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**

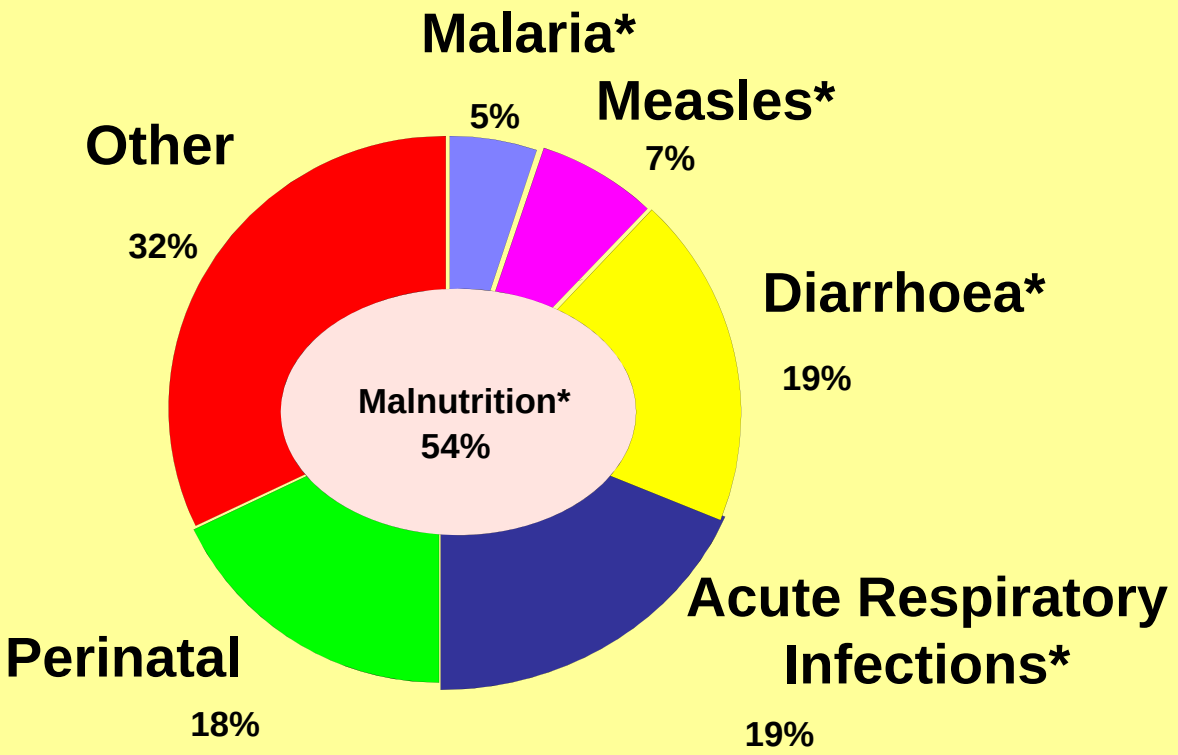
Differences between Generic IMCI and India's IMNCI

Features	Generic IMCI	India's IMN
Scope		
Includes birth to 7 d of life (early newborn period)	No	Yes
Target providers		
Facility-based providers such as physicians	Yes	Yes
Community-based providers (auxiliary nurse midwives/ Anganwadi workers)	No	Yes
Training program		
Training time – newborn and young infant	~20% (2 of 11 days)	50% (4 of 8 d
Sequence of training	First, the child (2 mo-5yr) module, followed by young infant (7 days-2 mo)	First,the newborn a infant (0-2 mo) mo the child (2 m
Training for home visits for postnatal care of newborn	No	Yes
Implementation		

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



* Based on data taken from The Global Burden of Disease 1996, edited by Murray CJL and Lopez AD, and Epidemiologic evidence for a potentiating effect of malnutrition on child mortality, Pelletier DL, Frongillo EA and Habicht JP, AmJ Public Health 1993;83:1130-1133

Home visits for young infants: 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**

• 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	**POSSIBLE SERIOUS BACTERIAL INFECTION**	➢ ***Give first dose of intramuscular ampicillin and gentamicin*** ➢ ***Treat to prevent low blood sugar.*** ➢ ***Warm the young infant by Skin to Skin contact if temperature less than 36.5°C (or feels cold to touch) while arranging referral.*** ➢ ***Advise mother how to keep the young infant warm on the way to the hospital.*** ➢ ***Refer URGENTLY to hospital#***
• Umbilicus red or draining pus or • Pus discharge from ear or • Skin pustules.	**LOCAL BACTERIAL INFECTION**	➢ ***Give oral co-trimoxazole or amoxycillin for 5 days.*** ➢ Teach mother to treat local infections at home. ➢ Follow up in 2 days.

