Demystifying UHC:
Experiential learnings from Tamil Nadu

21.12.2019
Hyderabad

Universal Health Coverage – Pilot in Tamil Nadu (67 HSCs in 3 pilot blocks)

Input

- ✓Focal point of TN UHC model
- ✓Building Infrastructure
  - Electricity
  - Water
  - Sanitation facilities
- ✓HR in Position (additional VHN at UHC HSC)
- ✓Drugs (including NCD drugs)
- ✓Basic Diagnostics
- ✓Digital maintenance of Clinical record

Output

- ✓Increase in OP attendance (up to 13 per HSC/day)
- ✓Fall in out of pocket expenditure
- ✓Rs.5.9 per OP visit in Shoolagiri Block; Rs.2.9 per OP visit in Viralimalai Block and Rs.5.16 per OP visit in Veppur Block (source: IIT M, 2018)
- ✓ Significant fall in the share of private hospitals for OP care.

Outcome

- ✓Strengthened the primary health care systems
- ✓Significant fall in the overall financial burden on patients
- ✓Enhanced economic outcome of primary healthcare delivery system
- ✓Enhanced confidence of field functionaries in providing quality patient-care

Criteria for a functional UHC HSC, PHC & Block

	Input	HSC (24x7)	PHC (4pm-9am)	Block (24x7)
1	Primary Healthcare Team	1 Addl. VHN/GNM /SN (MLHP) + 1 Regular VHN + WHV	3 Staff Nurses+ MO+ Pharmacist + LT	3 Lab Technicians
2	Capacity Building	Certificate Course in CHC through TNMGR + UHC-IT training (2 days) +Tele mentoring	Certificate course in CPHC (1 month)+ UHC-IT training (2 days) + Tele mentoring	Training on UHC Operationalization + UHC-IT training(2 days) +Tele mentoring
3	Infra Structure *	Own HSC building, Branding, Water supply, Alternate power	Branding, Dedicated Lab space, Water supply,	Block Public Health Lab building, Multipurpose Hall, Water supply,

*All HWCs aim for Quality accreditation in a phased manner

Criteria for a functional UHC HSC, PHC & Block

	Input	HSC (24x7)	PHC (4pm-9am)	Block (24x7)
4	IT Systems (Hardware)	1Tablet + Internet	1Tablet + 1Desktop (lab) +Internet	1Desktop (lab) + Internet
	(Software)	Family folder + UHC app PBS App+ NCD App + Drug Inventory+ LIMS (Report)	Family folder + UHC app+ NCD App + Drug Inventory + LIMS	Family folder + UHC app NCD App + Drug Inventory + LIMS
5	Drugs	Kit A (12), Kit B drugs(4), UHC Kit (12), NCD drugs (15), Family Welfare Kit (5)	Insulin injection, Antibiotic injection Dispensed as per	As per Essential Drug List Dispensed as per MO Prescription

Criteria for a functional UHC HSC, PHC & Block

	Input	HSC (24x7)	PHC (4pm-9am)	Block (24x7)
6	Diagnostics	6 tests + Sputum collection	20 tests @ PHC+ 20 tests thro' LIMS+ ECG + Sample collection	25 tests @ Block+ 15 tests thro' LIMS+ ECG + Sample collection USG + X-ray (9am-4pm)
7	Service Delivery	Minor ailment treatment + Referral & Follow up of all 12 CPHC services + NCD services + Wellness activities including Yoga + IEC+	Minor ailment treatment + Referral & Follow up of all 12 CPHC services + NCD services + Wellness activities including Yoga + IEC+	All 12 CPHC services by Medical Officers+ Managing referral in from UHC HSCs & PHCs+ IEC+ Tele consultation

*Tele consultation as per the need in UHC HSC, PHC and Block PHC

Criteria for a functional UHC HSC, PHC & Block

	Input	HSC (24x7)	PHC (4pm-9am)	Block (24x7)
8	Outreach Services	MCH outreach+ Population Based Screening + Patient Support Group	Medical Camp by MO @ HSC	Community palliative care services+ HoWP + RBSK
9	Reporting	Daily reporting of Line list of beneficiaries + Weekly HWC implementation status	Daily reporting of Line list of beneficiaries + Weekly HWC implementation status	Sharing of beneficiary Line list to all levels+ Weekly LIMS implementation status
10	Mentoring & Supervisio	Fortnightly visit by MO, DMCHO	Mentor Staff Nurse, DMCHO	District Microbiologist (LIMS), Adoption of

*Community Action for Health will be integrated with UHC

Conceptualization of UHC in Tamil Nadu

1. Building UHC within the public health architecture without altering the existing State policies
2. Public Healthcare Team, Training, Infrastructure including branding, Drugs and Diagnostics, IT Systems tailor made for State Public Health Systems
3. Intact continuum of care with forward and backward linkages from community to tertiary health facility supported by Master Registry
4. Patient centric convergence of all existing health and related activities at block level
5. Health Sub Centre strengthening is cornerstone of UHC implementation and differential services provided at differential level of Health Systems

