

Essential Medicines (Diarrhea and Pneumonia) Working Group

February 28 - March 1, 2013

PATH, Washington

# Improving Access To Diarrhoea And Pneumonia Treatment In Bangladesh

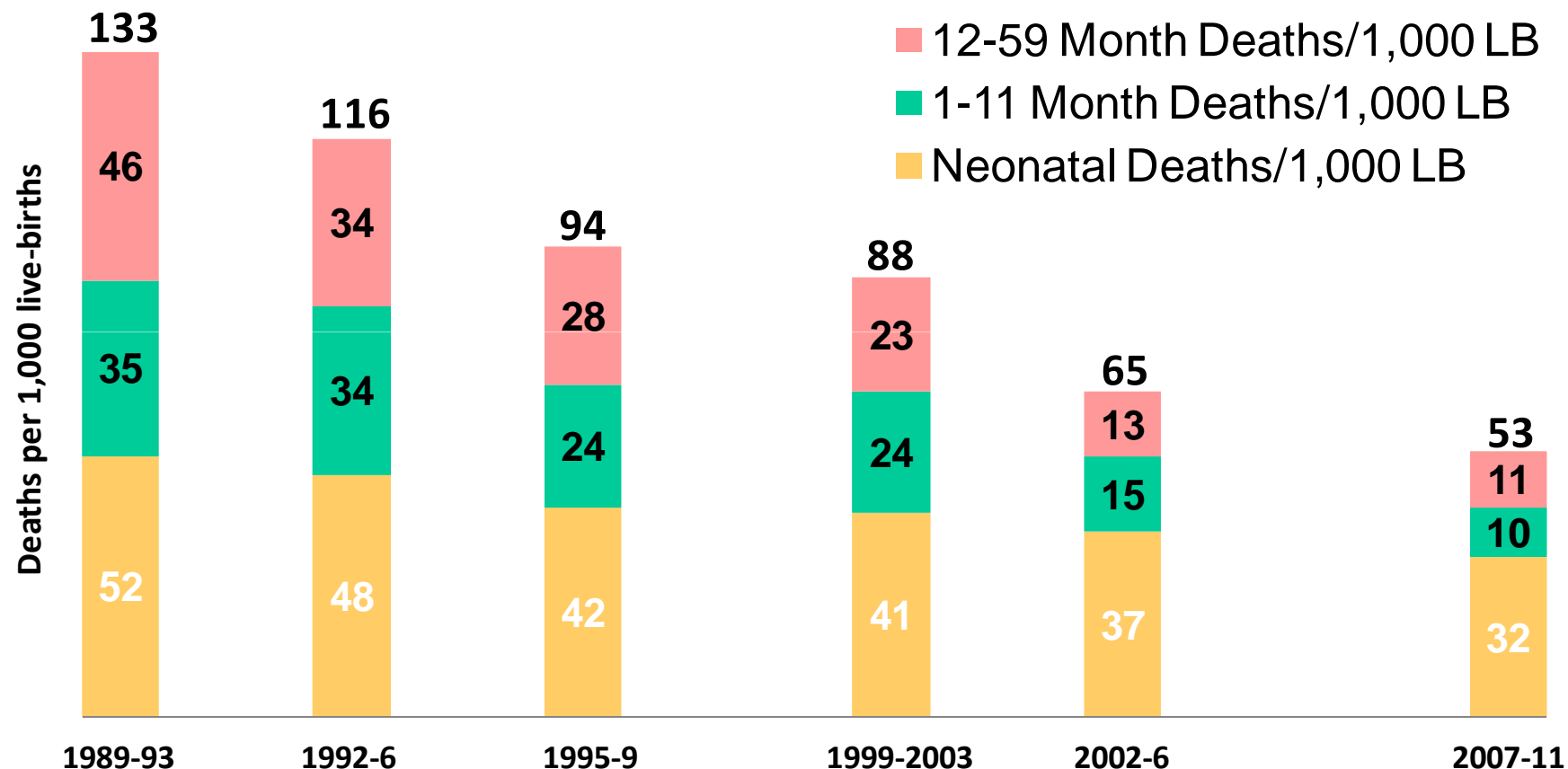


**icddr,b**

# Background

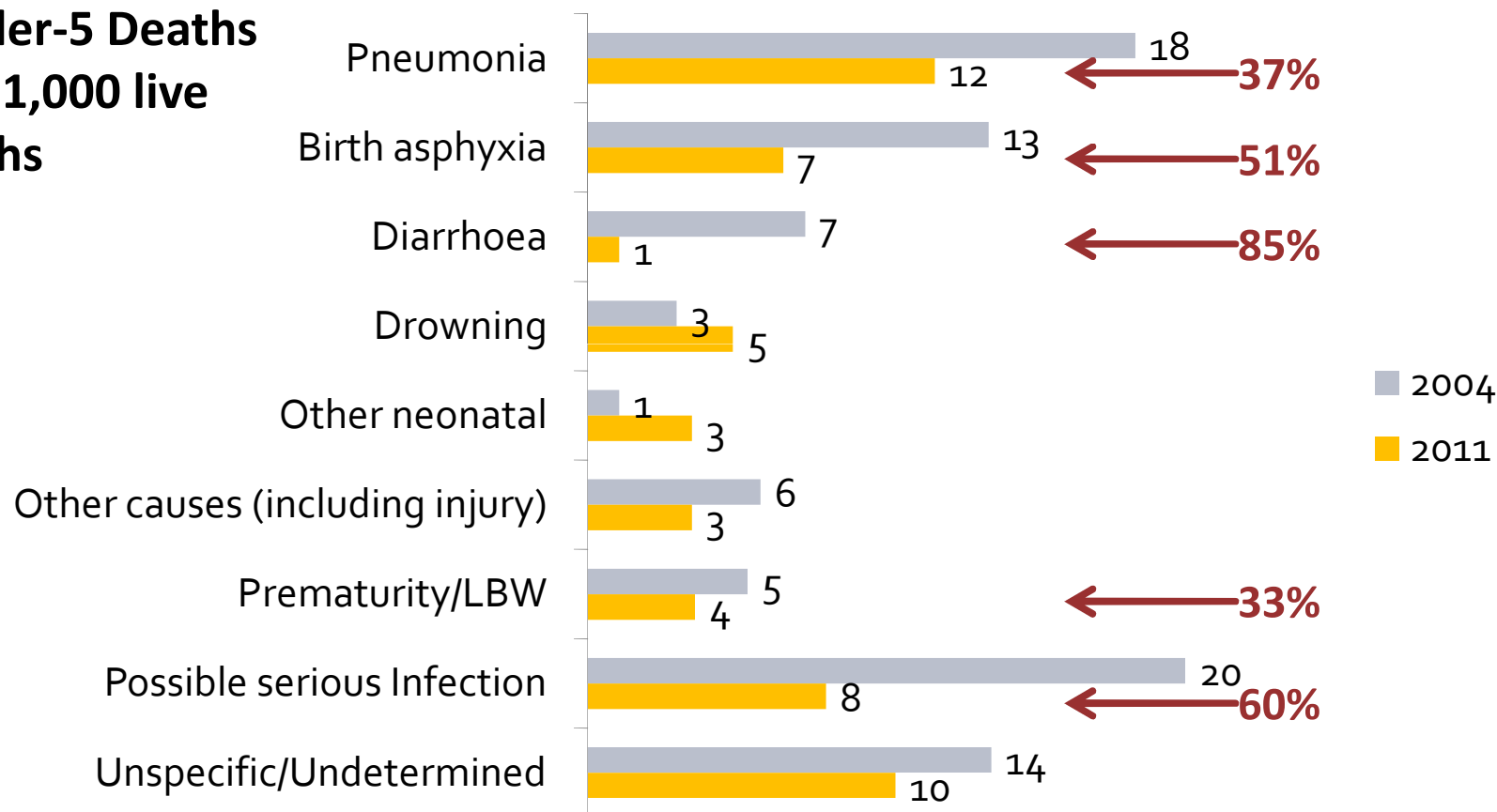
- icddr,b led development of ORS and zinc supplementation for treatment of diarrhoea
- Heavily involved in initial national scaling in Bangladesh
  - since 1970's w/ ORS
  - since 2004 w/ zinc/ORS – first nationally-scaled programme (SUZY)
- Bangladesh has been successful
  - Very rapidly declining <5 death rates

