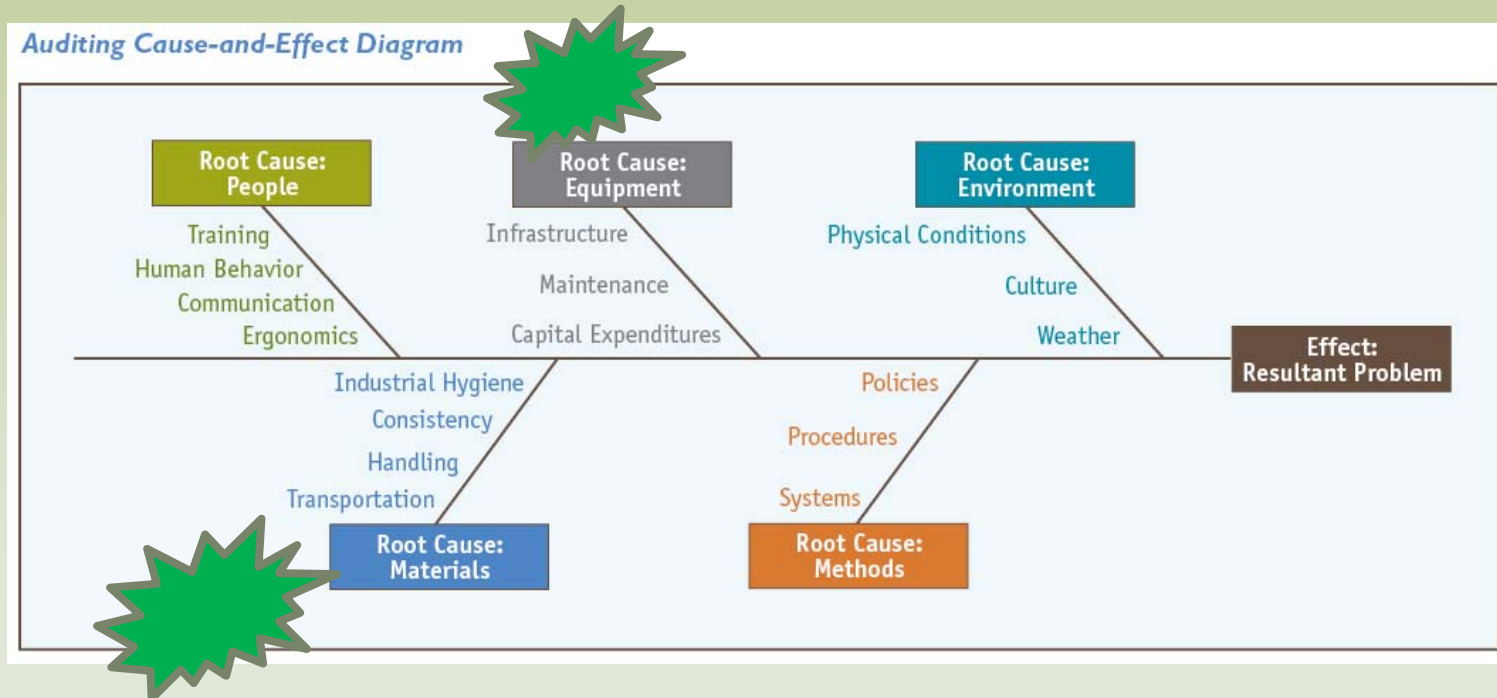


FINDING SOLUTIONS: MEDICAL TECHNOLOGY AT THE DOORSTEP

Aiming towards Self- Management and Adherence Technology



Stakeholder Groups

- **Technology Producers.** KYC
- **Technology Consumers.**
- **Product Producers.**
- **Product Consumers.** **KYC**
- **Resource Providers-** Financial and Conceptual

KYC and KC N*

Field Experience: Factors for poor outcomes or marginal improvements

- Gaps - Understanding, usage and interpretation of **tools /available products**
- Meeting the needs of Population -Mothers and Children
- Adherence issues :product architecture, storage, disposal, costs **and how easy to use**

HI TECH OR LOW TECH

Grassroots Need:

- Something easy to use
-
- Something affordable
- Something we can individually own
- Something we can collectively own

TOWARDS SELF MANAGEMENT

Health in your own hands Concept

WHAT IS NEEDED: RURAL CENTRIC TECHNOLOGIES

DIAGNOSTIC TOOLS-OR SELF TEST TOOLS

To enable identifying health issues right at home and non invasive

- Strip tests: For Diabetes, hypertension and anemia**

- (2 patent items, (a) reagent for testing H1N1 influenza virus and (b) strip used in Glucometer for testing diabetes, the Department of Health Research is working on developing indigenous techniques.)

