approval form and duly signed by respective Heads of Dept. and Directors.

PHFI Library also subscribes to 21 core public health journals and regularly provides bibliographic support and full text articles on demand to all including South Asia Network for Chronic Diseases. There are ongoing Information Literacy presentations to all PHFI and IIPHs new staff and students so that they are able to know what is available and how to access the resources.

The Library also coordinates in organizing talks on scholarships available. Recently USEFI had come to give a presentation to our staff on the Fulbright Scholarship available and how to apply for the same. There was an online Public Health Quiz for all PHFI and IIPHs on World Book Day on 23rd April, 2009.

The Library staffs visits other Libraries for networking with the Health Librarians and attends workshops and training to get support in sharing of resources on health.

PHFI Library initiated and received a grant for two computers, one backup server for all IIPHs and Refworks 15 User Licences (that takes care of bibliographies) from MCH Star Project, funded by USAID. IIPH Delhi Library received a grant from W.H.O. last year for purchase of books.

## **Disabled Friendly Library**

Recently PHFI Library has taken a step ahead to make it a disabled friendly Library. Visually impaired persons can also now access PHFI Library resources and navigate websites within the Library premises at PHFI. Attempts are being made to give access to other categories of disabled persons as well.

# **Partnerships and Institutional Collaborations**

# **PARTNERSHIPS AND INSTITUTIONAL COLLABORATIONS**

## **Introduction**

The Public Health Foundation of India (PHFI) has evolved through consultations with multiple constituencies including Indian and international academia, state and central governments in India, multi and bilateral agencies and civil society groups in India. As public health emerges as an independent discipline in Low and Middle Income countries, PHFI forges national and international partnerships aimed at establishing strong national and international research networks of public health and allied institutions, which would undertake policy and programme relevant research and build capacity to advance public health goals. In order to promote exchange of ideas and public health expertise, PHFI brings together some of the leading institutions in developed and developing countries to collectively undertake analytic work for generating policy recommendations related to public health action in not only in the health arena, but across allied sectors, which impact upon health of the people.

Partnerships seek to strengthen and facilitate the growth of existing public health training institutions/departments so that in the years to come, India and other countries are benefited by a strong network of Institutes of Public Health.

PHFI has partnerships with over 160 international and national academic and non-academic institutions and aims to collaboratively catalyse public health action globally. Some of these collaborations are focused on developing and fostering public health education, training and research; while some partnerships support distance learning programmes and provide a platform for collaboratively designed and implemented initiatives. In many partnerships, PHFI is the driver while in others it plays a major supporting role.

PHFI has developed collaborations with multilateral, bilateral, philanthropic, educational institutions, international bodies such as the European Commission, The Global Fund to Fight Aids, Tuberculosis and Malaria, The World Bank, United Nations Organizations such as UNICEF, World Food Programme, World Health Organization as well as Non-Government Organizations in Europe, United Kingdom and the USA and Australia.

PHFI partners with the Government of India (Ministry of Health and Family Welfare, Ministry of Environment, Department of Science and Technology), the Planning Commission of India, state government, corporate bodies and research institutions of repute to broaden the frontiers of knowledge and work together to achieve common public health goals.

In addition, PHFI has collaborations with over 25 development foundations across the world such as The Bill and Melinda Gates Foundation, Wellcome Trust, Rockefeller Foundation, MacArthur Foundation and has links with bilateral and multi-lateral organizations and nongovernmental organizations which support activities related to technical support or through direct funding.

Structured as a private-public partnership, PHFI supports the work of many state governments in India to strengthen health systems, build health workforce capacity and develop an enabling environment for policy and programme implementation.

## Recent PHFI Partnerships

PHFI partnerships portray the range and nature of synergies that PHFI has forged over the past five years with a variety of institutions both in India and in some developed and developing countries.

PHFI partnerships are regional, national and global in nature and use the mechanism of a Memorandum of Understanding (MOU). PHFI has signed many MoUs with various organizations — identifying, developing and implementing collaborative activities which benefit both parties. Some of the highlights are included in this section.

- **MoU with Council for Scientific and Industrial Research (CSIR)**

The Council of Scientific and Industrial Research (CSIR) and the Public Health Foundation of India (PHFI) signed a Memorandum of Understanding to strengthen the country's efforts in health science research, education and advocacy in New Delhi on April 20, 2011. The MoU aimed at collaborating, planning and opening up joint programmes and centres to promote research and training in pharmaco-epidemiology in relation to development of drugs for infectious diseases, cardiovascular diseases and Diabetes and study of gene environmental interactions in India with respect to chronic diseases.

- **MoU with Swedish National Institute of Public Health (SNIPH)**

PHFI signed a MoU with SNIPH on 25<sup>th</sup> November 2010 which aimed at collaborating for integrating public health practices in healthcare systems, capacity building, exchange of practitioners and working towards a determinant based national public health policy.

- **MoU with Government of Karnataka**

PHFI recently signed a MoU with Government of Karnataka to catalyze the development of institutionally-synergistic and effective healthcare interventions and participation to positively enhance the experience of the quality, delivery and management of healthcare and medical services.

- **MoU with the National Institute of Public Health of Mexico (INSP)**

This MOU seeks to strengthen cooperation, research and academic exchange activities in the field of health research systems development, international scientific exchange meetings, conduct of epidemiological and technological studies and research in order to understand, diagnose and develop the national systems of health research. Through this MoU INSP will work with PHFI's programmes in Latin America and globally through collaboratively developed curricula and teaching programmes, webinars and distance learning initiatives.

These partnerships endorse PHFI's commitment to redress the limited institutional capacity in India for strengthening public health training, research and policy development. As PHFI grows in repute and in academic strength, many such partnerships are forged and strengthened.

Exchange of knowledge and expertise in public health, conduct of joint programmes, seminars and conferences leading to academic publications are some successful outcomes of these partnerships. PHFI values and nurtures these partnerships as milestones in the growth and development as a leader in the arena of public health.

***Working towards  
a healthier India...***



**Public Health Foundation of India**

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