



**Government of Tamil Nadu**  
**Health & Family Welfare Department**

**Operational  
Research  
Programme  
Guidelines**



**Tamil Nadu Health System Reform Program  
(Program for Results supported by World Bank)**



**WORLD BANK**

**Government of Tamil Nadu**  
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**Operational Research Program**  
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## Operational Research Program

### Table of Content

<b>S. No</b>	<b>Subject</b>	<b>Page no.</b>
<b>1</b>	<b>Introduction</b>	4
<b>2</b>	<b>Framework for Operational Research Program</b>	5
	2.1 Operational Research	6
	2.2 Implementation Research	8
	2.3 Health system Research	8
<b>3</b>	<b>Institutional Arrangements</b>	11
	3.1 Overview of Key Stake holders	11
	3.2 IIT[M] Nodal Agency for implementation of OR	11
	3.3 Who can apply and submit the proposal	12
	3.4 Technical committee	12
	3.5 Ethical committee	13
	3.6 Research Proposal Selection Committee	14
	3.7 Costing	14
	3.8 Monitoring	15
	3.9 Dissemination and use of Operation Research	15
	3.10 Expected outcomes	15
<b>4</b>	<b>References</b>	16

# Operational Research Programme Guidelines

## 1. Introduction

Several countries across the world have adopted a strategy to initiate and sustain an Operational Research (OR) programme that will strengthen and enable to transform healthcare systems over a period of time.

Evidence from across several countries show that operational research, which are primarily context specific, have the potential to

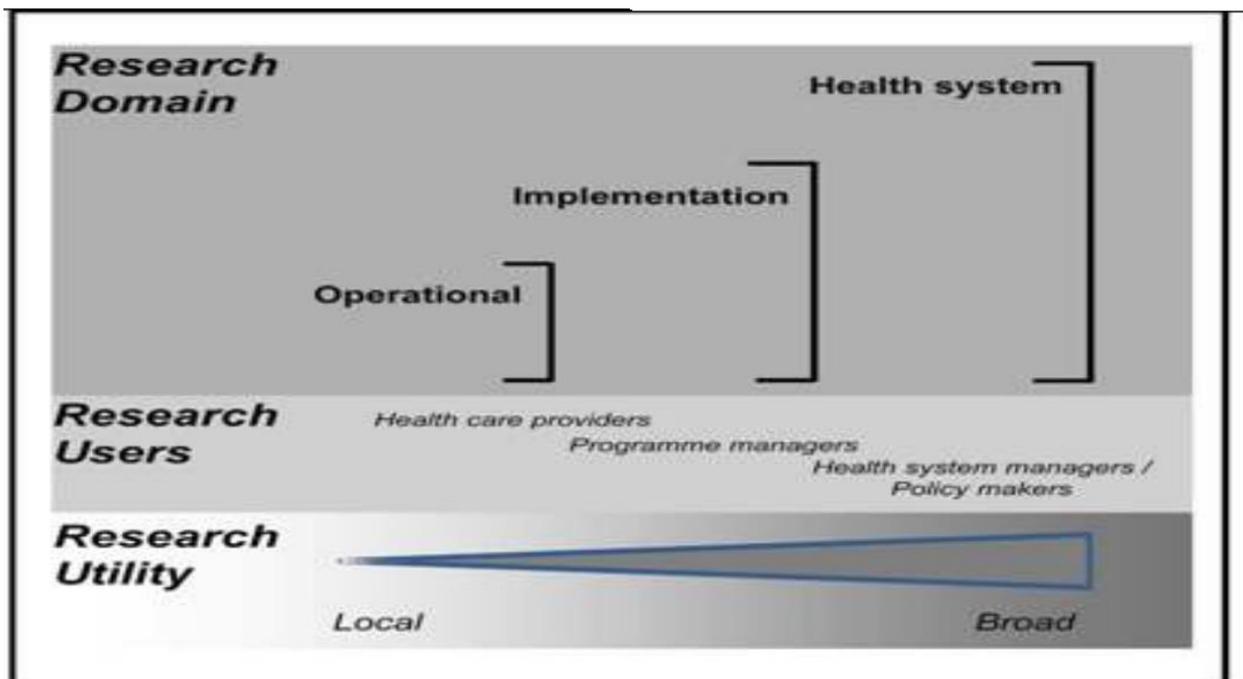
- (a) identify and solve problems in a timely manner
- (b) help policy-makers and program managers to make evidence-based program decisions and
- (c) help program managers and staff understand how their programs work

This document proposes guidelines that the Government of Tamil Nadu (GoTN) could adopt for Operational Research which will contribute significantly in transforming Tamil Nadu (TN) healthcare system in desirable directions in the future.

