

Current status and strategies to improve Routine Immunization coverage in Papua New Guinea

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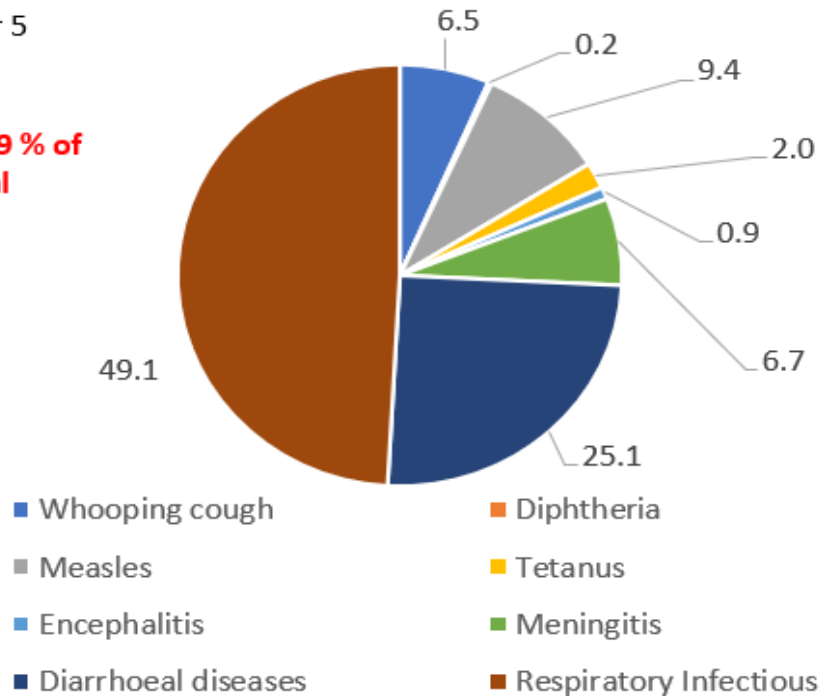
Under-5 deaths

(The Global Health Observatory 2019)

Proportion of Under five mortality - due to Vaccine Preventable Diseases (%) (WHO 2019)

Total Under 5 deaths

5,172,248 (9 % of total annual deaths)



Respiratory infectious (49.1%)

Diarrheal diseases (25.1%)

Measles (9.4%)

Meningitis (6.7%)

Pertussis (6.5%)

Tetanus (2.0 %)

Encephalitis (0.9%)

Diphtheria (0.2%)

- **5.172 million deaths under 5 years of age**
- **1.5 million or 29% deaths under 5 from vaccine preventable diseases**
- **1.01 million deaths under 5 years of age from diseases targeted by conventional EPI vaccines**
- **0.5 million from diseases where licensed vaccines are available**

