

**Assessment of Innovation uploaded on National Health Innovation  
Portal (NHINP)**

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Submitted

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“Successful passage & outcome of every work comes with dedication, determination & team work. All these turn futile in the absence of visionary guidance.”

I would like to extend my sincere thanks to the staff of NHSRC, New Delhi for extending its cooperation & never ending help in the process of understanding various dimensions of an organization. It's highly appreciated for the time spent by them for participating in discussions & lending valuable inputs.

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**Kesari Yadav**

## **About National Health System Resource Centre (NHSRC)**

National Health Systems Resource Centre (NHSRC) has been set up under the National Rural Health Mission (NRHM) of Government of India to serve as an apex body for technical assistance.

Established in 2007, the National Health Systems Resource Centre's mandate is to assist in policy and strategy development in the provision and mobilization of technical assistance to the states and in capacity building for the Ministry of Health and Family Welfare (MoHFW) at the centre and in the states. The goal of this institution is to improve health outcomes by facilitating governance reform, health systems innovations and improved information sharing among all stake holders at the national, state, district and sub-district levels through specific capacity development and convergence models.

NHSRC is also a World Health Organization Collaborating Centre for Priority Medical Devices & Health Technology Policy

The NHSRC currently consists of eight divisions – Community Processes, Public Health Planning, Human Resources for Health, Quality Improvement in Healthcare, Healthcare Financing, Healthcare Technology, Health Informatics and Public Health Administration.

The NHSRC has a regional office in the north-east region of India. The North East Regional Resource Centre (NE RRC) has functional autonomy and implements a similar range of activities.

### **Vision**

The National Health Portal aims to make this as a single point access for authenticated health information for citizens, students, healthcare professionals and researchers.

### **Mission**

The National Health Portal will achieve the above vision by collecting, verifying and disseminating health and health care delivery services related information for all citizens of India.

## **Policy Statement**

NHSRC is committed to lead as professionally managed technical support organization to strengthen public health system and facilitate creative and innovative solutions to address the challenges that this task faces.

In the above process, we shall build extensive partnerships and network with all those organizations and individuals who share the common values of health equity, decentralization and quality of care to achieve its goals.

NHSRC is set to provide the knowledge-centered technical support by continually improving its processes, people and management practices.

## **NHSRC serves as the Technical secretariat for National Health Innovation Portal**

National Health Systems Resource Centre (NHSRC) has been set up under the National Health Mission (NHM) of Government of India to serve as an apex body to assist in policy and strategy development in the provision and mobilization of technical assistance to the states and in capacity building for the Ministry of Health and Family Welfare (MoHFW) at the centre and in the states.

The role of the technical secretariat includes the following-;

- Consolidating the innovations from available resources, secondary searches, submission by innovators through the National Portal;
- Arranging for regular meetings of the committee. It is desirable that each of the Product and the Program appraisal committee meet at least once in 4 months
- The technical secretariat would present the submissions to the committee and will also undertake searches for credibility of evidence, any other related analytical evaluations or assessments of program and product evidences
- The technical secretariat would fund the activities of meetings, any related activities
- Technical secretariat would submit to MoHFW the findings of the two appraisal committees and will inform innovators about the selection of the innovation
- The technical secretariat would support MoHFW in informing states about the approval of the innovation
- The technical secretariat would support states in uptake of such innovations as felt appropriate by the states.

- Dissemination and Scale up of Innovation and Good Practice: The innovations and good practices which meet the criteria for uptake will be presented to stake holders including state officials periodically.

Healthcare Technology division of NHSRC works in areas of Health Technology Policy, Technology life cycle management, identification and uptake of innovations and conducting health technology assessments. The division serves as a technical node for Technology intensive healthcare Programs and systems development and their interface with broader health technology policy. The Division is South-East Asia's only World Health Organization Collaborating Centre for Priority Medical Devices & Health Technology Policy.