# Bangladesh on track to achieve MDG 4 targets well before 2015

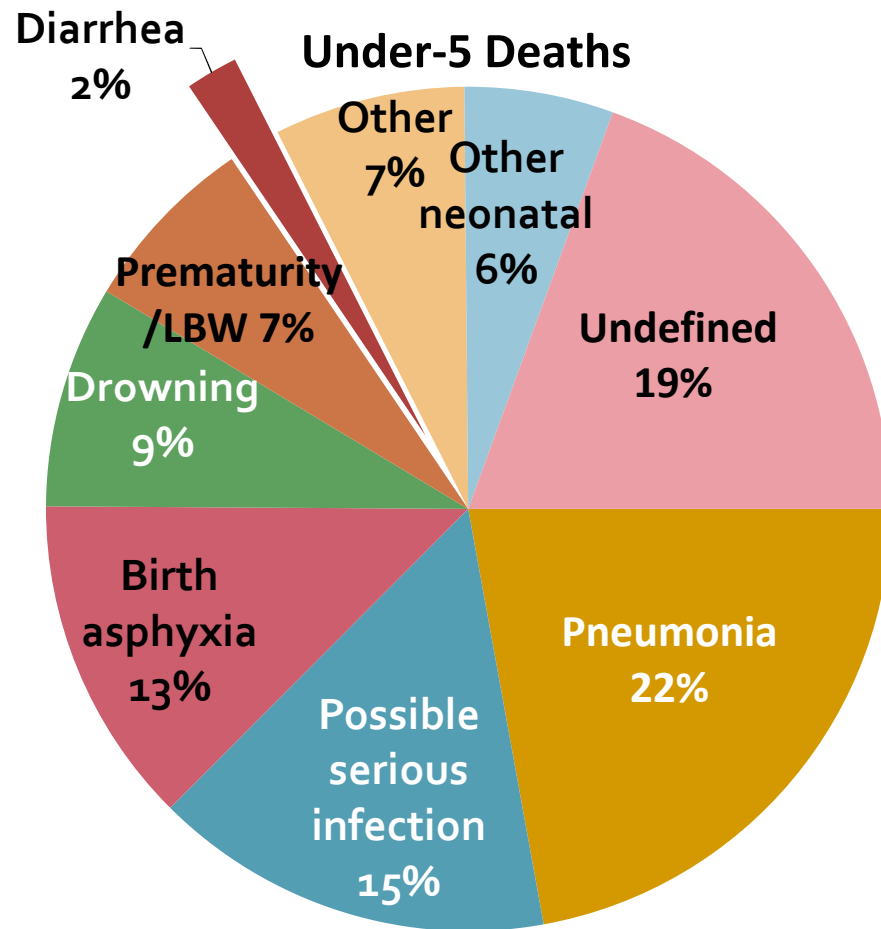


# Most causes of under-5 deaths are declining in Bangladesh

**Under-5 Deaths  
per 1,000 live  
births**



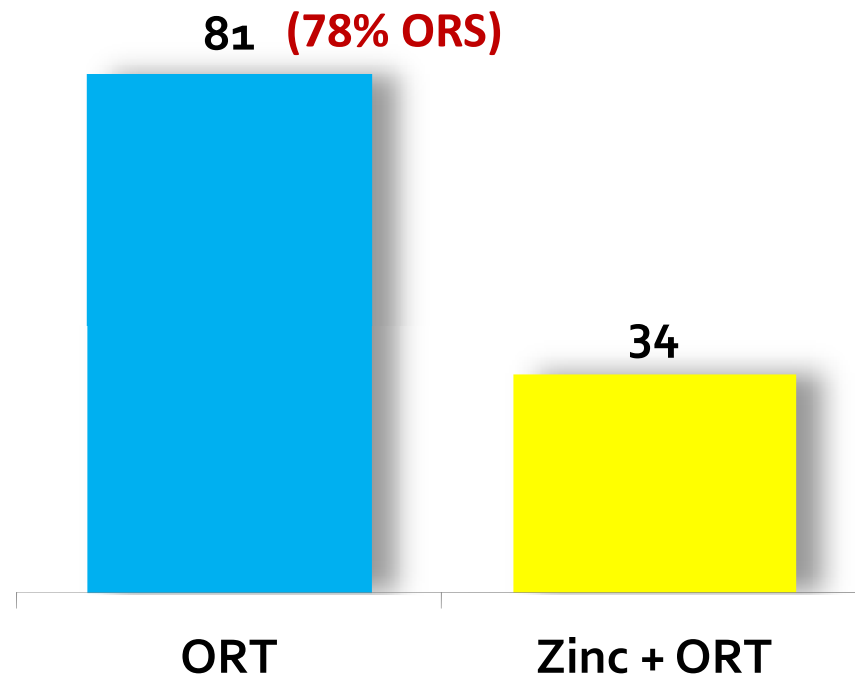
# Diarrhoea



## Diarrhea (3,500 deaths):

- Only 2% of under-5 deaths in 2007-11
