

Achieving Routine Childhood Immunization Objectives

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Child mortality and COVID-19

- Available evidence indicates the direct impact of COVID-19 on child, adolescent and youth mortality to be limited
- Indirect effects of the pandemic on mortality in these age groups stemming from strained health systems, household income loss, and disruptions to care-seeking and preventative interventions like vaccination may be more substantial

WHAT are the objectives of routine childhood immunization?

HOW can these objectives be achieved?

Key
Questions



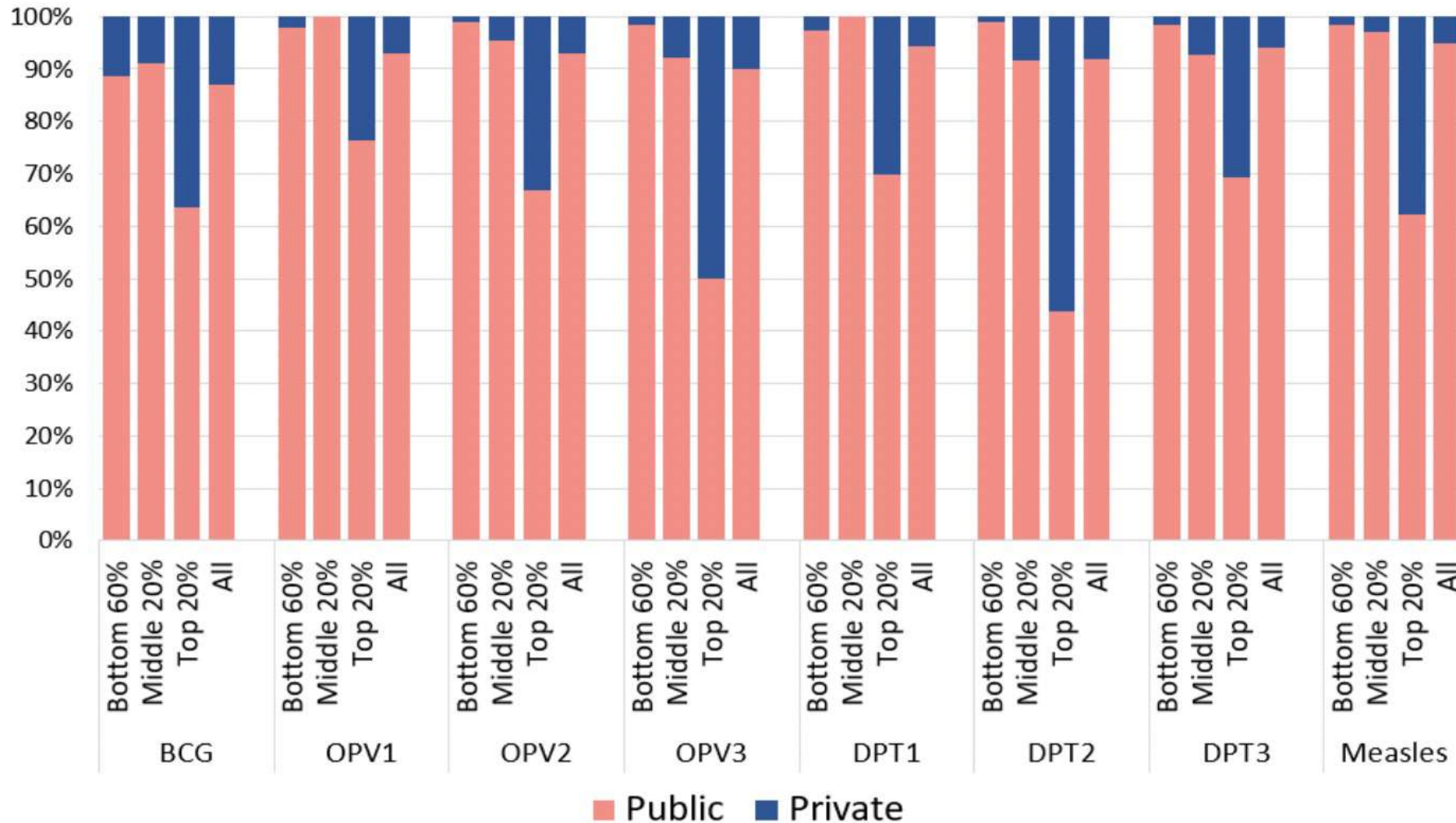
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Figure 11. Facility of last immunization by vaccine/dose and socio-economic status, 2017