Division of Healthcare Technology provide the technical supports the National Health Mission

These are following

- Technical Specifications of Medical Devices procured under National Health Mission
- Biomedical Equipment Maintenance Program across all levels of public health facilities
- Identification, assessment and uptake of innovations in National Health Programs
- Support in Health Technology systems strengthening and providing technical support to Government's agenda on improving cost of technologies, safety profile of products

# **Dissertation Topic**

**Assessment of Innovation Uploaded on National Health  
Innovation Portal (NHINP)**

## **BACKGROUND**

### **National Health Innovation Portal Launched To Boost Innovations in Public Health**

National Health Innovation Portal launched on **August 17, 2015**

The Ministry of Health and Family Welfare, Government of India has set up the National Health Portal in pursuance to the decisions of the National Knowledge Commission, to provide healthcare related information to the citizens of India and to serve as a single point of access for consolidated health information. The National Institute of Health and Family Welfare (NIHFW) have established Centre for Health Informatics to be the secretariat for managing the activities of the National Health Portal.

The National Health Innovation Portal In order to facilitate the innovators to boost the innovations in public healthcare, the Government launched National Health Innovation portal.

The portal will serve as a platform in public domain to facilitate collection and dissemination of good practices and innovations that are found to be replicable. It will act as a gateway for integrating innovations into mainstream healthcare and has potential to bring about transformative improvements in healthcare delivery by accelerating the uptake of successful innovations of products, processes and programs.

The National Healthcare Innovations Portal is an attempt to pool-in and showcase innovative programs designs, practices, technology solutions and products across public and private healthcare sector of India. These solutions have either demonstrated abilities to address health systems challenges in specific contexts or hold a promise for future. This portal will act as an inspiration to health entrepreneurs as well as provide newer program designs, devices and approaches to cover those in greatest need of healthcare.



**NHP Health Directory Service mobile App**  
INTERNATIONAL DAY OF YOGA 2015  
URL: <https://play.google.com/store/apps/details?id=com.nhp.healthdirectory>

**Launch of 24x7 Toll free Helpline (Voice Web) for authenticated health Information : NHP Voice Web**  
Health Programs  
Know about the diseases

International Day of Yoga | NHP Health Directory Service | 1800-180-1104 (NHP Voice Web) National Health Helpline Toll free Number

## **What is the work of the portal?**

This portal will bridge the gap between inventor, industry, manufacturers & academia and shall provide complete information related to the technology required by the small & medium entrepreneur.

- This portal will help the network people to share ideas, experiences, problems faced and their solutions.
- This portal will work as a single source of Information about inclusive innovation, sectors such as health, education, food and agriculture, environment and natural resources, science and technology etc.
- This portal will wills the industry to exploit Innovation to prosper the innovator and country.
- This portal will provide a platform to innovators, plant & machinery manufacturers and other experts, where innovators/entrepreneurs can register with the portal to avail services such as innovation search, content upload, personalized search, etc.
- This portal will create national index on innovations and information related to innovations.

## **Inventor how to uploaded the product and program on National Health innovation Portal**

This is a online web portal. Website available on the NHInP Portal. There is a simple format for the uploaded product on this portal. [“INNOVATIONPORTAL.ORG”](http://INNOVATIONPORTAL.ORG) AND [WWW.NHINP.ORG](http://WWW.NHINP.ORG)

### SIMPLE FORMAT FOR THE INNOVATION PORTAL

Submitte date	Name	Addres s	City	Zip	Country	Phone	Email	Title
Area of innovati on:	Evidenc e on scalabili ty:	Eviden ce on costs	Resul ts on costs	Independ ent Evaluatio n done:	Target populati on	Results of independ ent evaluatio n	Concludi ng Remarks	Referenc es

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A web portal serves as an integrated gateway to the website and provides a single point of contact for online delivery of services to the visitors.

Highly-useable portals are designed to search, categorize, present and to put together relevant information and likely to attract a large number of hits or visitors.

There are also different web portals implemented by the counties for providing health care facilities. National health innovation portal is implemented in the country. There are different health services available to the citizens on this web portal. The citizens access different health services electronically through the health portal. These services are, , , book planned appointments, appointments, advice how to help you, common information, and follow up

### **What is innovation?**

- Innovation is the successful exploitation of ideas.
- The main characteristic of innovation is change.
- The three dimensions of innovation are product, process and organizational.
- Innovation can be of incremental or radical type.
- Innovation is not restricted to high-tech environment only.