Human Resources

- A strong and dedicated primary care team at all levels
- Existing HR-Rationalisation & reorganising service delivery; till new HR gets approved
- Selection of MLHP: Available and appropriate work force with primary care skills and motivation to work in remote and rural centers
- Clear Job roles & responsibilities; Standard Treatment Guidelines
- objective of HWC is not to produce qualified quacks
- Cadre of community work force is pre-requisite – ASHA, SHG, AWW

Capacity Building

- a continuous process and focus on improving hands-on-skills
- training has to be based on the standard treatment guidelines (STGs)
- administrative skills, team building skills, skills to manage care pathways and referrals, use of information technology systems etc.
- case study method is an effective approach to sensitize the importance of job oriented skills

Infrastructure

- Don’t focus much on branding - wastage of resources!
- Appropriate infrastructure for service delivery
- Building new HSCs: should be based on population needs
- Rent free buildings, VPSC, other Govt buildings
- Patient waiting area, elderly friendly, Toilet, water, electricity, lab strengthening
- Display boards, patient charter, appropriate IEC

Drugs & drug delivery systems

- robust drug and diagnostics systems is a pre-requisite
- Finalizing the drug list (epidemiology)-Display in HWC
- NCD drug dispensation:
- AMR policy- Rational use of antibiotics
- Drug Inventory: to track procurement and adequate supply, drug usage, avoid wastage, proper redistribution of drugs.
- separate drug passbook

Diagnostics systems

- Test finalization: lab technician availability, diagnostics and reagent availability, infrastructure status etc.
- Refer samples instead of patients for higher investigations
- Hub and Spoke model of laboratory services with Lab Information Management Systems (LIMS).
- major challenge- to institutionalise the sample transport mechanisms
- need of local systems at each block/district level based on the terrain, availability of human resource etc.
- Ensuring continuous supply of drugs, reagents,

Service delivery

- provision of differential services at differential level of health systems
- Current focus: Expanded service delivery with focus on NCD services without compromising MCH services & communicable disease management
- Population based outcomes rather than counting footfalls
- Addressing social determinants, health promotion

Strategies for improving service delivery

- Standard Treatment Guideline (STG)
- Hands-on training at Block level for service provision and IT systems,
- Linkages of CPHC services from community to First Referral Unit
- Clear job responsibility of Public Healthcare Team
- Effective IEC strategies through local innovations
- Ensuring adequate Drug availability and indenting from the level of Sub centre
- Hub and Spoke Model to maximize the lab support to HWCs
- Building Mentoring Teams and motivated local leadership among healthcare providers at Block Level for Clinical Audit and regular monitoring
- Changing the reporting pattern from raw numbers to line lists and sharing it at all levels up to the community volunteer (can start with NCDs, TB, High risk mother etc.)
- Reinstating community's faith in public health systems through community engagement in service delivery- palliative care as entry point

Community Engagement & ownership

- Outreach service under UHC is the re-entry to community
- SHG involvement, community based organizations, panchayat raj
- Patient support groups
- Community should own their HWC- demand creation!
- HWC – should become an epicentre of all health & related activities
- Informal relations will work effectively

State Owned Information Technology Platform

Population based outcome for validating predictive and Preventive analysis

- 300 years experiential learning and readiness for implementing master registry, advanced technologies in Tamil Nadu
- Field inputs based tailor-made IT architecture, Standards and data dictionary for converging all programmes & dashboards
- Master Registry (denominator - digital cohort of State) 6.6 crore individuals as 2.05 crore households are mapped with 13,640 hospitals across 2.03 lakhs geographical units with GIS based organizational hierarchy (15 levels)
- IT Systems approach to provide able digital working environment
- IT enabled service delivery like protocols, drug inventory, prescription audit which aligned with health programmes
- State owns data generated under UHC IT, hosting credentials, source codes, implementation authority (strategy plan & policy)

Challenges in implementing the UHC-IT

Denominator of family folders & Service Area mapping	ePDS & GIS maps
Administrative Priorities (Time) and IT Standards (Quality)	Realistic Timelines
Transliteration of Regional language digital data to English	Open source codes
Good **Internet** connectivity in 66% (n=549) Health Facilities	Offline Capability
User convenience of using multiple devices (Tablet, Mobile, Laptop & Desktop) with varying specifications	Progressive Web App (Cross Platform)
Integration of ongoing established health programme applications and GoI Dashboards	Data dictionary & API Repository
Dynamically changing technology solution like Artificial Intelligence, Quantum computing	Architecture (Scale & Sustainable)