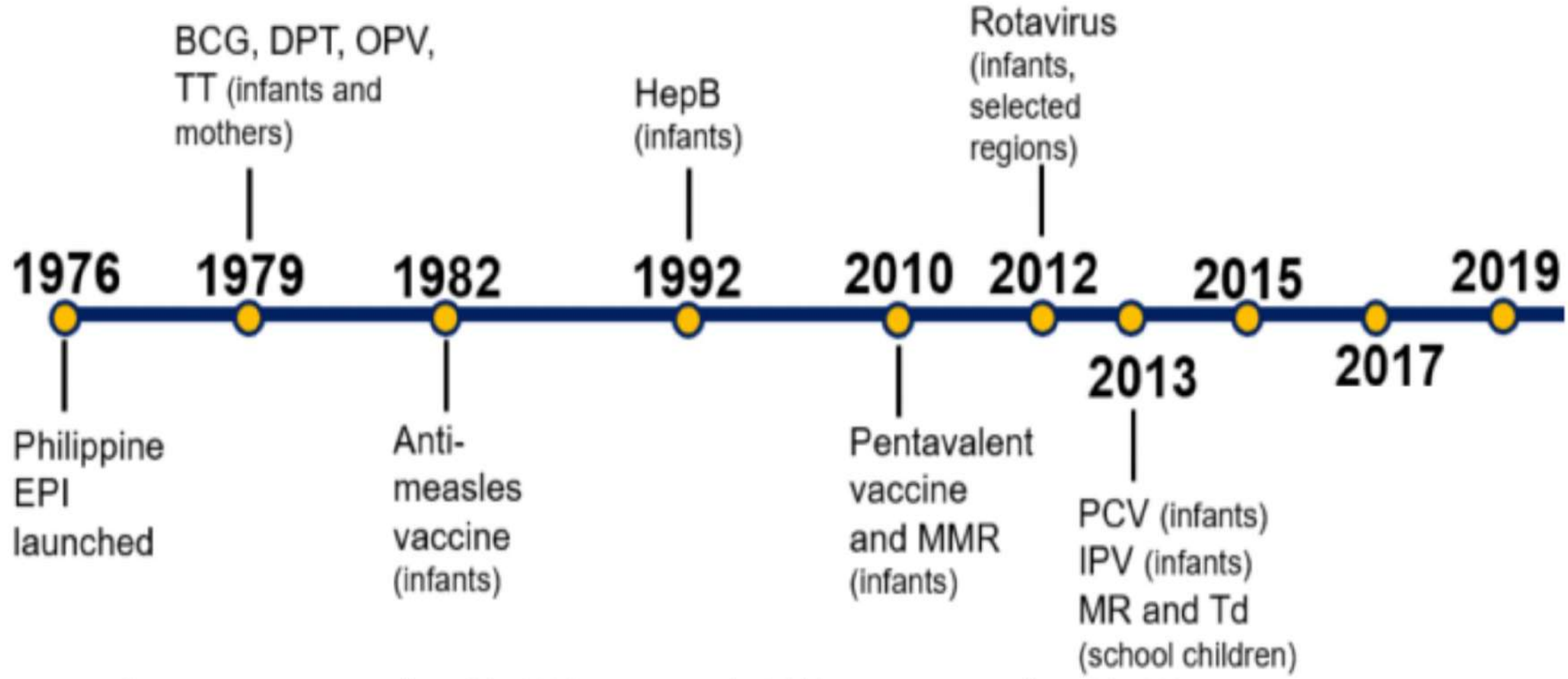
Source: Analysis of the NDHS 2017

The Expanded Program on Immunization (EPI)

- Established in 1976 to ensure that infants/children and mothers have access to routinely recommended infant/childhood vaccines
- Six vaccine-preventable diseases were initially included: tuberculosis, poliomyelitis, diphtheria, tetanus, pertussis and measles



Figure 1. Evolution of Expanded Program of Immunization in the Philippines (1976-2019)



LIMANG BISITA
HANGGANG BIRTHDAY NIYA!



#VaccinesWork for All



Pumunta sa pinakamalapit na health center sa inyong lugar.

f OfficialDOHgov @DOHgovph doh.gov.ph (02) 894-COVID / 1555

Sa LIMANG bisita lang, masisiguro mo na ang kaligtasan ni baby. Kumpletuhin ang bakuna ni baby hanggang sa unang birthday niya para siguradong lalaki siyang healthy!