It appears in all sectors of activity.

## **What is HTA**

Health Technology Assessment (HTA) is a multi-disciplinary field that examines the clinical, economic, social and ethical implications of medical technologies

HTA is an internationally active field and has seen continued growth. It has also been advanced by the evolution of methods including clinical epidemiology and health economics and acts as a bridge between the world of research and decision-making process.

The five day (including one day conference) Fellowship on Health Technology Assessment is 6th in series. The program offers sessions by expert faculty in the subject of Systematic Reviews, Economic Analysis and Medical Technology Evaluation.

HTA is the systematic evaluation of properties , effects and/or impacts of health technologies and interventions. It covers both the direct, intended consequences of technologies and interventions and their indirect, unintended consequences.

“A multi-disciplinary field of policy analysis that examines the medical, economic, social and ethical implications of the incremental value, diffusion and use of a medical technology in health care.”

### **What is a health technology?**

A health technology is the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of lives.

### **Dimensions of HTA**

- Clinical effectiveness- Assessment of clinical literature, trial data and undertaking system systematic review/meta analysis
- Cost-effectiveness- health economic modeling with life time costs to calculated societal gain
- Legal, ethical and regulatory aspects related to a technology
- Health systems integration model

## **Application for an HTA**

- Eliminating services that are lesser effective or lesser cost-effective compared to alternatives
- Estimating reimbursement thresholds
- Defining Insurance Packages
- Selecting priority technologies/services on scientific merit
- Assessing best choices in public health provisioning

## **HTA as a Tool**

HTA can help policy makers to:

- effectively prioritise health interventions and services
- improve their quality
- make consistent decisions
- reduce inappropriate variation
- inform the selection of indicators to assess performance and incentivise providers, especially in the context of capitation

## **Why to conduct an HTA**

- Evidence around technologies rapidly change with inclusion of newer and larger studies/trials
- Innovations have no formal or objective mechanism for uptake
- Designs of Clinical trails and research studies may not capture social/ethical dimensions around technologies
- Cheaper technologies may not always mean cost-effective technologies

## **HTA audiences**

- Policy-makers - payers
- Medical products developers – industry
- Healthcare professionals
- Academic community - researchers
- General public: taxpayers; insured population; informal sector
- Patients and their families
- NGOs / third sector
- Donors

## **Steps to conduct an HTA**

- Systematic Review/ Meta Analysis
- Cost-effectiveness
- Legal, ethical and regulatory aspects
- Health system Integration
- Health Technology Report

### **Systematic review**

- A review of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyze data from the studies that are included in the review

### **Process of Evidence based practice**

- Defining the scope
- Searching
- Select the studies
- Analyze data
- Present Results

### **Where do questions come from?**

- Clinical activity
- Patients
- Different management practices
- Purchasers of health care
- Policy makers
- Developing guidelines

## **Who can attend?**

- Biomedical and clinical engineers
- Hospitals and Healthcare Program Managers
- Students pursuing Public Health Management and Health Policy
- Attendees for the Program
- Professionals and providers who deal with healthcare technologies
- Patient safety officers and care providers
- Health Economists

## **Course objective:**

- Assessing clinical epidemiology questions through systematic reviews and critical appraisal of clinical studies/trials
- Basics of health economics modeling for intervention & technology selection in healthcare
- Legal and Regulatory dimension in use and uptake of health technologies
- Impact assessment in selection and use of health intervention & technologies

## **Specific Objectives:**

- Improve access to services through IT enabled cataloguing of service providers.
- Create a comprehensive web based National Health Portal to make available comprehensive health related information to the community using IT and analogue or Non-IT methods.
- Create protocols to enable the masses to access reliable, easy to understand, multilingual health information from the interactive National Health Portal.
- Create protocols for wide dissemination of health information in public domain using the Internet and other pertinent communication modalities.
- Create databases to enable citizens to seek, locate and access health care providers across the country.
- Create platforms to provide health information and health resources for the healthcare workers, NGOs, student communities, and health professionals

## Literature Review

Innovation is spurred through responses to the challenges of cost, supply chain problems and sustainability concerns. This implies that certain non-medical factors can influence the need for innovation in the health sector. (Temidayo, 2012)