## **2. Frame work for Operational Research Programme**

Research has a crucial part to play in strengthening health systems and in improving the equitable distribution of quality health services for population, especially for those in need. There are different types of research and multiple definitions for each of these which leads to a lack of clarity and negatively affects credibility of the research. To avoid these pitfalls, TN is developing a research program focused on strengthening its health system. Based on the focus of research, its utility and the users of the research outputs, research to improve health system will be broadly classified under three categories<sup>1</sup>(figure-1).

1. Operational research (OR),
2. Implementation research (IR) and
3. Health systems research (HSR)



**Figure 1: Research to improve health systems**

\* Source: Research to improve health systems. doi: 10.1371/journal. pmed. 1001000.g001

## 2.1 Operational Research

Operational research aims to develop solutions to current operational problems of specific health programmes or specific service delivery components of the health system. This research is characterized by a strong problem-solving focus and an urgency to find solutions and is of primary use to health care providers and programme managers. Few illustrative examples are given in Table 1.

A wide range of study designs and research methods are used, ranging from descriptive and analytical studies to operational experiments and the use of mathematical modelling. The research often starts with exploratory studies to better define the problem and its determinants, and to identify potential solutions that can subsequently be tested.

**Table 1: Defining research to improve health systems with illustrative examples**

Research Domain	Primary Characteristic			
	Focus of research	Users of Research	Utility of research	Illustrative Examples
<b>Operational</b>	Operational issues of specific health programmes	Health care providers, program managers	Local	“Communication for behavioural impact (COMBI)” strategy to improve the poor compliance with mass drug administration for LF elimination in TN, India Which locations should be targeted for delivering HIV prevention services in Namakkal district, Tamil Nadu?
<b>Implementation</b>	Implementing strategies for specific products or services	Program managers, R&D managers	Local/ Broad	How to improve access to vaccination among children who are currently not reached by immunisation services? How to effectively implement a new intervention package for kala azar elimination in the Indian sub-continent?
<b>Health System</b>	Issues affecting some or all of the building blocks of a health system	Health system managers, policy makers	Broad	To what extent do health services reach the poor? How can this be improved? How effective are different policies for attracting nurses to rural areas?

\* Source: How amenable the research outputs are to adaptation, scaling up or use or in other contexts or locations.  
doi:10.1371/journal.pmed.1001000.t001

## **2.2 Implementation Research**

Implementation Research refers to research work done to promote the uptake and successful implementation of evidence-based interventions and policies<sup>2</sup>. Implementation research is characterized by a focus on the need for innovative approaches and/or ensuring the effectiveness of implemented interventions and/or focused on scale-up of interventions that have already been evaluated to be effective. This type of research is of primary use to programme managers and often utilizes multiple sites (countries, states, districts, etc.) to tease out which findings are context-specific and which are more generalizable.

## **2.3 Health Systems Research**

Health systems research addresses health system and policy questions that are not disease-specific but concern systems problems that have repercussion on the performance of the health system as a whole. It addresses a wide range of questions, from health financing, governance, and policy to problems with structuring, planning, management, human resources, service delivery, referral, and quality of care in the public and private sector. This research is generally multi-disciplinary, with a strong emphasis on social sciences, economics, and anthropology. Health systems research is of primary use to policy makers and health system managers<sup>1</sup>.

The three research domains are not mutually exclusive, and there are large overlapping areas.

## **Research Proposal Supported**

This research programme mainly supports OR. IR and HSR and other research will be supported in special circumstances where it is absolutely essential. Research proposals related to drug trials, monitoring and evaluation and intervention studies will not be considered.

## **Current and Future Programmes requiring Operational Research**

A number of on going programmes like Reproductive and Child health(RCH), Communicable and Non-Communicable diseases, Traumacare, mental health etc., have operational issues which are identified through routine monitoring and evaluation activities. Operational research related to these issues identified will provide information to the decision-makers and enable them to improve performance of their programmes. OR will also be useful to design, test and identify challenges included in the result areas of TNHSRP, namely Quality of Care Strategy, Non-Communicable diseases, Health Assemblies and TAN-QUEST amongothers.