- Down from one-fifth in 1988-93

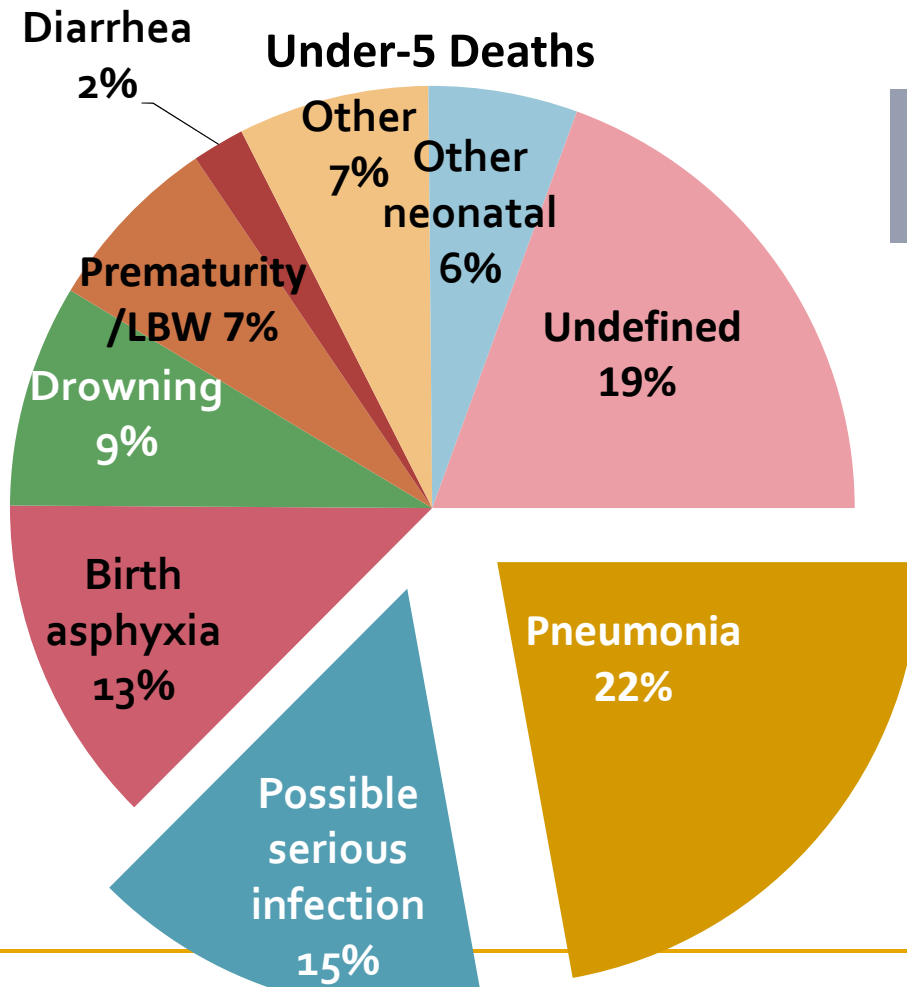
# Diarrhoea



What explains the reduction in diarrhoea deaths?

- Sustained high use of ORT
- 78% of ORS from private sources
- Use of zinc with ORT has increased from 20% (2007) to 34% (2011)