Innovation may mean different things to different people, professions and businesses (Mulgan and Albury 2003; Borins, 2001). Additionally, innovation will not perform its intended purpose in an organization until appropriate building blocks are put in place. The ability to understand and leverage these factors determines the degree to which innovation can be disseminated within an organization (Greenhalgh et al., 2004). Previous research on healthcare innovation has focused on clinical and medical technologies. With an aging population and declining health budgets, service innovation is needed in responding to the diverse nature of patients' needs (Peckham, 2000; Adams, 2003). This study has shown the multidimensional outlook of forces driving the need for innovation in the health sector. The findings uphold the assertion that innovation has been the NHS response mechanism to turbulent environment (Adams, 2003; Fulop et al., 2001). Healthcare organizations should develop competences and practices for promoting ideas generation and investment in early adopters (Varkey, et al., 2008).

The innovations' impacts on total cost of care were estimated by independent evaluators using multivariable difference-in-differences models; most of the innovations did not show a significant effect on total cost of care. Using meta-regression, we assessed the effects on costs of five common components of these innovations. Innovations that used health information technology or community health workers achieved the greatest cost savings.

Innovation is widely acknowledged as key to economic development, since it potentially leads to productivity and competitive gains (Abrunhosa&ESa, 2008). There are several definitions of innovation. According to Schumpeter (1983) "innovation is the commercial or industrial application of something new-a new product, process or method of production; a new market or sources of supply; a new form of commercial business or financial organization. The European Commission defines innovation as the renewal and enlargement of the range of products and services and the associated markets; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organization, and the working conditions and skills of the work force (CEC, 1995). In the simple terms, innovation involves the exploitation of new ideas. Innovation is term that may refer to process, an attribute, or an end result. There is a difference between innovation and invention. Innovation should not be equated to invention; an invention may not necessarily lead on to innovation. This distinction is made clear by Freeman (1982) when he note that: "an invention is a idea, a sketch or model for a new or improved device, product, processor system" whereas "an innovation in the economic sense is accomplished only with the first commercial transaction involving the new product, process, system or device.." Different definitions of innovation included in the literature. "Innovation has been consistently defined as the adoption of idea or behavior that is new to the organization (Bon

& Mustafa, 2013). Thus, innovation does not exclusively result from R&D; it is a multidimensional process, with multiple sources, most of the time coming from complex interactions among individuals, organization and the institutional setting.

## **Main Objective:**

To evaluate the process of selecting innovation uploaded on NHINP portal.

## **Methodology**

Search strategy:

A number of databases were used in the search for relevant academic published articles including Scopus, Pub Med, Web of Knowledge and Business Source Premier.

Searches for grey literature on the topic area were conducted using Google. Articles for the review were drawn from peer-reviewed journals, conference papers, consumer studies, health professional studies, research by recognized independent institutions as well as systematic and narrative reviews of the various topics.

Search terms:

The terms used for search purposes included, but were not restricted to: 'internet/web/online health seeking behavior', 'online health information', and 'health'.

How to define the mandatory data for the innovation

Firstly define the product name and title- these data are following

- Product Name
- Submit date
- Area of Innovation
- Evidence on scalability:
- Evidence on costs
- Results on costs
- Independent Evaluation done:
- Concluding Remarks
- References

We will study the portal on the website nhinp.org for to study the process an innovator to upload any innovation.

We will study the criteria of selecting or disqualifying any technology by contact to the concern term of nhinp portal, if possible we will try to get the tools those are using.

## Using Methods-:

1. What is the technology's stage of development?

Yes  (Commercialized)

No  (Under Development)

2. Does the technology target a well-defined and substantial health problem?

Yes

No

3. Are there health problems not mentioned by the submitter that the technology has the potential to address?

Yes

No

4. Is the innovation novel and unique?

Yes

No

5. Are there existing solutions not mentioned by the submitter that address the same health problem(s)?

Yes

No

If yes, please list these other existing solutions:

6. In what ways, if any, is the technology superior to existing solutions?

Safer

More effective

Higher quality

Easier to use

Easier to produce/manufacture

Easier to maintain

More affordable

More durable

More socially and culturally acceptable

Other comments (if any):

7. Is the technology suitable for low-resource setting because it is?

Easy to use

Easy to maintain in target setting

Easy to produce/manufacture in target setting

Affordable

Durable

Socially and culturally acceptable

Other comments (if any):

8. The technology is suitable for low-resource settings because it is?

Yes

No

9. Does the evidence presented indicate that the product could lead to positive health outcomes in low-resource settings?