## **Call for Research Proposals**

Broad themes related to OR in TN will be finalized by the Indian Institute of Technology, Madras (I.I.T. (M)), bi-annually in consultation with the Directorates of Public Health, Medical Services and Medical Education and Indian system of Medicine, National Health Mission (NHM), Tamil Nadu Health System Reform Programme (TNHSRP), Tamil Nadu Health System Project (TNHSP), Tamil Nadu Urban Health Project(TNUHP), National Institute of epidemiology (NIE), National Institute of Research in Tuberculosis (NIRT) and Tamil Nadu AIDS Control Society (TANSACS). There will be bi-annual call of proposals from the I.I.T.(M). Call for research proposals will be published in TNHSRP website and the I.I.T.(M) website and communication will be sent to the Directorates and societies under the Department of Health and Family Welfare, Department of Social Welfare, public and private institutions, Universities, Research institutes, Professional associations etc

## **3. institutional Arrangements**

### **3.1 Overview of Key Stake holders**

The key stakeholders include Directorates and societies under the Department of Health and Family Welfare and Department of Social Welfare, Academia, Think Tanks, Research Agencies and Development partners like the World Health Organization (WHO), the World bank, JICA etc. Numerous stakeholders will be benefited from the research outputs, and many of them will also participate in the actual conduct of research.

### **3.2 I.I.T.(M) Nodal Agency for Implementation of OR**

The I.I.T. (M) will be the nodal agency for implementation of the Operational Research Program(ORP).The responsibility of implementation of the ORP will be vested with I.I.T.(M). An MOU will be signed between the Project Director TNHSRP and the Director, I.I.T. (M) for implementation.

#### **Roles and Responsibilities of I.I.T. (M)**

1. To finalize broad themes of OR, IR & HSR in health sector in consultation with the Directorates of Public health, Medical Services and Medical Education and Indian Systems of Medicine, NHM, TNHSRP, TNUHP, TNMSC, NIE, NIRT and TANSACS and propose research questions in the context of the broader themes suggested.
2. To make bi-annual call for research proposals based on the broad topics identified
3. To convene Technical Committee meetings to short list the proposals
4. To convene the Research Proposal Selection Committee meeting twice a year for approving the list of the proposals which will be receiving the funding support.
5. To award research proposal to those selected by the Research Proposal Selection Committee
6. To issue of grants for research proposal
7. To review quarterly on the status of ongoing research
8. To maintain there pository of proposals, consent, investigation tools data sets and research related documents. To receive, approve and upload the final project report as working papers in the TNHSRP website
9. To receive, approve and upload the final project report as working papers in the TNHSRP website

### **3.3 Who can apply and submit Research Proposal?**

1. Individuals and teams of Medical and Paramedical health functionaries a ffiliated to private and public universities
2. Medical colleges/hospitals and health centers from private and public institutions
3. Departments from colleges working on Health and allied subjects
4. Colleges and Universities
5. Institutions of National importance
6. AICTE a ffiliated institutions
7. Research institutions working on health care
8. Think tanks

### **3.4 Technical Committee**

A Technical Committee will be formed with the Project Director, TNHSRP as the chairperson and the Director/designated Co-Ordinator, I.I.T.(M) will be the member secretary

#### **Members of the Technical Committee**

1. Additional/ Joint Director NHM
2. Expert Advisor/ Team Lead (Quality) from TNHSRP
3. Joint Director TANSACS
4. DD(Research)-DPH
5. DD/JD from DMS
6. Scientist/DD from ICMR-NIE
7. Scientist/DD from ICMR-NIT
8. DD/JD–Indian system of Medicine
9. DD, Madras Institute of Developmental Studies
10. Research Officer (statistics) TN Dr MGR Medical University To receive, approve and upload the final project report as working papers in the TNHSRP website
11. Co-opted members related to specialty of the proposals submitted

## **Responsibilities of the Technical Committee**

Based on the broad categories of research topics/ questions identified, I.I.T.(M) will call for proposals circulating the information through the heads of various departments related to health and other allied specialties and will also be put up in the website of I.I.T.(M) and TNHSRP. IIT(M) will convene a meeting of the Technical Committee bi-annually during the month of May/ October to scrutinize the proposals received and will shortlist based on the objective, methodology and expected outputs and budget requested. The researchers who have been shortlisted would be requested to make a brief presentation of the projects before the technical committee. The technical committee will recommend and forward the selected research proposals to the Research Proposal Selection Committee after obtaining clearance from the ethical committee.