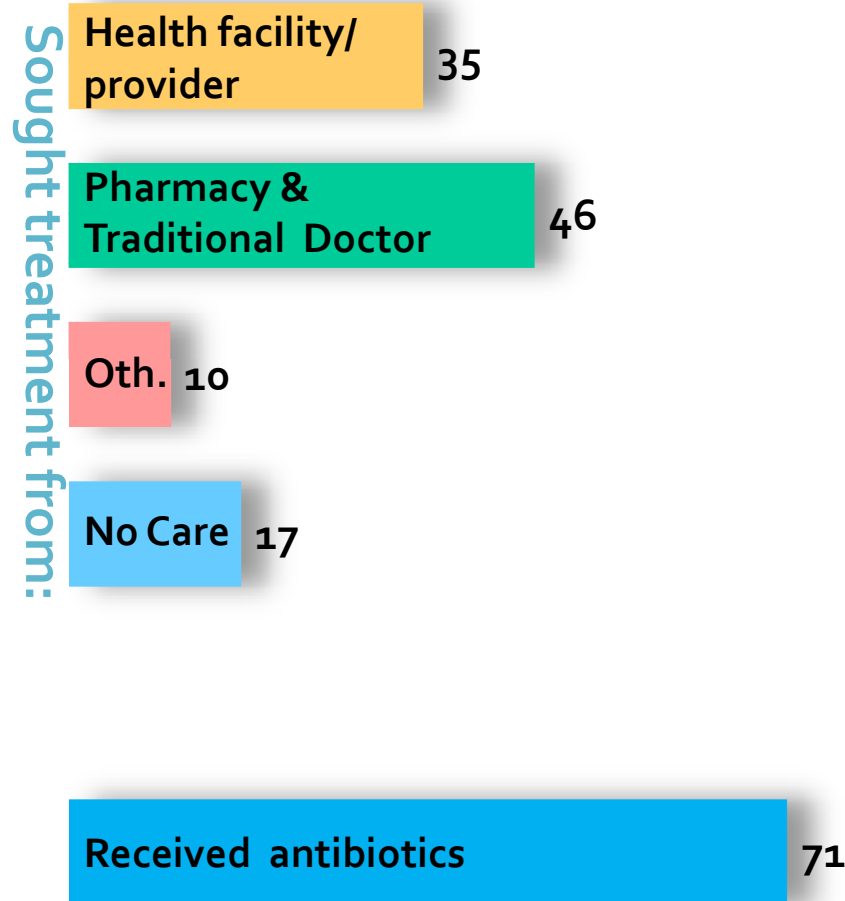
# Pneumonia and Serious Infections



**Pneumonia and Other Serious Infections (64,000 deaths):**

- Almost two-fifths of all under-5 deaths

# Pneumonia and Serious Infections



## Management of sick children remains a challenge:

- Only a 3<sup>rd</sup> of pneumonia cases sought care from health facilities or providers
- Almost half – from drug stores and village doctors
- Very high use of antibiotic
  - Inappropriate use
  - Drug resistance



# Some Lessons Learned on ORS and Zinc Scale Up

- Zinc scaling up
  - Early acceptance by the medical community
  - Engaging pharmaceutical industry and technology transfer
  - Baby zinc campaign
- Creative resources for increasing coverage where public sector is weak
  - ‘Bari Moms’ concept (ensuring convenient access) - contributed to early uptake in Matlab
- Messaging is critical
  - Intensive community-based campaign in the 80’s by BRAC on “home-made ORS” – was critical in early change in care norms
  - Effectively utilize mass media
  - Get right messages through - ex. initially some people thought zinc was replacement for ORS rather than supplementation

# Preparing the Bangladesh scale up plan for pneumonia and diarrhoea treatment

- icddr,b facilitated the engagement with partners and the Government
- Built on:
  - A regional GAPPs workshop (Sep 27-30, 2011) in Dhaka that formulated a country level action plan for Bangladesh
  - A country case study report developed for DGAP

# Preparing the Bangladesh scale up plan for pneumonia and diarrhoea treatment

- Situation analysis and document review (Oct – Dec, 2011)
- Stakeholder interview and Focus Group Discussion (Oct- Dec 2011)
  - GoB, NGO, paediatricians, industry (pharma. and social marketing), researchers
- National workshop (Dec 22, 2011) - identified key barriers and solutions
  - GoB, NGO, paediatricians, industry (pharma. and social marketing), researchers, donors and development partners
- Meeting to review the costed strategy (Apr 4, 2012)
- Meeting with key stakeholders to review budget (May 10 2012)
- Strategy and scale-up plan finalised in July 2012

## Demand side barriers addressed in national scale-up plan for Pneumonia and Diarrhoea treatment

- Low awareness and recognition of danger signs/symptoms
- Low care-seeking from appropriate/trained providers
- Inadequate preventive practices
- Inadequate practice of increased fluid along with continued feeding
- Low coverage of Zinc for diarrhoea
- Inadequate access to treatment in difficult and remote areas