Yes

No

10. Recommendation:

We select the all product the scoring based.

Scoring Sheet				
S.no.		Criteria	Score	Maximum Possible Score
1	What is the technology's stage of development?	Yes ( Commercialized )	1	1
		No ( Under Development)	0	
2	Does the technology target a well-defined and substantial health problem?	Yes	1	1
		No	0	
3	Are there health problems not mentioned by the submitter that the technology has the potential to address?	Yes	1	1
		No	0	
4	Is the innovation novel and unique?	Yes	1	1
		No	0	
5	Are there existing solutions not mentioned by the submitter that address the same health problems?	Yes	1	1
		No	0	
		If yes, please list these other existing solutions:		
6	Superiority of the technology in terms of safety and efficiency?	Safety, Quality & Affordability	2	2
		Affordability	1	
7	Dose the evidence presented indicate that the product could read to positive health outcomes in low resources setting?	Yes	1	1
		No	0	
8	Presentation	Approvals	2	2
	<b>Total Maximum Possible Score</b>			<b>10</b>

Than all criteria is approval and affordable after that selected the final product.

**Selected list for the product:**

S.No	Submit Date	Name:	Area of Innovation	E-mail:	Title Name	Status	Reason
1	1/10/2016 4:17	Joel Ehrenkranz	Salt Lake City	<a href="mailto:assistant@i-calq.com">assistant@i-calq.com</a>	Point-of-Care Newborn Thyroid Screening	Disqualified	No evidence Submitted
2	15/10/2016 3:08	RAJESWAR DAYAL KAPOOR	New Delhi	<a href="mailto:rkapoor@rijuve.com">rkapoor@rijuve.com</a>	Cardio Sleeve		
3	24/12/2016 4:43	Priyesh Shukla	Noida	<a href="mailto:support@indiafin.com">support@indiafin.com</a>	Test Form	Disqualified	Test Mail
4	10/2/2017 11:52	Ranjeet Kaur	Noida	ms@indiafin.com	Test	Disqualified	Test Mail
5	16/2/2017 8:57	SOMA GUHATHA KURTA	CHENNAI.	<a href="mailto:drsoma@smbpl.com">drsoma@smbpl.com</a>	CARDIAC PATCH/ (SYNKROSCAFF)		
6	17/2/2017 18:46	Vivek Borse	Mumbai	<a href="mailto:vivekborse22@gmail.com">vivekborse22@gmail.com</a>	PorFloR: point-of-care, portable, fluorescence lateral flow assay strip reader	Disqualified	Not Commercialized No third party evidence & Very limited evidence
7	18/2/2017 1:52	Amit Bhatnagar	Gurgaon	<a href="mailto:amitb@accuster.com">amitb@accuster.com</a>	Labike Mobile Lab	Complete	
8	18/2/2017 10:24	Suprio Das	Kolkata	<a href="mailto:firefly.power@yahoo.com">firefly.power@yahoo.com</a>	Zimba	PHP	Mail sent to upload on Health Program
9	19/2/2017 10:33	SARABJEET JOHAR1	Kanpur	<a href="mailto:sarabjeetjohar@yahoo.com">sarabjeetjohar@yahoo.com</a>	PERSONAL KIDNEY CARE KIT [ URINE ALBUKIT ]	Disqualified	Not yet commercialized
10	20/2/2017 6:00	AMIT TYAGI	Delhi	<a href="mailto:amityagi@gmail.com">amityagi@gmail.com</a>	HAEMOSTATIC BIOMEDICAL PRODUCTS & DEVICES FOR BLOOD LOSS MANAGEMENT IN ROAD ACCIDENTS	Disqualified	There is no data regarding any of the three required Documents present.
11	20/2/2017 6:52	Shantimoy Kar	Kharagpur	<a href="mailto:shantimoykar@gmail.com">shantimoykar@gmail.com</a>	Paper-based test kits for easy testing	Disqualified	It is a project proposal