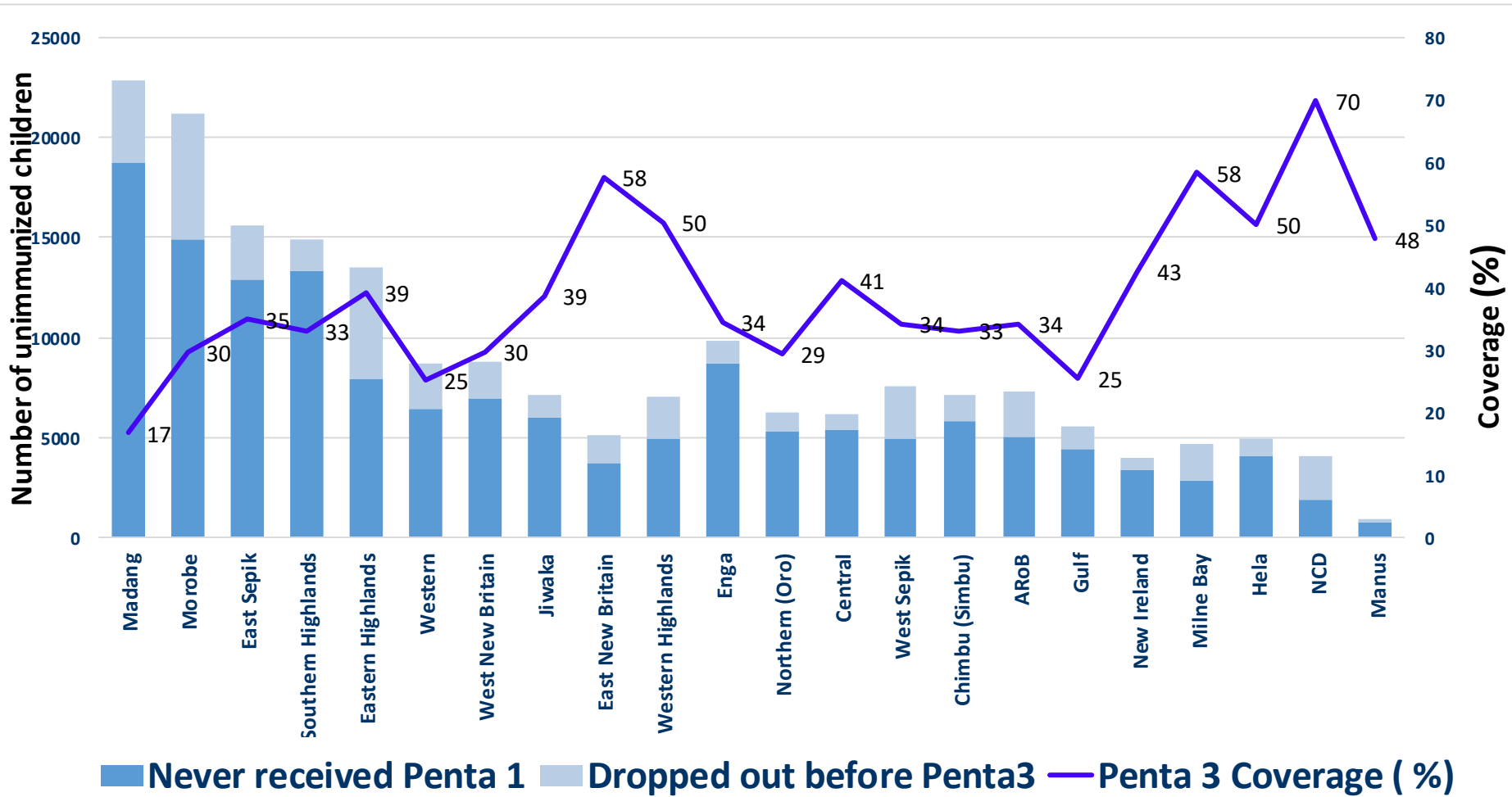
Current PNG's EPI schedule

New National EPI schedule

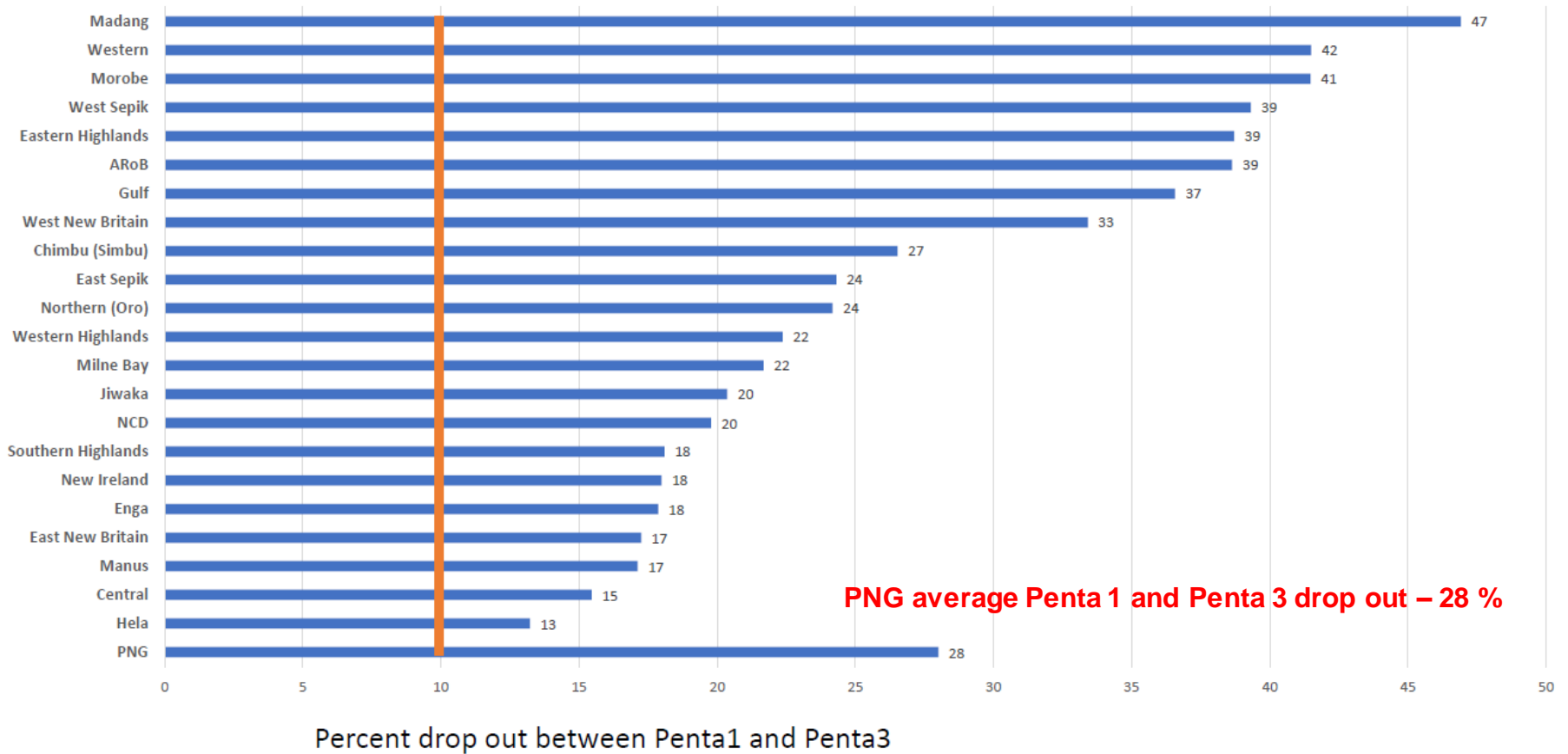
| Vaccine | Total # doses | Age of administration |
|--|---------------|----------------------------|
| BCG | 1 | Birth to 11 months |
| Hep B | 1 | Birth within 24 hours |
| OPV | 3 | 1, 2, 3 months |
| IPV | 2 | 3 months & 9 months |
| Penta (Tetanus, Diphtheria, Pertussis, Hepatitis B, Hib) | 3 | 1, 2, 3 months |
| PCV | 3 | 1, 2, 3 months |
| MR (Measles, Rubella) | 3 | 6, 9, 18 months |
| TT/Td | 5 | Women of child bearing age |

