Adaptation of the Integrated Management of Newborn and Childhood Illness (IMNCI) Strategy for India
Goals of IMNCI

- Standardized case management of (evidence based syndromic approach) sick newborns and children
- Focus on the most common causes of mortality
- Nutrition assessment and counselling for all sick infants and children
- Home care for newborns to
  - promote exclusive breastfeeding
  - prevent hypothermia
  - improve illness recognition & timely care seeking
Essential components of IMNCI

- Improve health and nutrition workers’ skills
- Improve health systems
- Improve family and community practices
Major Adaptations

• The entire 0-5 year period covered including the first week of life
• 50% of training time for management of young infants (0-2 months)
• The order of training reversed; now begins with management of young infants
• Reduced training duration (8 days), separate training materials for physicians & health workers
• Management now consistent with current policies of the MoHFW
• Home-based care of young infants by health workers added
Potential of the adapted IMNCI Package

- Accelerating the reduction in infant and child mortality in both rural and urban areas, particularly by its impact on neonatal mortality through home and facility based care

- Lower burden on hospitals, particularly in urban areas where access to care is not a limiting factor

- The package has been organized in a way that states with low post-neonatal infant mortality can use 0-2 month training material only
### Differences between Generic IMCI and India’s IMNCI

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<tr>
<th>Features</th>
<th>Generic IMCI</th>
<th>India’s IMNCI</th>
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<tr>
<td><strong>Scope</strong></td>
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<tr>
<td>Includes birth to 7 d of life (early newborn period)</td>
<td>No</td>
<td>Yes</td>
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<td><strong>Target providers</strong></td>
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<tr>
<td>Facility-based providers such as physicians</td>
<td>Yes</td>
<td>Yes</td>
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<td>Community-based providers (auxiliary nurse midwives/ Anganwadi workers)</td>
<td>No</td>
<td>Yes</td>
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<td><strong>Training program</strong></td>
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<tr>
<td>Training time – newborn and young infant</td>
<td>~20% (2 of 11 days)</td>
<td>50% (4 of 8 days)</td>
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<td><strong>Sequence of training</strong></td>
<td>First, the child (2 mo-5yr) module, followed by young infant (7 days-2 mo)</td>
<td>First, the newborn and infant (0-2 mo) module, followed by the child (2 mo)</td>
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<td><strong>Training for home visits for postnatal care of newborn</strong></td>
<td>No</td>
<td>Yes</td>
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<td><strong>Implementation</strong></td>
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Improving health & nutrition worker skills

- Guidelines for management of sick newborns and children with serious disease in first referral facilities
- Training course for doctors for outpatient management of sick young infants and children
- Training course for health and nutrition workers for:
  - Management of sick young infants and children
  - Home visits for young infants
Attention to counselling skills to promote exclusive breastfeeding, complementary feeding & micronutrient supplementation is a key strength of IMNCI

Objectives

- Promote & support exclusive breastfeeding
- Teach the mother how to keep the young infant warm
- Teach the mother to recognize signs of illness for which to seek care
- Identify illness at visit and facilitate referral
- Give advise on cord care and hand washing
Home visits for young infants: Schedule

All newborns: 3 visits (within 24 hours of birth, day 3-4 and day 7-10)

Newborns with low birth weight: 3 more visits on day 14, 21 and 28.
Colour coded case management strategy

- **PINK CLASSIFICATION**: Child needs inpatient care
- **YELLOW CLASSIFICATION**: Child needs specific treatment, provide it at home (e.g. antibiotics, anti-malarial, ORT)
- **GREEN CLASSIFICATION**: Child needs no medicine, advise home care
<table>
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<tr>
<th>Condition</th>
<th>Action</th>
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<td>Yellow palms and soles or Age less than 24 hours or Age 14 days or more.</td>
<td><strong>POSSIBLE SERIOUS BACTERIAL INFECTION</strong></td>
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<td>Palms and soles not yellow.</td>
<td><strong>LOCAL BACTERIAL INFECTION</strong></td>
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<td>Umbilicus red or draining pus or Pus discharge from ear or Skin pustules.</td>
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<td>Temperature 35.5-36.4°C or Feels cold to touch.</td>
<td><strong>LOW BODY TEMPERATURE</strong></td>
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<td>Convulsions or Fast breathing (60 breaths per minute or more) or Severe chest indrawing or Nasal flaring or Grunting or Bulging fontanelle or Many skin pustules or a big boil or If axillary temperature 37.5°C or above (or feels hot to touch) or temperature less than 35.5°C or Lethargic or unconscious or</td>
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Other innovations in case assessment

- Visible severe wasting as indicator for hospital admission rather than weight for age
- Palmer pallor to detect anaemia
- Breast feeding assessment: attachment and suckling
Innovations in therapy

- Single daily dose gentamycin
- How to treat at home when hospital admission is not feasible
- Counselling the mother to give oral drugs at home
- Clear recommendations for follow up
- Negotiated feeding counselling
Strengths of IMNCl training

- Evidence based decision making tree
- Feasible to incorporate into both pre-service education & in-service training
- Hands-on clinical practice for 50% of training time
- Focus on communication & counselling skills
- Locally adapted recommendations for infant and young child feeding
Improving health systems

- District planning and management
- Availability of IMCI drugs
- Quality improvement and supervision at health facilities
- Referral pathways and services
SUPERVISORY VISITS
What needs to be Assessed?

Improvement in HW Skills

Clinical Management Skills

Counseling Skills

Strengthening Health Facility

Facility Support

Case Management Record Forms

Caretaker Interviews

Checklist for Facility Support

Tools
What does IMNCI not provide at all or fully

• Antenatal care
• Skilled birth attendance
• Improved health system management

What can be rapidly added to IMNCI

• Inpatient care modules for first level referral hospitals
Training Material

- Separate training material (training module, chart booklet, photo booklet and video) developed for
  - Physician
  - Health and nutrition workers

- Workers training material translated in Hindi, Marathi, Gujarati and Tamil
Planning...

- First Planning meeting in late 2002
- Districts training load worked out
- District level clinical facilities assessed
- The first training in a district taken as opportunity to orient district administrators on potentials and challenge of IMNCI
- Both of the workers batches planned for implementation on the last day
- Informal follow-up done in Osmanabad
Training …

- Physician
  - 3 batches of TOT conducted in KSCH Delhi
  - 2 batches in Vellore district

- Workers
  - TOT conducted in Jhalawar, Valsad & Vellore districts
  - H&N workers of 1 PHC of Osmanabad & 2 SCs of Shivpuri
Indicators for monitoring IMNCl activities need to be incorporated into current monitoring system

Baseline Survey is planned
Challenges

• Feasibility of the proposed hands-on clinical practice in management of young infants at district level
• Feasibility of provision of health care at sub-centre and village level by ANMs and Anganwadi Workers
• Making the home-based care of young infants by ANMs and anganwadi workers operational
• Improving logistics and supplies
• Sustaining what is initiated through indicator based monitoring