					of antimicrobial susceptibility.		which has not been executed till date Further there is no data regarding any of the three required documents present.
12	20/2/2017 9:13	Kedar Khare	New Delhi	<a href="mailto:kedark@physics.iitd.ac.in">kedark@physics.iitd.ac.in</a>	High Resolution Digital Holographic Microscope (DHM) system	Disqualified	Prototype. It is a project proposal which has not been executed till date. Further there is no data regarding any of the three required documents present.
13	20/2/2017 9:22	Satish Kannan	Bangalore	<a href="mailto:satish@docsapp.in">satish@docsapp.in</a>	DocsApp an App for real-time mobile phone based medical consultations	PHP	Mail sent to upload on Health Program
14	20/2/2017 10:26	Ramakrishna Mahadevan	Madurai	<a href="mailto:ram.mahadevan@aurolab.com">ram.mahadevan@aurolab.com</a>	Quick See	Disqualified	Not yet commercialized
15	20/2/2017 10:44	Rupenangshu Kumar Hazra	Bhubaneswar	<a href="mailto:rupenkh@yahoo.co.in">rupenkh@yahoo.co.in</a>	Transfer of a Molecular Technique from Laboratory based study to field for Mapping of Malaria Vectors and their Vectorial Attributes	PHP	Mail sent to upload on Health Program
16	20/2/2017 11:42	NITIN MAHAJAN	NEW DELHI	<a href="mailto:rajendra4652@gmail.com">rajendra4652@gmail.com</a>	LED FLEXIBLE VIDEO ENDOSCOPY SYSTEMS	Complete	
17	20/2/2017 12:42	Dr Rajesh Kumar Ganjhu	Lane No 1	<a href="mailto:rajeshganjhu@gmail.com">rajeshganjhu@gmail.com</a>	Ayurvedic Proprietary & Patented Medicine For Rabies and Japanese Encephalitis	Disqualified	Only Preclinical studies (Animal studies) conducted. Safety & Stability studies not Conducted so far.
18	20/2/2017 12:46	Satya Tapas	Bangalore	<a href="mailto:satyatapas.dahp@gmail.com">satyatapas.dahp@gmail.com</a>	CNC microscope for clinical diagnosis	Disqualified	There is no data regarding any of the three required documents present.
19	20/2/2017 13:04	PremNandhini Satgunam	Hyderabad	<a href="mailto:premnandhini@lvpei.org">premnandhini@lvpei.org</a>	Pediatric Perimeter	Disqualified	Not Commercialized No third party evidence on infants