Coverage and gaps

Vaccination coverage and Zero dose children in PNG 2021

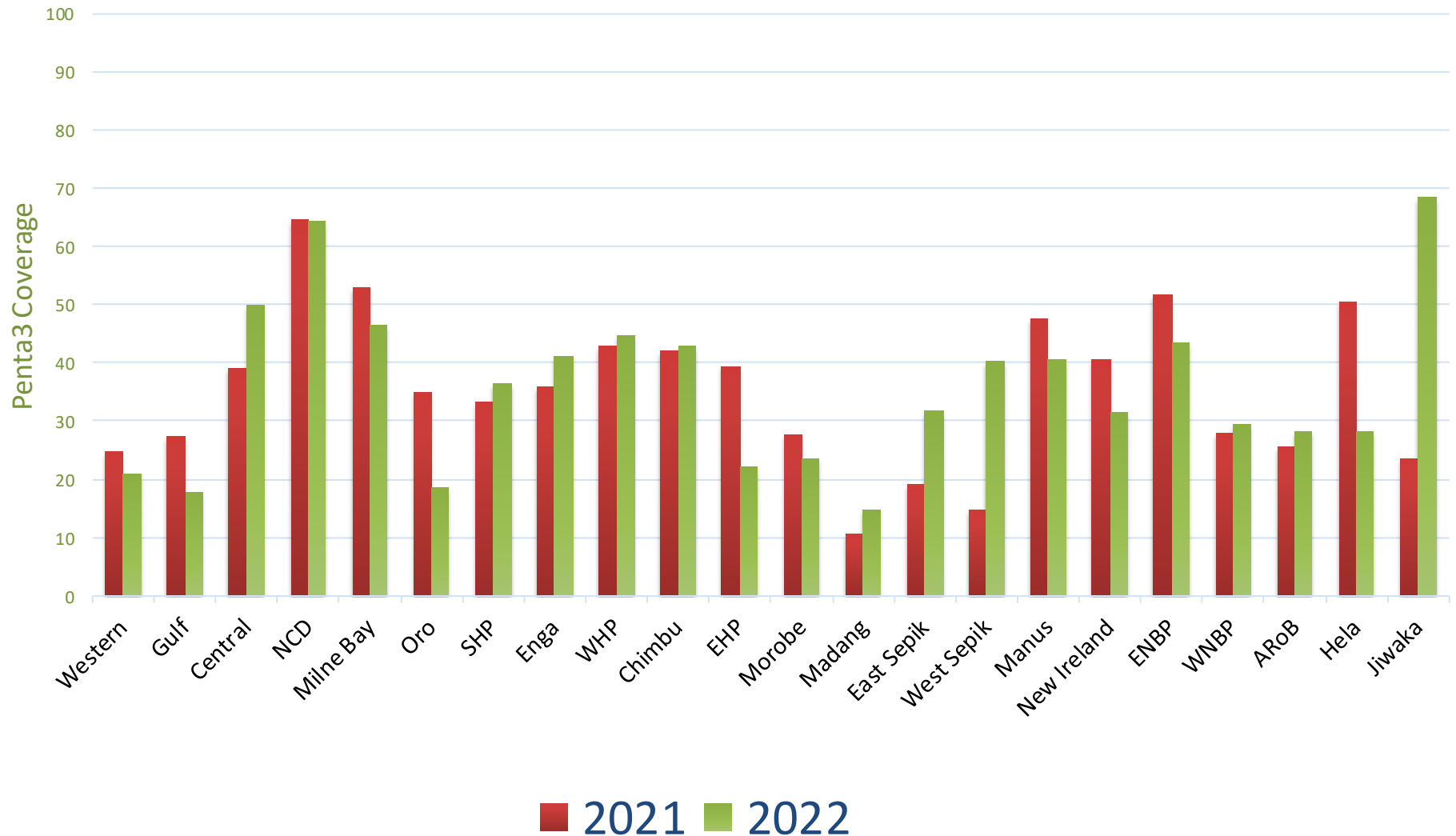


PNG Routine immunization: Dropout between Penta1 & Penta3 in 2021



Source: eNHIS (slides courtesy to WHO PNG CO)

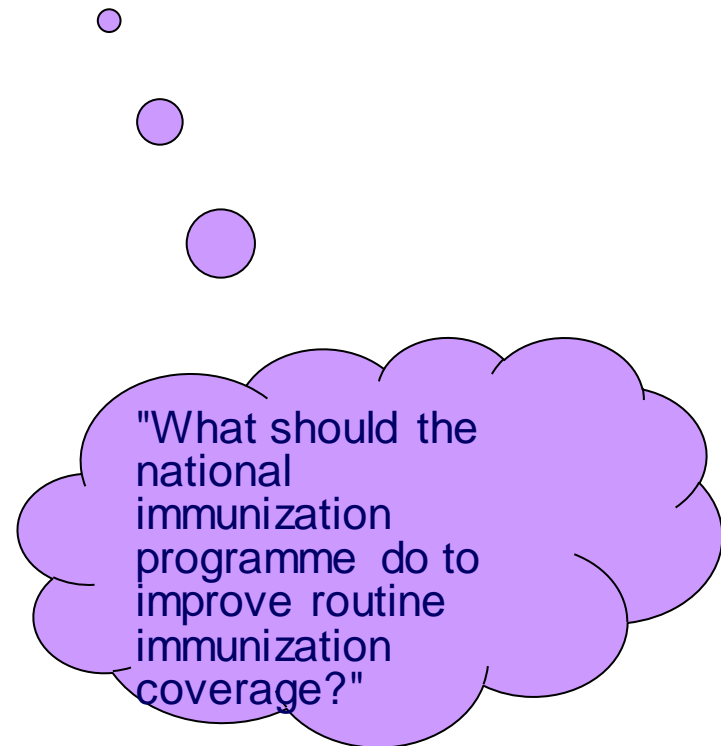
Comparison of Penta3 coverage Q1 2021 – Q1 2022