Bakuna	Sakit na maiiwasan	AT BIRTH	1ST VISIT	2ND VISIT	3RD VISIT	4TH VISIT	5TH VISIT
			1 1/2 months	2 1/2 months	3 1/2 months	9 months	1 year
BCG Vaccine	Tuberkulosis (TB)	✓					
Hepatitis B Vaccine	Hepatitis B	✓					
Pentavalent Vaccine (DPT-Hep B-HIB)	Dipterya, Tenano, Pertussis, Pulmonya, Meningitis		✓	✓	✓		
Oral Polio Vaccine (OPV)	Polio		✓	✓	✓		
Inactivated Polio Vaccine (IPV)	Polio				✓		
Pneumococcal Conjugate Vaccine (PCV)	Pulmonya, Meningitis		✓	✓	✓		
Measles, Mumps, Rubella Vaccine (MMR)	Tigdas, Beke, German Measles					✓	✓

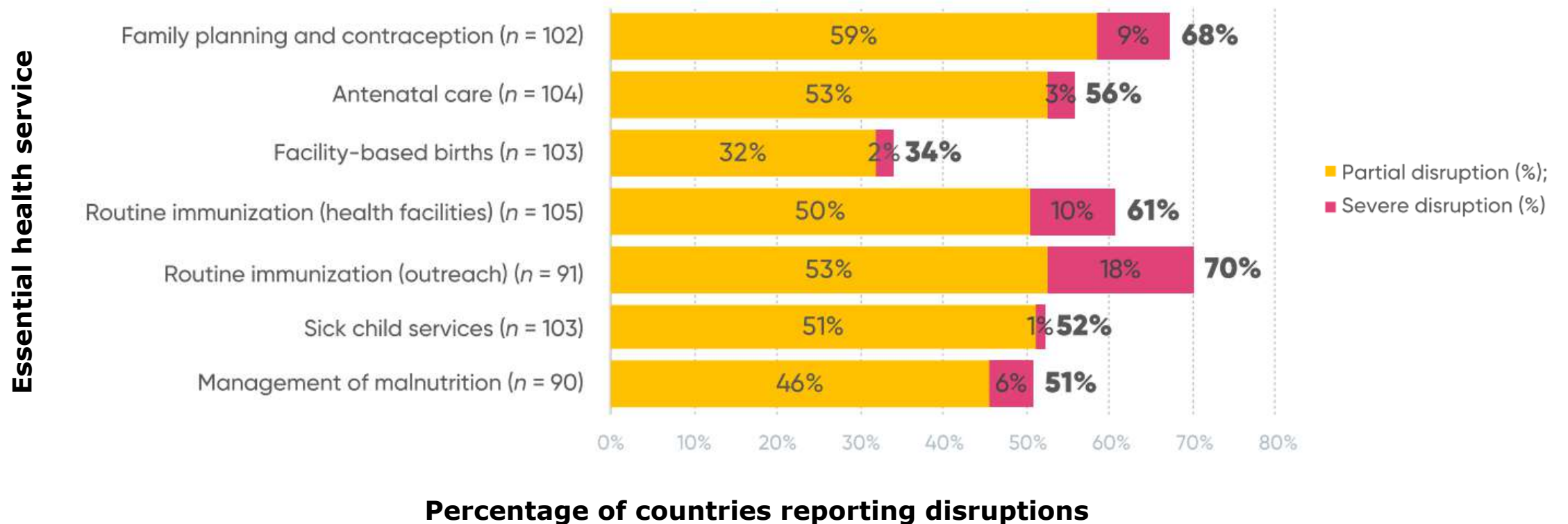
Program Objectives and Goals

- **Over-all Goal:** To reduce the morbidity and mortality among children against the most common vaccine-preventable diseases
- **Specific Goals:**
 1. To immunize all infants/children against the most common vaccine preventable diseases.
 2. To sustain the polio-free status of the Philippines
 3. To eliminate measles infection
 4. To eliminate maternal and neonatal tetanus
 5. To control diphtheria, pertussis, hepatitis b and German measles
 6. To prevent extra pulmonary tuberculosis among children



