Integrating NCDs in Health System: Experiences in India

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Healthy, Low Risk

At Risk & Undiagnosed

Diagnosed, not adequately treated

Adequately treated
Integrating population and personal management

- Healthy population
- Persons at risk
- Subclinical disease
- Established disease
- Multiple co-morbidities

Level of Risk

- Relatively low
- Relatively high

Population level interventions predominate

Highly individualised care

Intensity of Population, Community and Individualised Interventions
Requisites of Integration

1. Structural integration
   – Extended primary care with effective referral system with secondary and tertiary care
   – Networks and clusters – integrating public health functions

2. Integrated care delivery process
   – Integrating population and individual health care needs
   – Team-centric approach to integrated care

3. Patient centred Integration
   – Individually focused care to manage multi-morbidity and risks
Benefits of Integrated Care

**Improved efficiency**
- Integration of activities
- Information use
- Co-ordination
- User participation
- Reduced duplication
- Optimal use of technology

**Improved effectiveness**
- Reduce lag time from evidence to implementation
- Real time information
- Reduced variability in outcome
- Improved user satisfaction
Building Blocks of Health Systems

- Governance
- Medicines and Technologies
- Information
- Human Resources
- Financing
- Service Delivery
Efforts towards integration of NCDs in Health System in India
Governance & Leadership

- Structural reforms in health sector by launching National Rural Health Mission (NRHM) in 2005
- Initially National programs for Reproductive & Child Health and communicable diseases covered under NRHM
- Decision taken to also include NCD programs under NRHM in 2013 to facilitate linkages
- National Urban Health Mission & NRHM merged as National Health Mission
Vision of National Health Mission

Vision: Attainment of Universal Access to Equitable, Affordable and Quality health care services, accountable and responsive to people’s needs, with effective inter-sectoral convergent action to address the wider social determinants of health.

Guiding Principle: Build an integrated network of all primary and secondary care, providing a continuum from community level to the district hospital, with robust referral linkages to tertiary care.
Leadership Structure

Mission Steering Group

Empowered Program Committee

National Mission Directorate

State Health Mission

District Health Mission
Financing

• Decentralized Planning: Districts & State
• State submits Annual Implementation Plans for funding to Mission Directorate
• Funds released under three pools: RCH, Communicable Disease Flexipool, NCD Flexipool
• Funds released in two installments
• Second installment is based on expenditure patterns
• Funds are released by components with fair amount of flexibility
Human Resources

- State Governments employ personnel at all levels through State Budget.
- Additional human resources supported under NHM/various programs
- Emphasis is on utilization of available human resources; multitasking encouraged
- Structured standard training of human resources at identified institutions
- Capacity building for NCD programs underway
Service Delivery in Public Health Sector

PRIMARY LEVEL
- Sub-Centre for 5000 population
- Primary Health Centre for 30,000 popn.
- Community Health Centre for 100,000 popn.

SECONDARY LEVEL
- Sub-District/ Rural Hospitals
- District Hospitals

TERTIARY LEVEL
- Medical College Hospitals
- Other National Institutes
NCD Services at Sub-Centre

Manpower available
ANM(1), Male Health worker(1)

Services
• Screening of persons above 30 yrs. & Pregnant women by Health Workers for:
  ➢ NCD risk factors (dietary habits, physical inactivity, alcohol abuse and tobacco use)
  ➢ Random blood sugar (Glucometers)
  ➢ BMI, Blood Pressure
• Health Promotion, Early warning signals of cancer
• Referral
NCD Services at PHCs

Manpower available

Medical Officers, Nurses, Health Supervisors, Laboratory Technician, Health Educator etc.

Services

- Opportunistic Screening for common NCDs
- Strengthening of laboratory services
- Health Promotion
- Referral
NCD Services at CHCs

Infrastructure available

- First referral unit for NCDs
- Four Specialists; Physician, Surgeon, Gynecologist & Paediatrician
- OPD & Inpatient Facility (30 beds)
- Common lab. Investigations
- NCD clinic: 1 Doctor, 2 Nurses, 1 Counselor, 1 Data Entry Operator
NCD Services at CHCs

- Early detection of common NCDs (Diabetes, CVDs & Stroke) and appropriate treatment
- Investigations: blood sugar, ECG, Total Cholesterol, Serum creatinine, Blood Urea, Urine albumin, etc.
- Referral of complicated cases
- Home based care of bedridden cases
- Health Promotion
- Screening for oral, cervical and breast Cancer & palliative care
- Data recording and reporting
NCD Services in District Hospital

- **NCD clinic** for management of NCDs

- **Additional HR:** 1 Doctor, 2 Nurses, 1 Physiotherapist, 2 Counselor, 1 Care Coordinator, 1 Data Entry Operator

- **Cardiac care unit (CCU):** with 6-8 beds & equipped with ventilator and other necessary CCU equipments

- **Day care cancer facility**

- **Geriatric OPD & Ward**

- **Laboratory diagnostic facilities:** such as lipid profiles, ECG, ECHO, CT Scan etc.
NCD Services in Health System

Tertiary level Institute
- Medical Colleges, Tertiary Cancer Centres, Regional geriatric Centres, Centres of Excellence
- [Tertiary care, Training, Research]

District Hospital
- NCD Clinic, Geriatric Clinic, Cardiac Care Unit, Cancer Care Facility etc.
- [Health Promotion; Early diagnosis & Management; Home Based Care; Day Care Facility]

Community Health Center
- NCD Clinic, Geriatric Clinic
- [Health Promotion, Early diagnosis & Management; Laboratory Investigations, Home Based Care, Referral]

Sub Center
- Screening Services
- [Health Promotion; Opportunistic Screening; Referral]

Referral
Medicines & Technology

- Standard list of equipment, medicines, diagnostic kits and other consumables as per Indian Public Health Standards (2012)
- Most of the items are procured by States as per standard procurement guidelines
- Poor persons with BPL cards get free services
- Procurement of generic medicines encouraged
- Many States have computerized inventory management system
Health Management Information System

- HMIS developed and in use
- Some National Health programs have dedicated MIS
- Periodic independent evaluation
- Annual Common Review Mission in selected districts
- National Family Health Survey (3 conducted, 4th planned for 2014-15)
- STEPS RF survey 2006-07; planned for 2015
NCD surveillance Card
Integrated Service Delivery under NRHM

PRI to Plan & Monitor Programme

Nutrition
- NACP
- NCDP
- IDSP
- RCH
- SHP (State Health Programme)

Community-Aware-Access-Participate

Sanitation
- NCCP
- NPCB
- IDD

Water Supply

Education
Convergence with other Health Programs

Reproductive & Child Health Program:
• Screening for Gestational Diabetes
• Screening for Cervical & Breast cancer
• Hepatitis B vaccination
• Promoting breast feeding

National Adolescent Health Program & School Health Program
• Risk Factor screening during bi-annual check up
• Health promotion
Convergence with other Health Programs

- Revised National TB Control Program (COPD & Diabetes)
- National Blindness Control Program (Screening for Diabetic Retinopathy)
- National Program for Health care of the Elderly
- National Mental Health Program (Alcohol Control)
- National AIDS Control Program (HIV-TB & HIV-HPV infection)
- Trauma Care Centre
- Integrated Diseases Surveillance Program
Issues & Challenges

• Full integration of vertical programs in Health System
• Involvement of Voluntary Organizations
• Role of Private Health Sector
• Shortage and unequitable distribution of health care personnel
• Allocation of budget for Health Sector (specifically NCDs)
• Priority of some State Governments continue to be RCH & Communicable Diseases