							Studies on infants not yet conducted
20	20/2/2017 14:07	ATUL SARDANA	NEW DELHI	atul.sardana@al facorpuscles.co m	Low Cost Indigenous Single Use Safety Syringe With Passive Spring Actuated Needle Stick Injury And Reuse Prevention Mechanism (SMART SYRINGE)	Complete	
21	20/2/2017 14:25	Pooja Mukul	Jaipur	<a href="mailto:reconrehab@gmail.com">reconrehab@gmail.com</a>	ReMotion Polycentric Prosthetic Knee Joint	Disqualifie d	Evidences not available.
22	20/2/2017 15:37	Ashish Gawade	Pune	<a href="mailto:gawade.ashish@gmail.com">gawade.ashish@gmail.com</a>	[World's first hand cranked defibrillator that costs 1/4th]	Disqualifie d	Evidences not available.
23	20/2/2017 16:01	Uttama Lahiri	Gandhi nagar	<a href="mailto:uttamalahiri@iitgn.ac.in">uttamalahiri@iitgn.ac.in</a>	[SWASTI: A Smart Walking Aid Stick for Individuals having Parkinson Disease][Selected for Exhibition at RB 2017]	Disqualifie d	Evidences not available.
24	20/2/2017 16:10	Gaurav Lodha	CHENN AI	<a href="mailto:glodha0@gmail.com">glodha0@gmail.com</a>	Advanced Electro larynx	Disqualifie d	Not commercialized Clinical trials for safety and effectiveness is ongoing i.e. no evidence available
25	21/2/2017 10:59	Aditya Parashari	NOIDA	<a href="mailto:adityaanjana_pashari@yahoo.co.uk">adityaanjana_pashari@yahoo.co.uk</a>	Digital Magnivisualizer	Disqualifie d	Not commercialized
26	22/2/2017 6:17	Rajendra Kharul	Dr. Homi Bhabha Road	rk.kharul@genri chmembranes.c om	Innovative Gas Enrichment Technology: Applications Including Oxygen Therapy	Disqualifie d	Not commercialized Clinical trials for safety and effectiveness is not yet initiated i.e. no evidence available
27	22/2/2017 9:08	SUBHASHR EE R	CHENN AI	<a href="mailto:subhashree@pmsind.com">subhashree@pmsind.com</a>	Neonatal Resuscitation Trolley Enabling Delayed Cord Clamping (DCC) and Resuscitation with Intact Placental Circulation (RIPC )	Disqualifie d	Not commercialized Clinical trials for safety and effectiveness is ongoing i.e. no evidence available
28	27/3/2017	yogesh jain	Chhattis garh	yogeshjain.jssbil aspur@gmail.co m	Infant warmer with a heat source	Asked for Evidences	Evidences not available. Evaluation on safety is on going.
29	28/3/2017	Raman	Chhattis	<a href="mailto:k.drraman@gmail.com">k.drraman@gmail.com</a>	Hemoglobin	Asked for	Evidences not available

		kataria	garh	<a href="http://ail.com">ail.com</a>	Electrophoresis apparatus for Sickle cell disease	Evidences	
30	29/3/2017	Dr RS Aswal	Uttarakhand	<a href="mailto:mdnhmuk@gmail.com">mdnhmuk@gmail.com</a>	mSakhi	PHP	Mail sent to upload on Health Program
31	31/3/2017	Charusheila Ramkumar	Bangalore	<a href="mailto:charusheila@oncostemdiagnostics.com">charusheila@oncostemdiagnostics.com</a>	Can Assist-Breast	Disqualified	Evidences not available.
32	3/4/2017	Sanjay Soni	Rajasthan	<a href="mailto:drsanjaysoni.1970@gmail.com">drsanjaysoni.1970@gmail.com</a>	point of care device for rural and urban health globally	Disqualified	Evidences not available.
33	7/4/2017	Ambar Srivastava	New Delhi	<a href="mailto:ambar@wignanosystems.net">ambar@wignanosystems.net</a>	TrueHB	Complete	

## **Approaches**

The methodology selected to conduct this research is a mixed approach. Which combines the quantitative and qualitative approaches?

Qualitative research is used to explore and understand people's beliefs, experiences, attitudes, behavior and interactions. It provides non-numerical data to the user. Qualitative techniques have been commonly used to do research in health care, e.g. it can be used to document the experience of chronic illness and also to do research about the functioning of different organizations.

Quantitative research gives numerical data or the data convert able into numbers. Examples of such kind of studies are clinical trials or the national census, which counts people and households.

In order to understand the -health web portal concerning usability evaluation, there will be a detailed literature review in the first phase of the study. This study will guide in selecting the appropriate methods in conducting usability tests and specifying the evaluation criteria for health web portal. The authors have aim to use “think aloud” technique to perform the usability test of the portal and this technique will help the authors to get citizen’s point of view regarding the usage of new data and new ideas on health web portal in a better way.

“Think aloud” technique is a type of outsider observational analysis. As its name suggests, the method involves users vocalizing their thoughts and actions as they perform a set of specified tasks. Users are instructed to speak what they are thinking and feeling while doing a task.

## **Results**

There are two options to upload any innovation.

Health Product

Health Program

As we are focusing Health products.