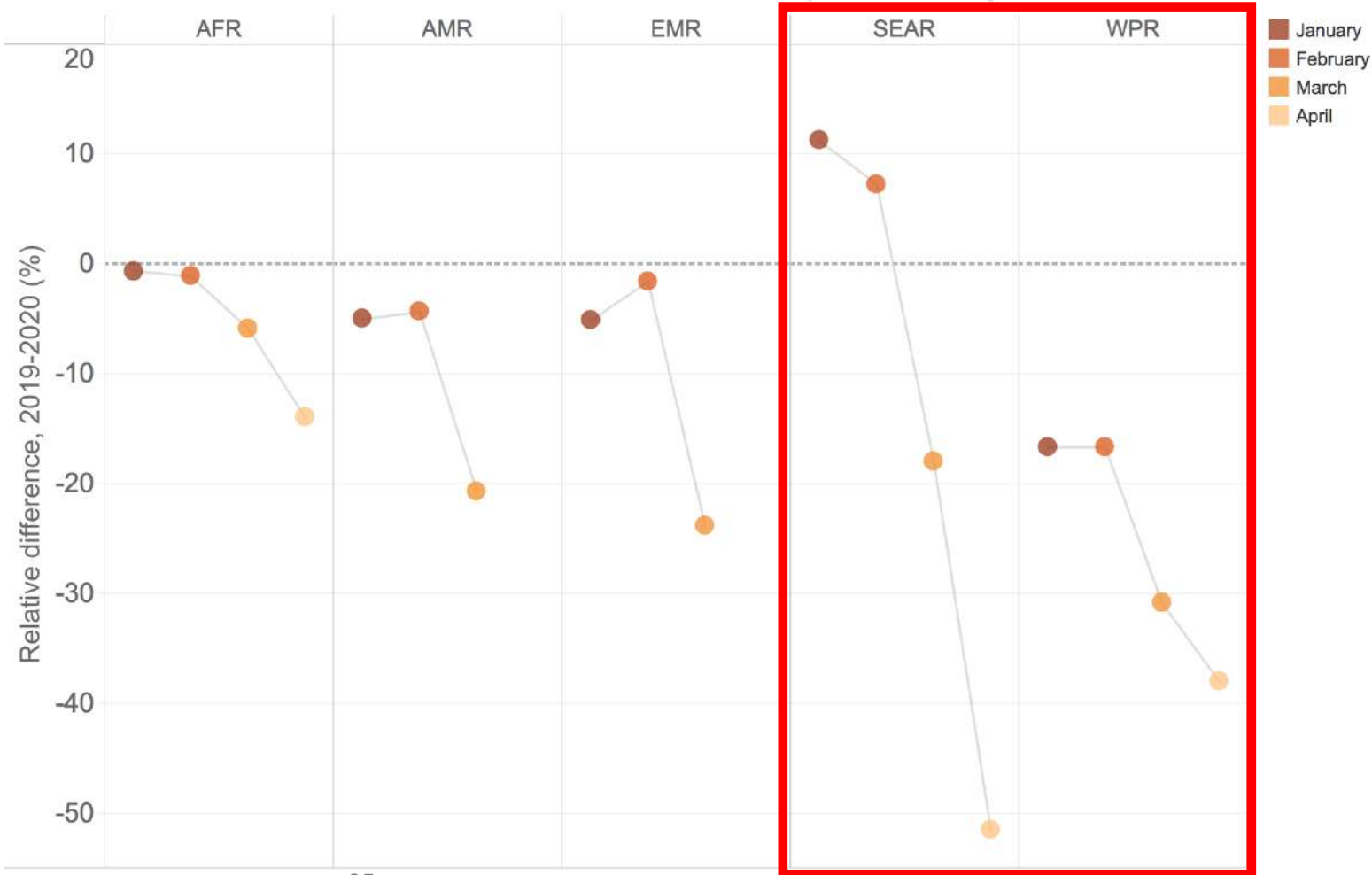
Disruption of Hospital Services

Percentage of countries reporting disruptions in reproductive, maternal, newborn, child and adolescent health, and nutrition services



Immunization across the world affected by the COVID-19 pandemic

2020 preliminary DTP coverage data compared to equivalent 2019 period



Total countries

47 35 21 11 27

Countries reported
(% surviving infants
represented)