- H₂S strip test for fecal contamination and potable water**

- Easy to read thermometer**

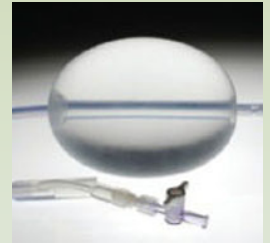
- Breath counter to diagnose pneumonia**

- Easy to use BP apparatus**

- Teaching sthethoscope J**

TREATMENT / MANAGEMENT

- Ultraviolet light based disinfection system
- Mosquito repellant oil
- Safe Delivery kits for the mother baby and the birth attendants
- Vaccines (Influenza A Vaccine being developed. CRI, Kasauli started production of DPT
- Mosquito nets
- Rural sanitation and waste management home and community models
- Medicinal plants Nursery and bio pesticides
- Battery operated MCH Breast pumps for healthy and hygienic feeding
- Innovations in midwifery care- Delivery Kits



uterus, balloon tamponade can alleviate or stop postpartum hemorrhage

Any home dehumidifiers , air purifiers , easy to follow visual and symbol help

TB- DOTS(Directly Observed Shortcourse Treatment and HAART (highly active antiretroviral therapy)-

- Echaupal , EHR, Information and communication *technologies* (ICTs), telemedicine , doorstep rural bank bank at panchayat level

Boond

Boond creates entrepreneurs who sell and service development products like solar lamps (and home systems), water filters, efficient cooking stoves, dynamo lamps and mosquito nets in remote rural areas or areas affected by calamities (floods etc.)

Moksha-Yug is a Rural Supply Chain Solutions company focusing on the dairy sector. Milk Route, Moksha-Yug's supply chain network, organizes the rural producer base and moves their produce from villages to downstream markets.Karnataka

Hande **Solar Electric Light Company (SELCO)**



World's first solar waterproof bulb



Biomass Gas Cookstove An excellent cooking stove that consumes 60% less fuel or biomass and emits less than 70% smoke than its conventional counterparts. Light weight but very sturdy.



Solar Water Pump

525W Poly -Crystalline Solar Module with 150 ft head and flow of 10000 and 12000 ltr/hr

Boond

Dox-in-Box®

HMRI designed Dox-in-Box® specifically for remote areas with difficult terrain. Integrated with HMRI software, Dox-in-Box® digitally captures, stores and transmits eight vital signs. It emphasizes general physician functionality and is easy to use. This reduces the need for highly skilled health workers where they are scarce. By virtually connecting doctor and patient, Dox-in-Box® bridges gaps in distance and time.

HMRI extensively uses Dox-in-Box® through a diabetes management program in [Assam](#)
Piramals



Easy BP

	<i>Health care need</i>	<i>Appropriate technology items</i>
1	Rapid reliable and cheap way to diagnose urinary tract infection that does not need a microscope	Urinary tract infection detection kit
2	Rapid reliable and convincing way to measure anemia status at the level of the health worker in the field	Measurement of Anemia status through copper sulphate based test or packed cell volume measurement by microcentrifuge
3	Cheap confirmatory way to diagnose the presence of sickle cell anemia	Diagnosis of Sickle cell anemia by hemoglobin electrophoresis
4	How to improve the yield of sputum in diagnosing tuberculosis practically and with an inexpensive test , and yet avoid the expense and the inconvenience of getting an X ray done	Sputum concentration system based on sodium hydroxide and ammonium chloride
5	Rapid reliable and convincing way to measure anemia status at the level of community	CuSo4 based hemoglobin estimation by densitometry
6	How do I know that the water that I or we are drinking potable?	Microbiological testing of water using H2S based paper strip test
7	If not, how can we disinfect it ?	UV lamp based water Disinfection system
8	How to measure heights reliably and conveniently at the field level?	Stadiometer
9	What is the reliable way for a neoliterate health worker to diagnose lower respiratory infection?	Breath counter
10	Are the symptoms that I have due to raised body temperature?	Easy to read thermometers
11	How do I know whether the blood pressure that I am measuring or the fetal heart rate that I am listening to, is correct or not? also, can I not learn the use of stethoscope for other purposes?	Teaching stethoscope
12	Can neoliterate health workers learn to check blood pressures? Is it possible to prevent eclampsia at the village level?	Easy to read blood pressure apparatus
13	Does growth monitoring using a simple easy to understand pictorial method help in improving nutrition status?	Growth booklets for growth monitoring
14	Can we develop a personal protection methods against malaria locally?	Mosquito repellant oil and cream based on neem, designer anti mosquito bed nets
15		ORS packets
16	Easy formulation for childhood medication	Paracetamol in gel
	How to dispense fractions of tablets?	Appliance for breaking tablets into 3-4 pieces
17		Self Cleaning system for washing glassware
18	Modular kits for all the needs of the mother, the baby and the midwife for the first 24 hours including the birth process	Safe Delivery kits for the mother baby and the birth attendants
19	Complementary feeding base in areas where milk availability is a problem	Amylase rich flour
20	Care of injuries and common illnesses in a rural area	First aid kit