

The cost of immunizing zero-dose children through additional outreach sessions in Kaduna, Nigeria

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Introduction and objective

- With an estimated 2.1 million children who have never received a vaccine, Nigeria is the country with the highest number of *zero-dose children* in the world
- To address this, Nigeria developed the Zero-Dose Immunization Recovery Plan 2023-2028, and kicked off its **Zero-Dose Reduction Plan (Z-DROP)** in 100 priority local government areas (LGAs)
- Outreach is key element of this strategy

Zero dose children

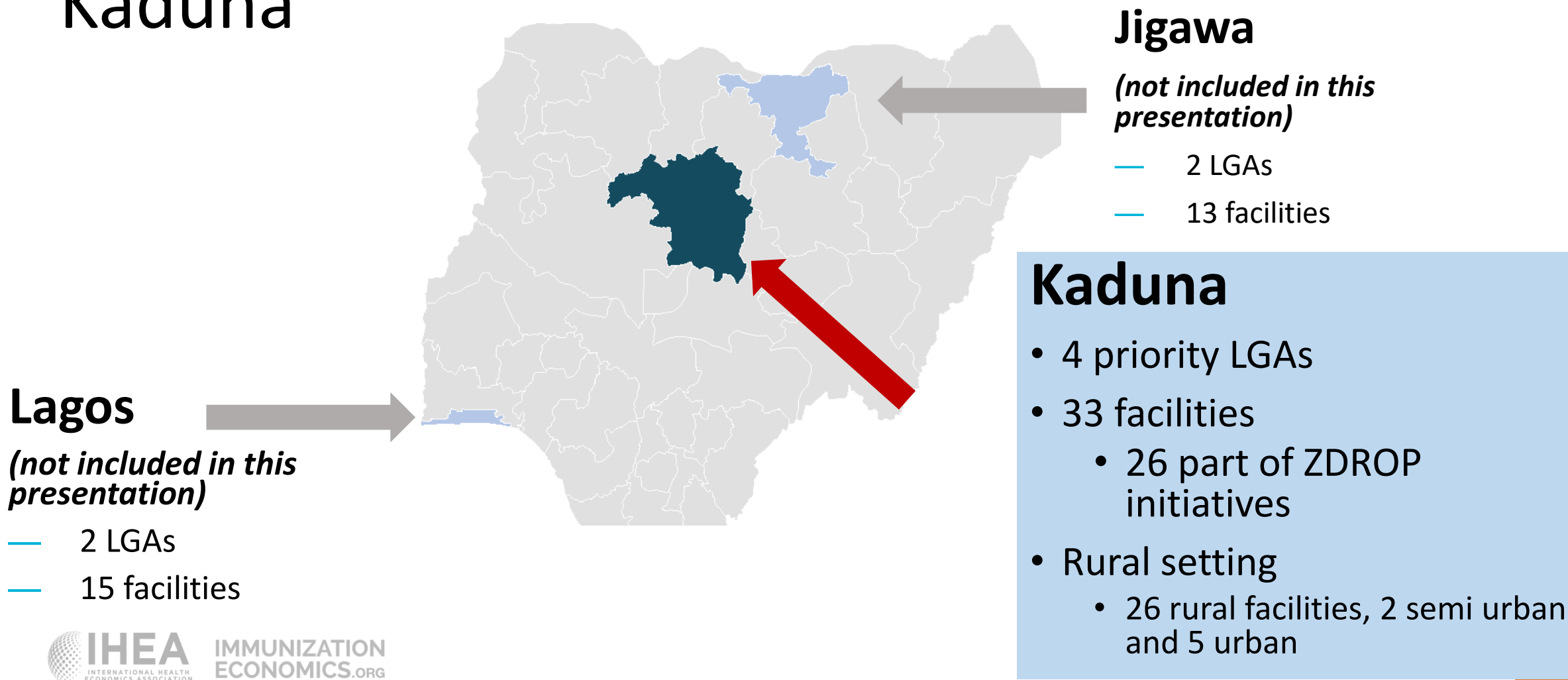
- Children missing Penta1 between the ages of 12-23 months

This study estimated the **cost** and effectiveness of several **outreach strategies** at reaching zero-dose and under-immunized children