## Public sector supply side barriers addressed in national scale-up plan for Pneumonia and Diarrhoea treatment

- A large proportion of providers not trained on treatment guidelines
- Inadequate supply of essential commodities
  - Inadequate/no supply of Zinc to public health facilities and providers
  - Dispersible amoxicillin tablets not supplied to public facilities and providers
- Lack or absence of service providers at all levels – no differential programming in hard-to-reach areas and high risk populations
- Poor coordination between the two directorates of health and family planning regarding management of diarrhoea and pneumonia, supply of drugs and MIS
- IMCI corners are not uniformly established or functioning in all facilities
- Referral system is weak and pre-referral treatment provisions or case assessment capacity are limited
- Poor quality of care for sick child care, inadequate diagnostics at sub-district and district hospitals
- No QA, poor monitoring and supervision system

## Private sector supply side barriers to access for Pneumonia and Diarrhoea

- High rates of care-seeking from unregulated health service providers (e.g. village doctors)
- Preference for expensive and higher generation antibiotic formulations and combinations rather than amoxicillin alone
- Low levels of zinc prescription by service providers
- Inadequate attention to smart marketing of ORS and Zinc (e.g., co-packaging of ORS and Zinc)
- Only one pharmaceutical company at present is producing amoxicillin in dispersible tablet form

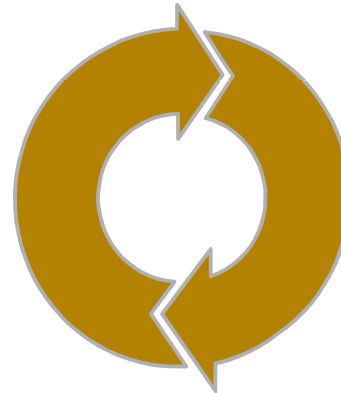
# National strategy outlines key interventions needed to increase treatment coverage

Strengthen the capacity of health facilities and providers to manage sick children

Awareness and demand interventions motivate supply

Develop and implement a procurement planning and distribution system

Implement referral solutions for different contexts



Improve local level planning (LLP), quality assurance (QA), supervision and monitoring

Communications for improved recognition and care-seeking

Increased supply drives demand and builds awareness

Ensure availability of zinc and dispersible amoxicillin in health facilities and CHWs

# Cost of the key interventions

	Budget (millions)
1: Provider skills (training)	\$5.68
2: Procurement systems	\$0.16
3: Referral systems	\$11.97
4: Local level planning, QA, monitoring and supervision	\$12.49
5: Communications for demand creation	\$8.77
6: Essential commodities	\$12.92
7: Coordination and management	\$3.80
<b>Total</b>	<b>\$55.80</b>



## Summary of current status

- OTC status secured for zinc – many local products available – but public sector supply is spotty
  - UNICEF supported supply in 15 districts for 1 year (2012);
  - MI supported the supply in 2 districts in 2012
  - GoB has distributed zinc to the Community Clinics across the country in 2012
- Amoxicillin is now recommended as the 1st-line treatment for pneumonia (incorporated in the IMCI guidelines in 2012)
- No procurement and supply of amoxicillin DT in the public sector yet

# Summary of current status

- UNICEF and other UN agencies, and BRAC undertaking demand generation activities as part of several MNCH initiatives that cover 32 districts
- Continue scale-up of IMCI (facility, community), pre-service training
- Updating guidelines and protocols
- Expanding hospital-based ETAT and sick newborn care (training and infrastructure)
- iCCM implementation in Bangladesh for the management of pneumonia and diarrhoea:
  - Training of the GOB/NGO CHWs on CCM (diarrhoea with low osmolarity ORS with zinc, pneumonia with oral amoxicillin, malaria in endemic areas by RDT with ACT)
  - Social marketing of ORS and zinc by SMC, BRAC, others
  - NGO Depo-holders for community based distribution of ORS, zinc, cotrimoxazole

# Coordination mechanisms

- The National Steering Committee for IMCI at MoHFW
- National MNCH Forum at the directorate level coordinate the activities around diarrhea and pneumonia
- National Core Committee for newborn health at the ministry level and a National Working Team for IMCI including all partners working in child health
- Efforts are underway for better coordination among different programmes (e.g., EPI, IMCI, Maternal Health, etc.) through expanding the TOR of the National Core Committee for newborn health

# National scale-up plan

- National scale up plan developed
  - Needs further review and revision
- Discussions on the formulation of a Child Health Policy/Strategy at a very early stage

## Next steps

- Dissemination of the national scale up plan by the Directorate General of Health Services (DGHS) and formal endorsement by MoHFW
- Review/revise the MoHFW Operational Plan and ensure budgetary allocation for zinc and amoxicillin DT – hopefully from 2014
- Continue to seek funding for the scale-up plan