Operational Guidelines for Comprehensive Primary Health Care: Screening and Management of Hypertension, Diabetes, and Common Cancers
## Comparison of mortality due to NCD in India with other selected countries (WHO, 2014)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sweden</th>
<th>UK</th>
<th>Thailand</th>
<th>India</th>
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<tbody>
<tr>
<td><strong>Proportion of NCD deaths due to 4 main causes that occur before age 70</strong></td>
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<td>M</td>
<td>23.4</td>
<td>29.1</td>
<td>45.5</td>
<td>62.2</td>
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<td>14.7</td>
<td>19.2</td>
<td>38.7</td>
<td>52.2</td>
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<td><strong>All NCDs</strong></td>
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<td>Deaths per 100,000 population (age standardized rates)</td>
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<td>M</td>
<td>390.3</td>
<td>425.9</td>
<td>559.6</td>
<td>785.0</td>
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<td>F</td>
<td>286.3</td>
<td>302.2</td>
<td>358.3</td>
<td>586.6</td>
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<td><strong>Cancer</strong></td>
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<td>Deaths per 100,000 population</td>
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<td>M</td>
<td>124.9</td>
<td>133.9</td>
<td>127.8</td>
<td>79.0</td>
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<td>F</td>
<td>100.5</td>
<td>112.5</td>
<td>82.6</td>
<td>66.3</td>
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<td><strong>Chronic Respiratory Illness</strong></td>
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<td>87.7</td>
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<td>13.8</td>
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<td>124.9</td>
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<td><strong>Cardio-vascular disease</strong></td>
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<td>M</td>
<td>162.8</td>
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<td>105.7</td>
<td>86.7</td>
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<td><strong>Diabetes:</strong></td>
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<td>Deaths per 100,000 population</td>
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<td>M</td>
<td>10.6</td>
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<td>F</td>
<td>6.1</td>
<td>3.6</td>
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</table>
Rationale

Four major NCDs – CVD, Diabetes, Chronic Respiratory Diseases and Cancer - account for over 60% of mortality - placing them ahead of injuries, communicable diseases, Maternal, Prenatal and Nutritional conditions.

Proportionate Mortality from various NCDs, WHO, 2014

- Cardiovascular diseases: 26%
- Diabetes: 13%
- Cancer: 7%
- Respiratory Diseases: 12%
- Other Chronic diseases: 2%
Rationale

• NSSO data (71st Round. 2014): Only 11.5% and about 4% in rural and urban areas respectively sought any form of OP care - at or below the CHC (except for Childbirth)

• Sub centre and Primary Health centre- currently provide largely preventive care related to maternal and child health

• Epidemiologic Transition: Death from the four major NCDs for nearly 60% of all mortality

• The sequelae of NCD impose a high fiscal cost – need to focus on primary and secondary prevention.

• Lack of Primary Health Care close to communities, increases the burden on secondary and tertiary facilities; consequences on quality of care
Reorganizing work processes

- **Family/Household and Community Level:** by community level workers- ASHA, Anganwadi Workers, community volunteers, school teachers, etc. with active support of VHSNC.

- **Health and Wellness Centres** - one per 5000 population - Existing sub centres to be converted to Health and Wellness Centers (HWC) – with a Primary Health Care Team- led by a trained mid level health care providers (MLP) (Community Health Officer- a BSc. Community Health or a Nurse Practitioner (NP) or an Ayurvedic doctor)

- Other team members : all ASHAs and AWW in the villages in sub centre area, an ANM and an MPW (Male) or two ANMs

- **First Referral Level** - Referral support includes general medical and specialist consultation as relevant and the first level of hospitalization at FRU
Comprehensive Primary Health Care- Package of Services

1. Care in pregnancy and child-birth. (the latter would be provided in specific facilities based on state context).
2. Neonatal and infant health care services
3. Childhood and adolescent health care services.
4. Family planning, Contraceptive services and Other Reproductive Health Care services
5. Management of Communicable diseases: National Health Programmes

7. Screening and Management of Non-Communicable diseases
8. Screening and Basic management of Mental health ailments
9. Care for Common Ophthalmic and ENT problems
10. Basic Dental health care
11. Geriatric and palliative health care services
12. Trauma Care (that can be managed at this level) and Emergency Medical services
Leveraging NHM led Health System Strengthening

• Systems for registration, tracking and follow up of target groups for MNCH and FP, including high risk for anaemia, LBW, NRC
• Expanding workforce - including increasing HR at sub centre
• ASHA – to expand outreach, promote mobilization and provide home care, including counselling
• Mechanisms for Referral and transport established for MNCH
• Free Drugs Service Initiative/Free Diagnostics Service Initiative - with attendant components - Procurement and logistics, STGs, Telemedicine, hub and spoke models,
• Strengthening District Hospitals/Secondary care
Background

• Transition to focusing on adult premature mortality
• National Programme for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) - currently operational in 468 districts,
  ❖ Opportunistic screening for common NCDs at District and CHC levels, through establishing NCD clinics at CHC and DH
  ❖ State reports indicate that a key challenge is to focus on coordination of care and follow up of patients seen at secondary and tertiary levels
  ❖ Some states have leveraged this funding to expand the programme with greater outreach, better follow up through systematic monitoring and data collection to enable improved surveillance, including the use of IT tools.
Background

• Integrate screening, early detection and management of these common NCDs as close to communities as possible.
• These interventions would be a part of NPCDS and leverage existing resources.
• The operational guidelines are designed to build on existing and proposed interventions as part of NHM’s Health Systems Strengthening efforts.
Service Delivery Framework