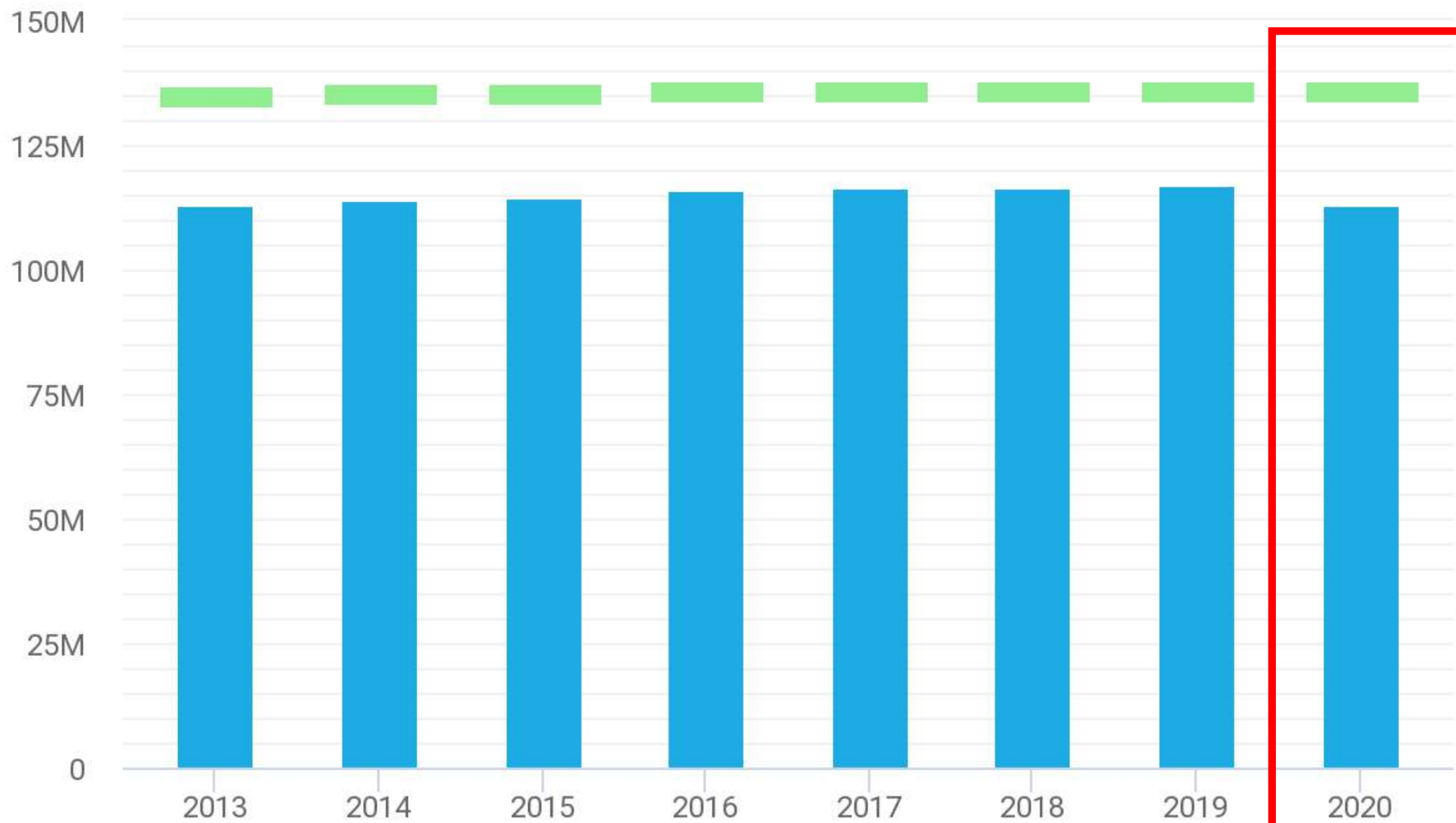
Jan: 42 (94)	Jan: 20 (23)	Jan: 5 (54)	Jan: 9 (99)	Jan: 5 (13)
Feb: 41 (84)	Feb: 20 (23)	Feb: 5 (54)	Feb: 9 (99)	Feb: 5 (13)
Mar: 41 (84)	Mar: 20 (23)	Mar: 5 (54)	Mar: 9 (99)	Mar: 5 (13)
Apr: 34 (75)	Apr: 0 (0)	Apr: 0 (0)	Apr: 5 (24)	Apr: 4 (11)

In 2020, disruptions to the routine immunization program linked to the COVID-19 pandemic and its response measures are widespread and have affected countries in all WHO regions. Preliminary and incomplete data received from many countries suggest steep drops in the number of administered doses in March and especially April of this year, compared to last year.