NHInP - Administration x Health Products x New Tab x MyWay x Aman Ahuja

www.nhinp.org/index.php/submit-your-innovation/health-products

**NHInP** NATIONAL HEALTHCARE INNOVATIONS PORTAL  
An Initiative under National Health Mission  
Ministry of Health and Family Welfare, Govt. of India

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## Health Products



Improving health of the Nation through partnerships

National Healthcare Innovation Portal aims to provide access to Program and Product Innovators a transparent and user friendly access. The form below consists of essential information required for innovation assessment. This includes critical information as well as evidence of previous evaluations conducted for the innovations. The information submitted would be accessible only to the technical secretariat and shall be used for purpose of evaluation of innovations prior to recommending them.

NHInP - Administration x Health Program x New Tab x MyWay x Aman Ahuja

www.nhinp.org/index.php/submit-your-innovation/health-program

**NHInP** NATIONAL HEALTHCARE INNOVATIONS PORTAL  
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**About the innovation/Introduction:**

Title:\*

Area of innovation:\*

Evidence on scalability in the system and cost effectiveness:

Evidence on scalability:\*

Results of Pilots/Data sheets: (pdf, xls, doc, jpg)\*

Evidence on costs/cost effectiveness:\*

Results on costs/cost effectiveness: (pdf, xls, doc, jpg)\*

Independent Evaluation done:\*

Results of independent evaluation: (pdf, xls, doc, jpg)\*

Target population / Beneficiary:

We will define and selected the entire all products in those criteria and based on scoring, otherwise disqualified and rejected the products.

As per the criteria we select the total 33 products. As per terms we selected the final products on nhinp portal – 5 products

5 products selected

22 products disqualified

4 products for PHP

2 products no evidence

Define the selected product on National Health Innovation Portal in this list. This is a final list of the NHInP products.

NHINP List of Innovation						
S · N o	Submit Date	Name:	Area of Innovation	E-mail:	Phone:	Title Name
1	16/2/2017 8:57	SOMA GUHATHAKURTA	CHENNAI.	<a href="mailto:drsoma@smbpl.com">drsoma@smbpl.com</a>	44 26811172	CARDIAC PATCH/ (SYNKROSCAFF)
2	18/2/2017 1:52	Amit Bhatnagar	Gurgaon	<a href="mailto:amitb@accuster.com">amitb@accuster.com</a>	0124 4500700	Labike Mobile Lab
3	20/2/2017	NITIN MAHAJAN	NEW DELHI	rajendra4652@gmail.com	011 41069553	LED FLEXIBLE VIDEO ENDOSCOPY SYSTEMS
4	20/2/2017	ATUL SARDANA	NEW DELHI	<a href="mailto:atul.sardana@alfacorpules.com">atul.sardana@alfacorpules.com</a>	011 27754814	Low Cost Indigenous Single Use Safety Syringe With Passive Spring Actuated Needle Stick Injury And Reuse Prevention Mechanism (SMART SYRINGE)
5	7/4/2017	Ambar Srivastava	New Delhi	<a href="mailto:ambar@wrignanosystems.net">ambar@wrignanosystems.net</a>	011 46570200	TrueHB

## CONCLUSION

This part of thesis consists of conclusion, recommendations for improvement in portal and proposed future work.

The major objective of this thesis is to evaluate the health portal to find out its effects on citizens while accessing the health related information and services. The usability evaluation is done empirically. It supports the citizens for taking care of their health and helps them in accessing health services and health related information in an easy to access way.

Healthcare systems have experienced a proliferation of innovations aimed at enhancing life expectancy, quality of life, diagnostic and treatment options as well as the efficiency and cost effectiveness of the healthcare system. Information technology has played a vital role in the innovation of healthcare system. Despite the surge in innovation, theoretical research on the art and science of healthcare innovation has been limited. In order to achieving target goals of National Health Mission and to make health more accessible, affordable, safer and equitable; there is a need to identify, evaluate and scale up innovation. This compendium of innovations is collection of best practices in various states in India and is being shared for the purposes of dissemination and scale up.

The first step in solving a problem is to create a plan for change. In preparation for change within healthcare, there is often an anticipation that change will result in an improvement or solution for an existing problem. In reality, not all changes result in a solution or improvement, much less an innovation. Change may in fact produce little to no improvement or benefit, and in some cases, may unexpectedly yield negative results or outcomes. For this reason, introducing a change, whether big or small, cannot be considered innately 'innovative'.

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