Plan of Action to improve RI

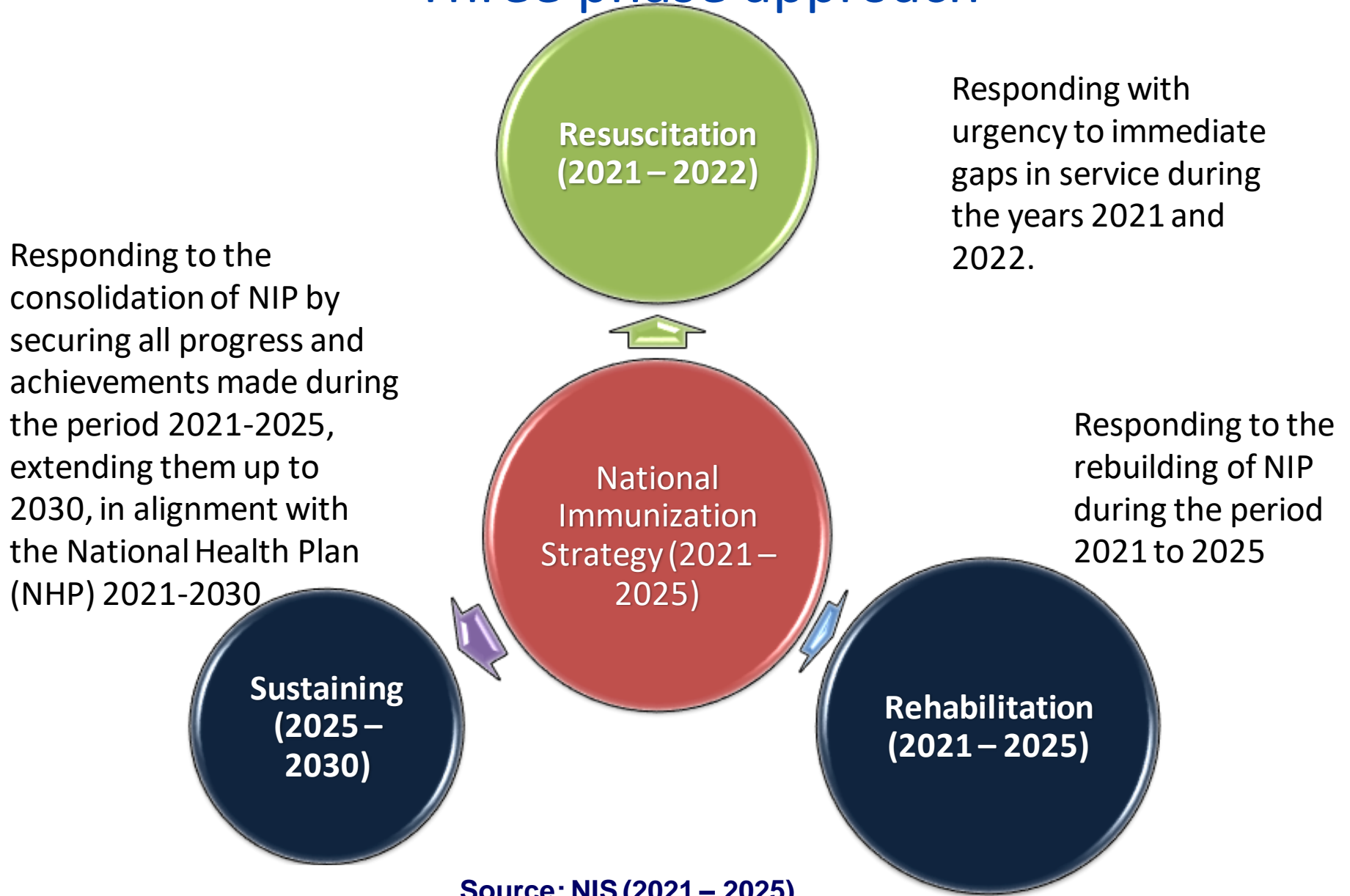
Plan of Action to improve RI (1/5)

- **Political and Bureaucratic commitment** from highest level, **Mechanism could be**
 - ICC and partners forums
 - Semi-annually/ Annually High-level ICC meetings
 - Monthly / Quarterly technical ICC/ partners meeting
 - NITAG (National Immunization Technical Advisory Group)(Semi-annually) to advise on various aspects of immunization programme
- **Planning and budgeting** for results and sustainability
 - Support in **full operationalization of National Immunization Strategy (2021-2025)**, monitor progress against milestones
 - Establish Immunization TAG for day-to-day coordination and technical guidance
 - Rigorous advocacy for adequate funding in Five-year plans
 - Mobilize resources from Multilateral, in-country bilateral org. and NGOs
 - Adequate and sustainable financing (for current and newer vaccines)



National Immunization Strategy 2021-2030

Three phase approach



Source: NIS (2021 – 2025)

Sustainable financing

Service delivery cost in USD* (2021 – 2025)