• ASHA to screen the target population using a Community Based Assessment Checklist (CBAC) -
  1. All men and women over 30 years for Hypertension, Diabetes Mellitus, and oral cancer
  2. All women over 30 years for Cervical and Breast cancer
• CBAC will capture data related to age, family history, waist circumference, and risk behaviors
• Once identified, all in this age group will be informed about screening and its benefits
• ASHA and ANM to be aware of who to prioritize
• Frequency of Screening:
  1. Cancer – Once in five years
  2. Hypertension and Diabetes - Annually
Case Loads

• Approx. 37% of the population is over 30 years
• In a normative village of 1000: Total case load: 370
• No. of Men over 30 years = 51% of the total case load: 188
• No. of Women over 30 years = 49% of the total case load: 182
• For HT/DM: 370 – annual
• For Oral Cancer: 370 – every five years
• For Breast and Cervical Cancer: 182 – every five years
• Screening day to be organized at a fixed location with a fixed day approach: 30/day

• Principles of screening at the community level:
  1. No individual should need to travel more than half an hour to be screened
  2. Privacy to be assured at screening site
  3. Standard protocols to be followed

• Screening for Hypertension, Diabetes, Oral and Breast Cancer can be offered at the village level in outreach areas, provided infrastructure requirements are met.

• Cervical cancer Screening using VIA to be prioritized in PHCs/UPHCs for now
Service Delivery Framework.. contd

• Key tasks:
  1. Community awareness and active mobilization
  2. Organizing the venue
  3. History taking
  4. Patient flow management
  5. Recording results
  6. Feedback to patients
  7. Monitoring of already diagnosed cases
  8. Referral advice

• Coordinated team effort: ANM, ASHA, ASHA facilitator, AWW and Volunteers (members of VHSNC/MAS or adolescent groups or local community based organizations)

• VHSNC and MAS to be actively involved
Service Delivery Framework.. contd

• Concerned ANMs, LHV, SNs and mid level providers to be trained in
  ❖ Oral Visual Examination (OVE),
  ❖ Clinical Breast Examination (CBE) and
  ❖ Visual Inspection using Acetic Acid (VIA)

• LHV and SNs to serve as mentors and trainers to the SHC staff

• State to consider engaging an additional staff to manage the screening programme for the entire PHC area

• At the District level, one Programme Officer and an MIS officer are required to oversee the planning and implementation of NPCDCS

• Existing Human Resources in NPCDCS would also be involved at various levels as appropriate
Health Promotion

- Three key risk factors:
  - Behavioural (diet, low physical activity, tobacco use, harmful use of alcohol)
  - Biochemical/metabolic (blood pressure, blood glucose, serum lipids, BMI),
  - Environmental: air pollution, occupational,

- IEC messages aiming at increasing awareness on risk factors of NCDs, healthy lifestyle and benefits of screening

- Engagement of PRI/ULB to facilitate health promotion
- MMUs to display audio visual messages
- Individual and family counselling using IEC material (brochures/leaflets)
- Linkage with AYUSH and active promotion of Yoga

- VHSNC/MAS members to play an important role in raising community awareness and mobilization for screening

- Sensitizing RKS at the level of PHC/CHC – to support implementation at the facility level
Referral and Treatment: Ensuring Continuity of Care

• In case of Cancer, positive cases will be referred to appropriate PHC/CHC for confirmation and treatment as per the Operational Framework developed for Cancer screening and management

• After Diagnosis of HT/DM –
  1. First follow up visit to PHC at the end of 3 months
  2. An annual specialist consultation at CHC - NCD clinic should be facilitated

• HT/DM – once diagnosed, patient must receive at least a month’s supply of drugs from the PHC. Once stable, 3 months supply can be provided.

• Regular visits of ANM/ASHA to ensure adherence to treatment plan
Drugs and Diagnostics

- Drug supplies as per state Essential Drug list

- Equipment required for ANM/ASHA:
  - Glucometer/Strips
  - BP apparatus
  - Tape measure
  - Torch/Examination lamp with white light, Mouth Mirrors,
Monitoring and Supervision (Indicators)

• Overall responsibility lies with PHC-MO
• Recording and reporting to be aligned with NPCDCS guidelines
• **Indicators:**
  ✓ % of population over 30 years whose blood pressure and blood sugar was measured in last one year.
  ✓ % of population over 30 years who were screened for Oral Cancer.
  ✓ % of women over 30 years screened for Cervical Cancer.
  ✓ % of women over 30 years screened for Breast Cancer.
  ✓ % of those screened positive for HT/DM and who were examined at the PHC/CHC
  ✓ % of those who were initiated on treatment at PHC or above and who are still under treatment, un-interrupted for the last three months
  ✓ % of those currently on treatment and who have achieved blood pressure/sugar control
  ✓ % of those who were screened positive for each of the cancers and underwent biopsy at the CHC/DH
  ✓ % of those who underwent treatment for each of the cancers and are screened periodically.
Variables that affect Workload of FLW team

- Team Composition and numbers: ANM/MPW-M, ASHA
- Scatter of population: distance between SC and village and to first referral point
- Population Coverage and Density
- Birth Rate and load of midwifery services at the SC
- Communicable diseases: malaria, kala azar and other local conditions
Challenges and issues

- Chronic diseases need a long term engagement
- Reduction in adult mortality – complex and challenging, and has a higher cost implication
- Community based screening needs high competency and motivation of frontline workers,
- Leveraging existing staff
- Ensure reaching women, marginalized
- High focus on
- prevention and promotion
- Adherence to Standard Treatment Guidelines: retraining medical officers and specialists
- Ensuring referrals, maintaining continuum of care
- Uninterrupted drug supplies
THANK YOU