While countries have made efforts to continue providing immunization services, most outreach activities have been suspended and demand for vaccination has declined linked to fear of SARS-CoV 2 transmission in health care facilities and physical distance measures, including lockdowns and reduced transportation.

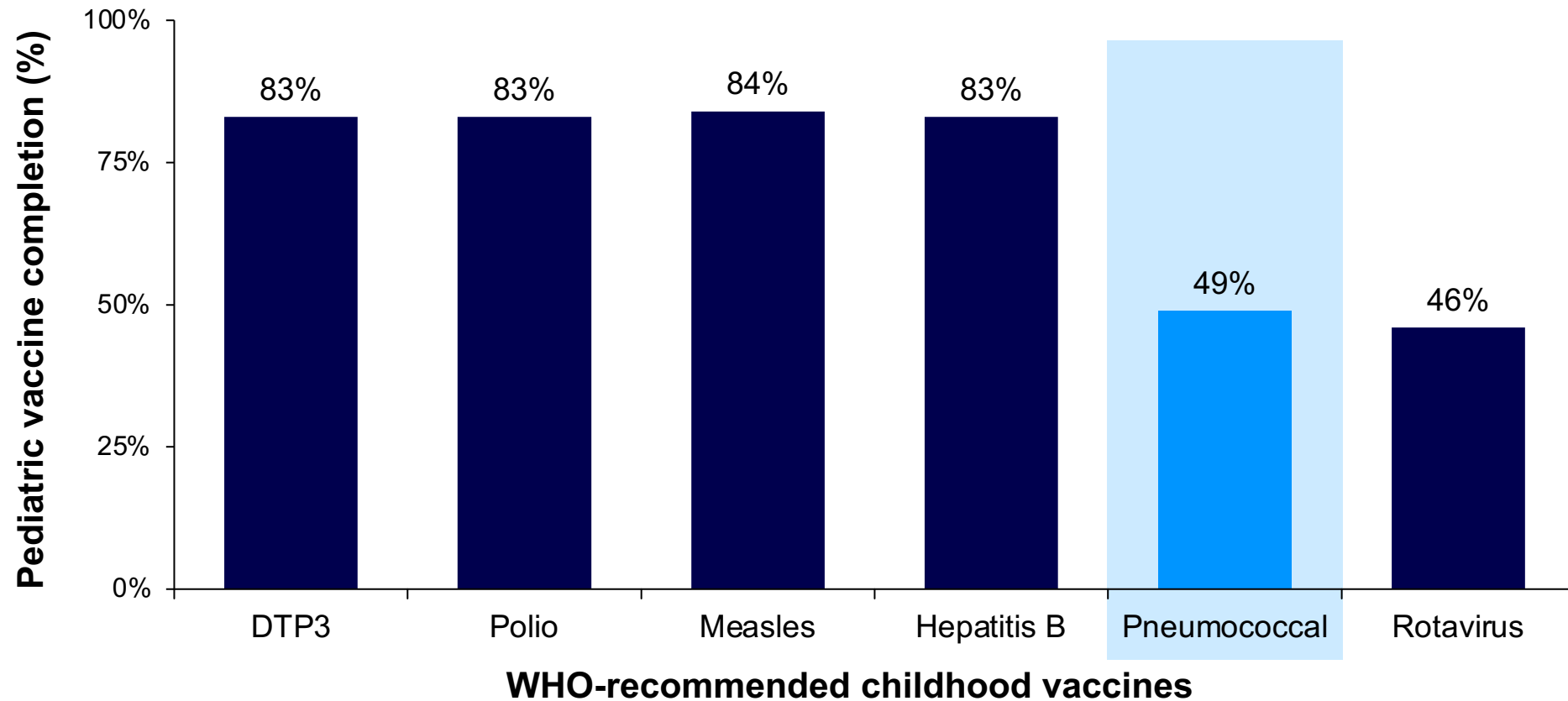
Pulse polls suggest that special efforts are being made to monitor the levels of disruption in immunization services in order to better plan vaccination catch-up activities

Number of vaccinated children and target population DTP3, Global, 2013-2020



Source: WHO/UNICEF estimates of national immunization coverage, 2020 revision

2020 WHO Estimates of Global Immunization Coverage in Children



Global coverage with 3 doses of pneumococcal vaccination substantially trails that of other infectious diseases

DTP3=diphtheria-tetanus-pertussis; WHO=World Health Organization.