| Cost Element | 2021 | 2022 | 2023 | 2024 | 2025 | 2026-2030 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Personnel Costs | 698,586 | 709,352 | 720,322 | 731,500 | 742,890 | 3,893,017 |
| Salaries of full-time EPI health workers (immunization specific) | 126,449 | 127,081 | 127,716 | 128,355 | 128,997 | 654,723 |
| Per-diems for outreach vaccinators/mobile teams | 26,829 | 26,963 | 27,098 | 27,233 | 27,370 | 138,914 |
| Per-diems for supervision and monitoring | 45,308 | 45,308 | 45,308 | 45,308 | 45,308 | 226,540 |
| In-service training | 500,000 | 510,000 | 520,200 | 530,604 | 541,216 | 2,872,840 |
| Other Direct and Indirect Costs | 995,086 | 1,014,988 | 1,035,288 | 1,055,994 | 1,077,114 | 5,717,449 |
| Cold chain maintenance and overhead | 714,661 | 728,954 | 743,533 | 758,404 | 773,572 | 4,106,213 |
| Maintenance of other capital equipment | 72,732 | 74,187 | 75,670 | 77,184 | 78,727 | 417,895 |
| IEC/Social Mobilization | 110,408 | 112,616 | 114,869 | 117,166 | 119,509 | 634,370 |
| Disease Surveillance | 55,204 | 56,308 | 57,434 | 58,583 | 59,755 | 317,185 |
| Program management | 22,082 | 22,523 | 22,974 | 23,433 | 23,902 | 126,874 |
| Other recurrent costs (overheads) | 20,000 | 20,400 | 20,808 | 21,224 | 21,649 | 114,914 |
| Vaccines & Supplies (routine vaccines only) | 7,581,992 | 8,782,582 | 9,887,421 | 11,053,947 | 12,284,976 | 77,574,408 |
| Total Vaccines cost | 7,291,726 | 8,446,352 | 9,508,893 | 10,630,761 | 11,814,662 | 74,604,572 |
| Injection supplies | 290,267 | 336,230 | 378,527 | 423,186 | 470,314 | 2,969,836 |
| Vaccine Distribution | 2,070,707 | 2,112,121 | 2,154,364 | 2,197,451 | 2,241,400 | 11,897,622 |
| Fixed Site Strategy (Incl. Vaccine Distribution to Provinces) | 2,070,707 | 2,112,121 | 2,154,364 | 2,197,451 | 2,241,400 | 11,897,622 |
| Total | 11,346,371 | 12,619,043 | 13,797,394 | 15,038,892 | 16,346,380 | 99,082,497 |

* It doesn't include capital cost such as infrastructure, human resource (cost sharing)

Source: NIS (2021 – 2025)

Plan of Action to improve RI (2/5)

- **Training** health workers in immunization
 - Institutionalize local training capacity such as establishing and building capacity of provincial training team
 - Promote regular budget for sustained training
 - Regular trainings/ CMEs for health workers (Vaccinators/Midwives, Provincial level supervisors/ managers, provincial/ health facility level handlers)
- Assuring safe and **effective vaccine availability** at all level
 - How vaccine forecasting and supplies are made. Do all provinces have vaccine and logistics officers to manage huge supplies of vaccine, syringes, diluents, Have all provincial vaccine focal been properly trained (vaccine/ cold chain stock/ inventory management)
 - Is monthly/ quarterly reporting of stocks from health facilities/ provinces to national (to streamline over stock – under stock) regularly happening
 - Is there real time stock management (eg eNHIS, mSupply), Is this functional? Are all provincial stores have dedicated store manager?
 - Is cold chain space adequate (state/ district/ PHC). Does all functional PHCs have DF and ILR. Does the province have cold chain technician to handle equipment breakdown? , Is he adequately trained. Does state/ district have condemnation policy?

Plan of Action to improve RI (3/5)

- **Creating demand** for vaccines and vaccination
 - Reviewing/ revising existing communication strategy for routine and supplementary immunization
 - Development and use of innovative communication tools (Messenger chat bots, Social media channels, Radio messages, TV/ radio spots etc)
 - Linkage between program divisions and IEC division/ bureaus at various levels for consistency of messages
- Dealing with **false perceptions** and AEFIs
 - AEFI reporting mechanism (HF to PHA to National)
 - Committees to investigate (causality assessment)
 - Orient media
- Linkages with **other programs and deptt.**
 - School health program Adolescent friendly services (TT vaccination, Rubella in adolescents)
 - Skilled birth attendants and institutional delivery (birth dose of Hep B, BCG)