Outcomes: The change

	Baseline Household Survey July 2013 Household Sampled N=1000		Post UHC survey July 2019 Household Sampled N=1000	
Facility Provider	Number of OPs	%	Number of OPs	%
HSC	**13**	**2.5**	**207**	**20.66**
PHC/CHC	**89**	**17.5**	**451**	**45.01**
Government Hospital	162	32	121	12.08
Private Clinic	57	11.2	90	8.98
Private Hospital	169	33.2	110	10.98
Informal Care	4	0.8	4	0.40
Not Visited	14	2.7	0	0
Pharmacy	0	0	13	1.30
Home Remedies	0	0	6	.60
Total	**508**	**100**	**1002**	**100**

NCD Outcomes
Hypertension Follow-up

Name of Block	Name of Facility (PHC/GH/MCH/ Urban PHC)	Facility Type	Total Number of HT line listed Patients as on 31.10.2019	Total Number of HT Patients on Follow up during October 2019	Follow-Up %
Siruvandhadu	Siruvandhadu	Main PHC	510	498	98%
	Kandamangalam	Add PHC	380	350	92%
	P.S.Palayam	Add PHC	345	315	91%
	Kondur	Add PHC	346	326	94%
	Rampakkam	Add PHC	456	421	92%

For Tamil Nadu follow up rate is 58-60

DM Follow-up

Name of Block	Name of Facility (PHC/GH/MCH/ Urban PHC)	Facility Type	Total Number of HT line listed Patients as on 31.10.2019	Total Number of HT Patients on Follow up during October 2019	Follow-Up %
Siruvandhadu	Siruvandhadu	Main PHC	328	304	93%
	Kandamangalam	Add PHC	173	145	84%
	P.S.Palayam	Add PHC	176	157	89%
	Kondur	Add PHC	190	171	90%
	Rampakkam	Add PHC	219	195	89%

HT & DM Follow-up

Name of Block	Name of Facility (PHC/GH/MCH/ Urban PHC)	Facility Type	Total Number of HT line listed Patients as on 31.10.2019	Total Number of HT Patients on Follow up during October 2019	Follow-Up %
Siruvandhadu	Siruvandhadu	Main PHC	153	146	95%
	Kandamangalam	Add PHC	198	185	93%
	P.S.Palayam	Add PHC	162	154	95%
	Kondur	Add PHC	165	146	88%
	Rampakkam	Add PHC	102	96	94%

Our Experiential learnings

- **UHC is not another health program/vertical—its change in perception: both provider and beneficiary (community)- Demand should be generated from community**
- **UHC is about convergence of all health and related activities by establishing a harmonious programme networks to ensure intact forward, backward and lateral linkage**
- **UHC has to defined and conceptualized locally based on community felt needs, epidemiology, socio-cultural aspects.**
- **Need for 'local health systems' at a decentralized level-**

Our Experiential learnings

- **UHC as an opportunity to strengthen the primary healthcare machinery through public systems strengthening**
- **Role of civil society: taking health rights into the political discourse**
- **Go for in-house models rather than outsourcing/PPP modes, which has its own moral hazards and sustainability and equity issues.**
- **Concept of UHC has to be kept open for accepting the feedback from community and evolve over the time – dynamic concept!**

Department of Public Health and Preventive Medicine ,Tamil Nadu

Year	Establishment
1679	Madras General Hospital
1818-59	Cholera Invasion
1835	Madras Medical College
1864	Sanitary Police Force to improve military hygiene
1864-83	**Sanitary Department, Madras Presidency**
1869	**Public Commissioner and Statistical Officer**
1870	Sanitation merged with vaccination dept.

Year	Establishment
1880	**Sanitation Engineer div**
1894	Indian Hygiene Manual
1905	**King Institute Establishment (Lab)**
1919	Madras City Municipal Corporation Act
1920	Public Health Code (Volume1 & Volume2 (Part 1,2&3)
1923	**Department of Public Health and Preventive Medicine**
1939	Public Health Act

Hub and Spoke
Lab Model

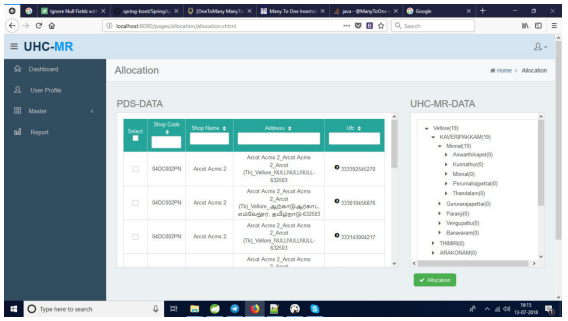
Population Based Screening Training

Thanks

MLHP Training

Display board of HWC

Painting (Branding) of HWC



Software of HWC

Adithyan GS
adithyangs@gmail.com
9037710290/7550226081