



GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**

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**INDIA**

3<sup>rd</sup> Meeting of the Clinical  
Management Work Group  
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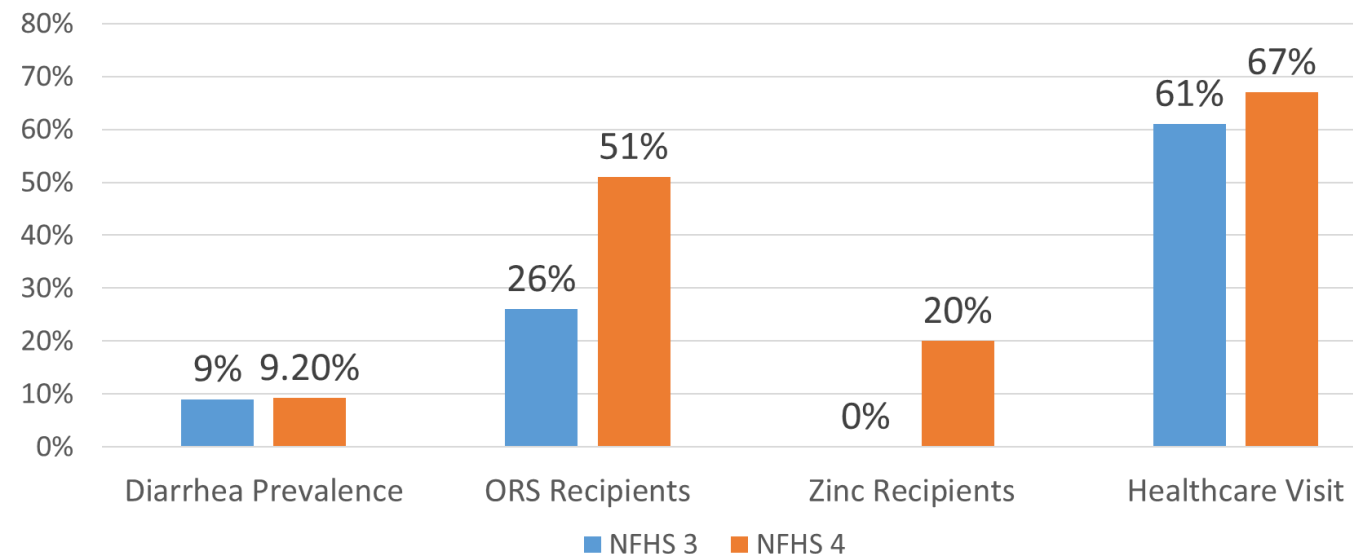
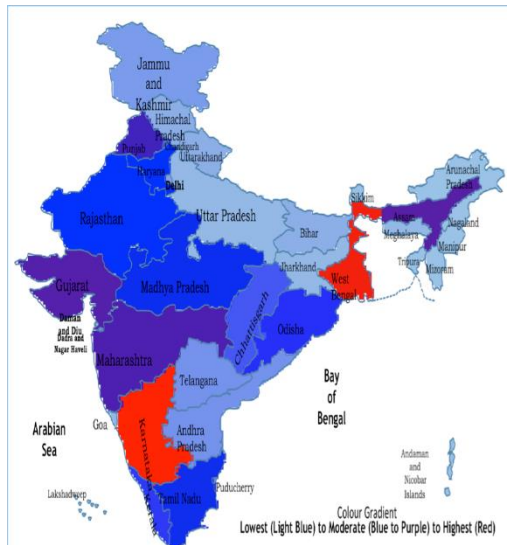
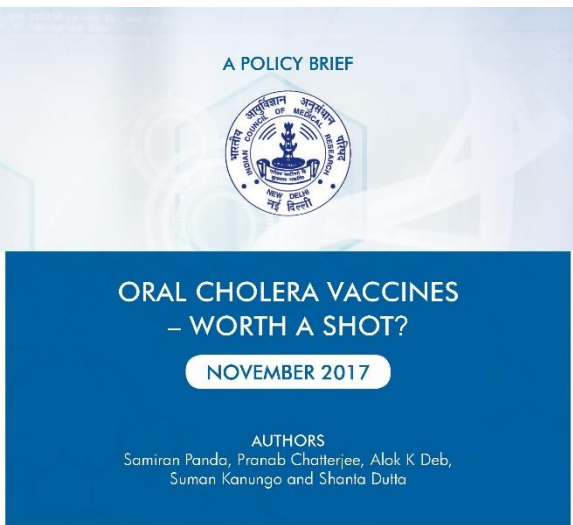
# ORGANIZATION OF

## HEALTHCARE SYSTEM IN INDIA

- ❑ Levels of care: Sub-centre → Primary Health Centre → Secondary (Community Health Centres or District Hospitals) → Tertiary Care Centres (Medical Colleges) [both private and government providers]
- ❑ Pluralistic medical system: Indian Systems of Medicine (AYUSH); “crosspathy” allowed to certain extent
- ❑ Community based care: highly focused on Reproductive and Child Health; through ASHA workers (volunteer health workers) and Auxiliary Nurse Midwives.
- ❑ Euphemistically labeled Registered Medical Practitioners; non formal practitioners
- ❑ Referral systems complex: Lessons from TB cases
- ❑ Lack of specific M&E indicators for cholera; burden massively under-reported
- ❑ Coordination between various sectors needed for comprehensive cholera control: Health and Family Welfare, Women and Child Development, Drinking