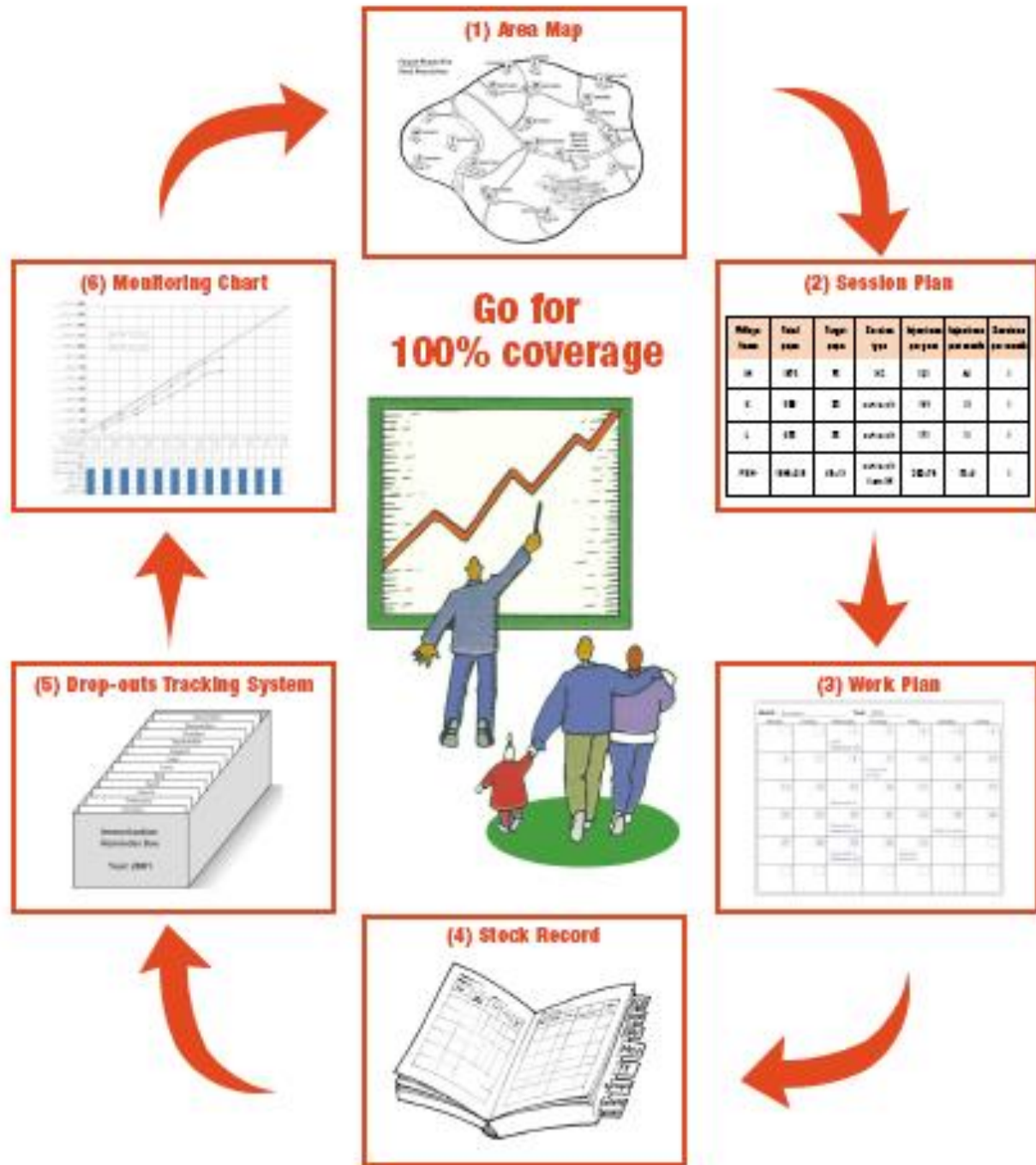
Plan of Action to improve RI (4/5)

- Designing methods to efficiently and effectively **deliver vaccines** to the target group (**Service delivery**)
 - Adequate health staff, fill vacancies, hire addl. Staff in under served areas like tribal, urban slums
 - Prioritization of poorly performing provinces and, within that, prioritizing poorly performing districts and blocks for better targeting
 - Focus on high quality **micro-plans** and strengthening supervision
 - Ensure regular budget available for outreach / mobile patrols
- **Supervision and Monitoring programme performance**
 - Establish national/ provincial / district level supervision teams (with dedicated staff for supervisions)
 - Quality of reported data
 - concurrent session and house to house supervision and monitoring using standard checklists
 - Periodic reviews at various levels(national/ provincial/ district/ HF)
 - Surveys

Micro-planning

1. Area map
2. Session Plan
3. Work Plan
4. Stock record
5. Drop-out tracking system
6. Monitoring chart

Target to achieve 100% population coverage



Plan of Action to improve RI (5/5)