• Yellow palms and soles or • Age less than 24 hours or • Age 14 days or more.	**SEVERE JAUNDICE**	➢ ***Treat to prevent low blood sugar.*** ➢ ***Warm the young infant by Skin to Skin contact if temperature less than 35.5°C (or feels cold to touch) while waiting for referral to be arranged.*** ➢ ***Advise mother how to keep the young infant warm on the way to the hospital.***
• Palms and soles not yellow .	**JAUNDICE**	➢ Follow up in 2 days ➢ Give home care ➢ Advise the mother when to return immediately

• Temperature 35.5-36.4°C or • Feels cold to touch.	**LOW BODY TEMPERATURE**	➢ Warm the baby using Skin to Skin contact for 1 hour and REASSESS. ➢ Treat to prevent low blood sugar.

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 IMNCI training

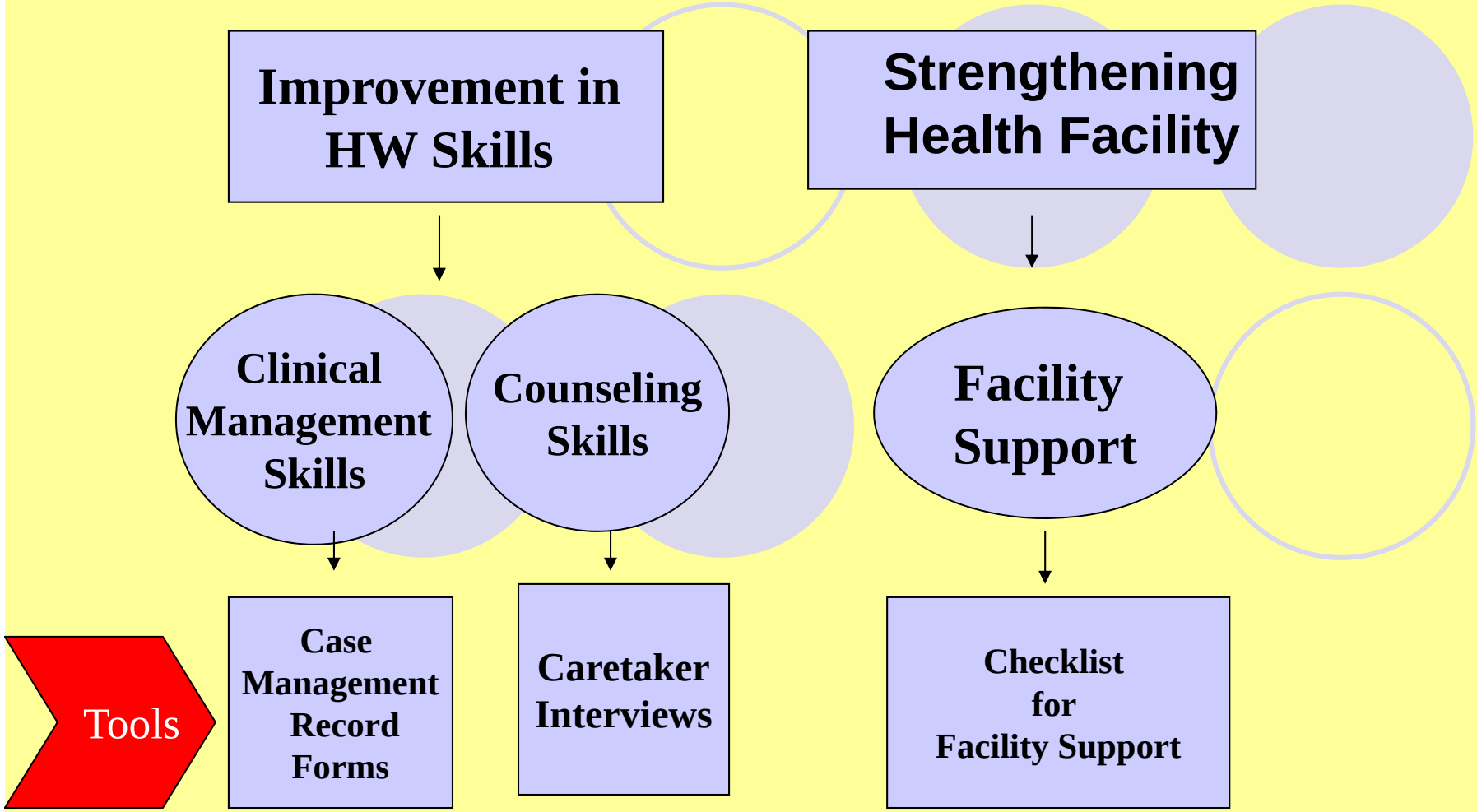
- Evidence based decision making tree
- Feasible to incorporate into both pre-service education & in-service training
- Hands-on clinical practice for 50% of training time
- Focus on communication & counselling skills
- Locally adapted recommendations for infant and young child feeding

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?



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 IMNCI 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**