### **3.5 Ethical Committee**

Every research has some inherent risks and probabilities of harm or inconvenience to participants / communities. Therefore, protection of participants shall be built in to the design of the study. Do no harm (non-maleficence) has been the underlying universal principle guiding health care in all systems of medicine around the world. While conducting biomedical and health research the four basic principles namely: respect for persons (autonomy), beneficence, non-maleficence and justice have been enunciated for protecting the dignity, rights, safety and wellbeing of research participants. All the proposals recommended for the selection committee shall be reviewed by the Ethical Committee for obtaining ethical clearance. The researcher shall submit the Ethical Committee clearance certificate from their place of work or from the place of study at the time of presenting their proposal or at least before it is sent to the Research Proposal Selection Committee. Individuals taking up research who are unable to get the ethical clearance from the place of their work, can obtain the clearance from the ethical committee of I.I.T.(M).

### **3.6 Research Proposal Selection Committee**

Research Proposal Selection Committee is formed with the Secretary, Department of Health and Family Welfare as the Chair person and the Project Director, TNHSRP as the member secretary.

#### **Members of the Research Proposal Selection Committee**

1. Secretary, Health and Family Welfare –Chairperson
2. Managing Director, Tamil Nadu Medical Service Corporation
3. Mission Director, National Health Mission
4. Project Director, Tamil Nadu State AIDS Control Society
5. Director/Designated Co-ordinator, I.I.T.(M)
6. Director of Medical Education
7. Director of Medical and Rural Health Services
8. Director of Public Health and Preventive Medicine
9. Director of Indian Medicine
10. Director, National Institute of Epidemiology
11. Director, National Tuberculosis Research Institute
12. Director, Madras Institute of Development Studies
13. Co-opted members for specific projects from relevant departments /disciplines
14. Any other nominee by Chairperson

The Research Proposal Selection Committee will review the proposals recommended by the Technical Committee and approve the research projects for which grants can be provided. The funds allocated to each of the research project will also be finalised by the Research Proposal Selection Committee.

### **3.7 Costing**

As a part of the ORP, TNHSRP proposes to support research projects related to OR. On an exceptional basis, IR and HSR may also be supported when absolutely essential. The study shall be conducted within Tamil Nadu and shall be completed within the period approved by the Research Proposal Selection Committee and whenever required can be extended based on approval by Research Proposal Selection Committee.

Priority would be given to research proposals, where research outputs provide insights on specific health programmes or specific delivery components of the health system. Each research project will be funded to a maximum of approximately Rs 25 lakhs and additional funds may be provided on a case to case basis subject to the approval of the Research Proposal Selection Committee. Go TN would provide TNHSRP an amount of Rs2 crores each year for 5 years to fund there search projects. The funds will in turn be transferred to I.I.T. (M). who will claim an amount of Rs.15 lakhs per year from this as an administrative cost for functioning asthenodal agency for implementation of the ORP.

### **3.8 Monitoring**

On approval of the research proposal by the Project Selection Committee, I.I.T. (M) will issue 1<sup>st</sup> instalment of the fund approved. The designated Co-Ordinator, IIT (M) will conduct a meeting once in three months to review the status of the ongoing research, and give feedback and necessary guidance to the researcher and also release funds in instalments or as required

### **3.9 Dissemination and use of Operation Research**

On completion of the research project, they will receive, review and approve the studies. The completed research project will be uploaded in the TNHSRP website and also in I.I.T. (M) Website who will maintain a digital library. The study reports will also be shared with the stake holders who are directly involved in programmes / work related to the topic of research. TNHSRP will organise workshops to disseminate the research findings to the implementation agencies which will be useful to them for course corrections and for adopting alternate strategies. The researchers would be encouraged to publish their research findings in peer-reviewed journal.

### **3.10 Expected Outcomes**

The program is expected to establish a network of researchers across Tamil Nadu and beyond to support Tamil Nadu health sector's improved outcomes. The OR programme, if successfully implemented, is expected to build a culture of continuous learning, research and evidence-based programmatic and policy decision making.

## 4. List of References

1. RemmeJHF, Adam T, Becerra-Posada F, D'Arcangues C, Devlin M, et al. (2010) Defining Research to Improve Health Systems. PLoS Med 7(11): e1001000. doi:10.1371/journal.pmed.1001000
2. Sanders D, Haines A (2006) Implementation research is needed to achieve international health goals. PLoS Med 3: e186. 13. AlloteyP, ReidpathDD, Ghalib H, PagnoniF

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# Operational Research Programme Guidelines



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