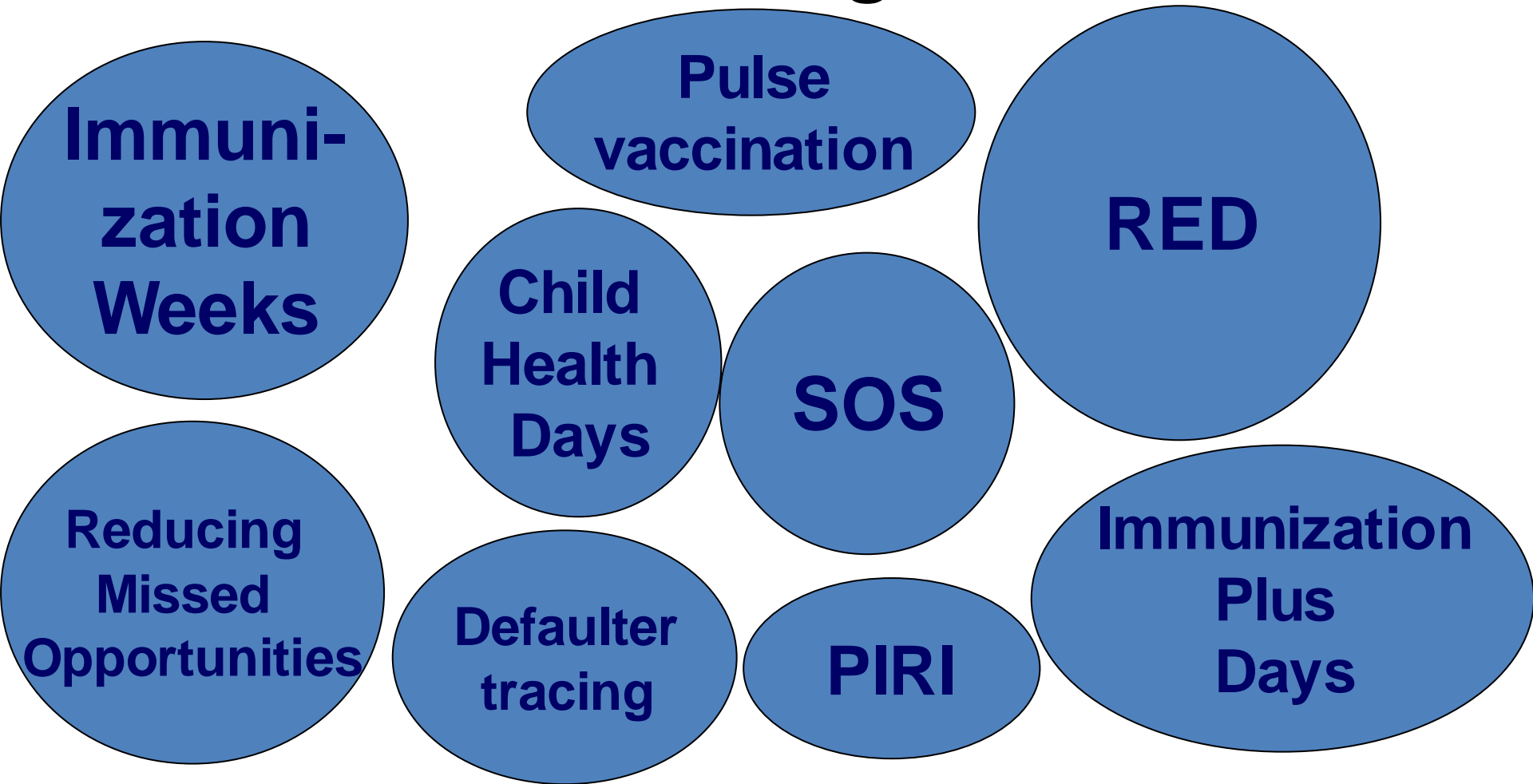
- Using **new vaccine introduction** and **accelerated disease control** activities to support routine immunization
 - Examples are Polio and measles campaigns
 - COVID 19 vaccination and strengthening cold chain, RCCE
 - Use opportunity of close supervision, improved micro planning for mobile/hard to reach areas, cold chain strengthening
- **Generate Evidence** to scale up successful interventions and strategies
 - Involve Medical institutions, Prof . bodies and research organizations
 - Develop disease surveillance system (sentinel, community based)
- Use **additional strategies** to reach left out and drop out children's
 - Catch up activities, Mobile teams for hard to reach areas
 - PIRI, Immunization. Weeks

PIRI

PERIODIC INTENSIFICATION OF ROUTINE IMMUNIZATION

Child Health Days
Intensified Outreaches
Pulse campaigns
Immunization Week

PIRI is one of strategy to improve RI coverage



Global experience



Concluding thoughts- What needs to be done?

- Strengthen ***delivery infrastructure*** for routine immunization
- Improve VPD ***surveillance and monitoring*** for routine immunization
- Generate ***community participations and policy commitment***
- ***Integrate routine immunization*** with ***other linked health interventions***
- ***Innovative strategies*** for the ***hard-to-reach*** populations



Thank You