Adapted from World Health Organization. Immunization coverage. <http://www.who.int/news-room/fact-sheets/detail/immunization-coverage>. Accessed September 14, 2021.

Fully Immunized Child vs Susceptible Child



For 2020 and 2021 alone, almost a year cohort is susceptible to Vaccine Preventable Diseases (VPDs).

Source: FHSIS Reports and partial 2021 data

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FEBRUARY 2021

DISCUSSION PAPER SERIES NO. 2021-04

An Assessment of the Expanded Program
on Immunization (EPI) in the Philippines:
Challenges and Ways Forward

Valerie Gilbert T. Ulep and Jhanna Uy



“Why has the country struggled to maintain immunization coverage over the years and repeatedly failed to achieve its national immunization target?”

While demand factors like vaccine confidence have contributed to the weak performance of the program...

... the sharp decline in immunization coverage is largely a result of deep-seated supply-side systems issues related to leadership, planning, and the supply chain that has led to recurring vaccine stock outs in the past decade...”

Financing

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1. Majority of additional DOH EPI funds from sin taxes were spent purchasing new vaccines; in 2017 and 2018, vaccines accounted for almost 97% of the total DOH spending on EPI
2. Only 1%-1.5% of the EPI budget is typically allocated for cold and supply chain and less than 1% for soft components.

Vaccine supply chain and Human resources

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PIIDS Philippine Institute for Development Studies

1. Poor strategy and planning, lack of foresight during need's assessment and allocation, inadequate warehouse capacity and logistics system, and other bureaucratic process such as delayed payments to logistics and suppliers >> vaccine stock outs.
2. Government has introduced multiple vaccines in recent years, but failed to invest in systems strengthening or non-vaccine components of the program

Medium to Long-term Solutions

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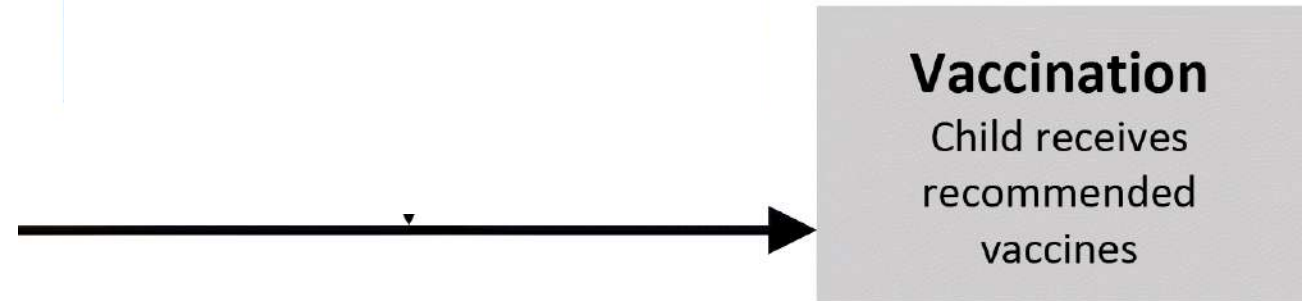
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1. Improve planning of vaccine requirements
2. Increase immunization coverage and timeliness by expanding to private sector delivery channels
3. Increase immunization coverage by allowing more health worker cadres (both from the public private health workers) to provide routine vaccination
4. Improve and invest in the vaccine cold and supply chain
5. Re-design procurement practices to improve efficiency

Behavioural and social drivers of vaccine acceptance for children





Vaccine Acceptance Continuum

The diagram features a large horizontal arrow pointing from right to left. The arrow's color transitions from green on the right to red on the left. Below the arrow are five colored boxes, each representing a level of vaccine acceptance, with colors matching the arrow's gradient.

**Refuse all
with
conviction**

Refuse
all, but
unsure

Accept some,
refuse some,
delay
vaccination

Accept
with
doubts &
concerns

**Accept all
with
confidence**

Facilitating COVID 19 vaccination acceptance and uptake



Confidence

Do people have trust in vaccines, health system, policy makers?



Collective responsibility

Are people motivated by the need to protect others?



Constraints

Is it easy to get vaccinated, physically and financially; do people have access to simple information in a language that they know?



Complacency

How do people perceive the potential risks of getting COVID-19?



Calculation

How do people search for and use information to inform their own individual risk-benefit analysis about vaccination?



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