# COMMUNITY BASED CHOLERA MANAGEMENT

- ❑ Non-formal practitioners the first point-of-contact for careseekers
- ❑ Indiscriminate prescription of antibiotics; often irrationally chosen, with incorrect dosing and duration
- ❑ Traditional custom: Limit child feeding during diarrhea; may worsen existing malnourishment of child
- ❑ Provisions for ORT available at the primary healthcare level; but uptake poor
- ❑ OCV not part of the routine arsenal against cholera



# BARRIERS TO ADEQUATE CARE PROVISION

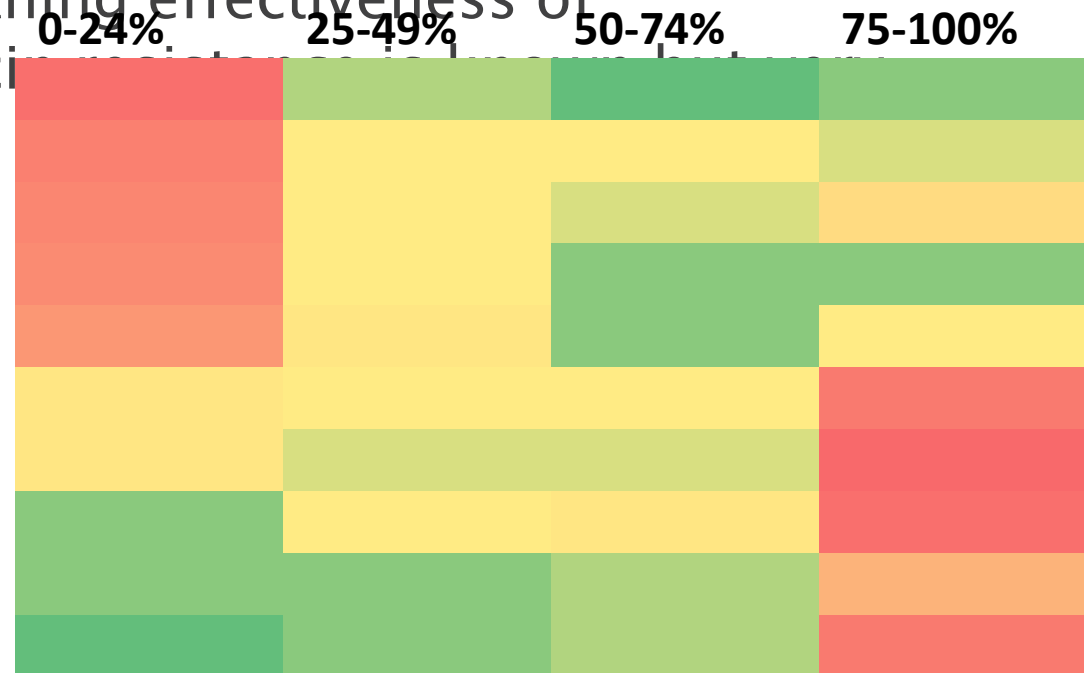
- ❑ Knowledge of health workers at community level is limited
- ❑ Excessive dependence on non-formal practitioners with poor training
- ❑ Limited diagnostic capacity even up to secondary care levels
- ❑ Endemic transmission or outbreaks common in remote areas; logistic and training issues prevent adequate care provision or protocol implementation
- ❑ Vaccination program focused only on infants; window for OCV administration very small unless extra mechanisms adopted
- ❑ Referral systems poor; undue delays, result in poor clinical outcomes in severe cases
- ❑ Poor knowledge about Zinc uses; poor adherence to good practices for ORS preparation, use and dispensing; poor water management at the household level

# ANTIBIOTIC USE AND CHOLERA

- Easy access to drugs; antibiotics and other scheduled drugs sold over the counter
- Ongoing surveillance by ICMR–NICED: ~40% patients consume antibiotics prior to consultation
- High demand for antibiotics from patients reported by healthcare providers
- Published AMR data for cholera shows waning effectiveness of Fluoroquinolones, Tetracycline; Azithromycin uncommon
- Non-formal practitioners and doctors from rural areas more likely to prescribe antibiotics when not indicated
- Most preferred antibiotics in enteric infections include macrolides (Azithromycin) and fluoroquinolones

## Antibiotics

Gentamicin  
Ciprofloxacin  
Tetracycline  
Norfloxacin  
Chloramphenicol  
Ampicillin  
Nalidixic Acid  
Cotrimoxazole  
Streptomycin  
Purazolidone



# WAY FORWARD: EXPLORING SOLUTIONS

- ❑ ICMR–NICED is exploring the following approaches:
- ❑ Programmatic operationalization of Oral Cholera Vaccines using existing public health infrastructure in a known focus of endemic transmission in Kolkata: Pilot demonstration of acceptance, barriers & facilitators, and costs
- ❑ Mapping hotspots for cholera in multiple sites across India to obtain closer-to-real estimates for appropriate burden estimates
- ❑ Studies with social science components for understanding the role of behavioural patterns which increase risk exposure in susceptible populations
- ❑ Developing a multi-modal package of interventions to reduce the burden of diarrheal diseases in children younger than five years of age

THANK YOU |