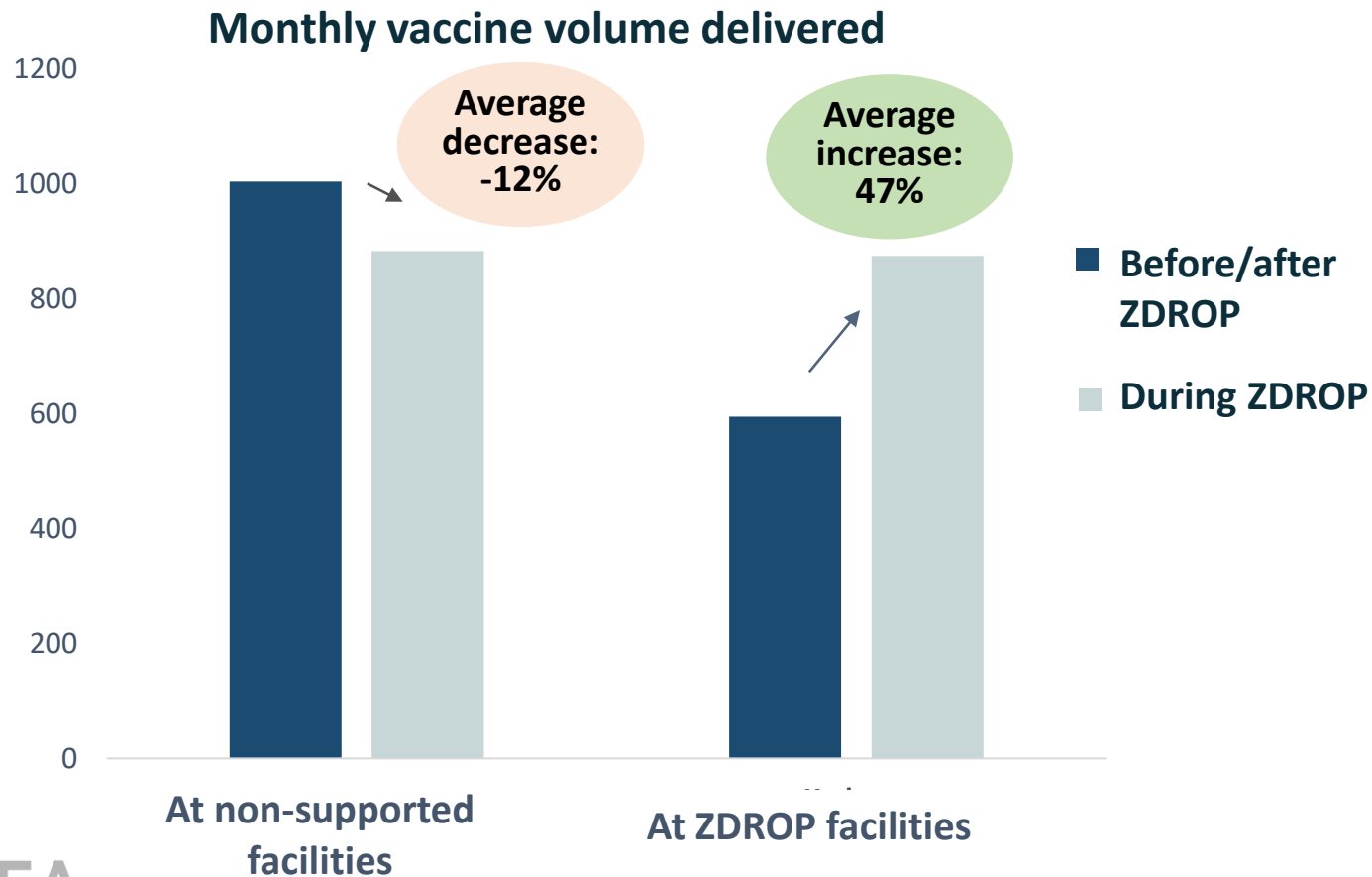
Design and methods

Scope	Estimating the economic and financial delivery cost of routine immunization delivery strategies
Perspective	Gov. entity responsible for implementation, and implementing partners (payer) (facility level costs included in these findings)
Design	Bottom-up retrospective costing
Sampling strategy	Purposive sampling of priority LGAs in collaboration with state MOH
Time horizon	Costs incurred during a typical month at point of data collection (January 2025)
Main output	Average cost per dose delivered (weighted by volume delivered, USD 2024)

Our study included 33 facilities from 4 LGAs in Kaduna

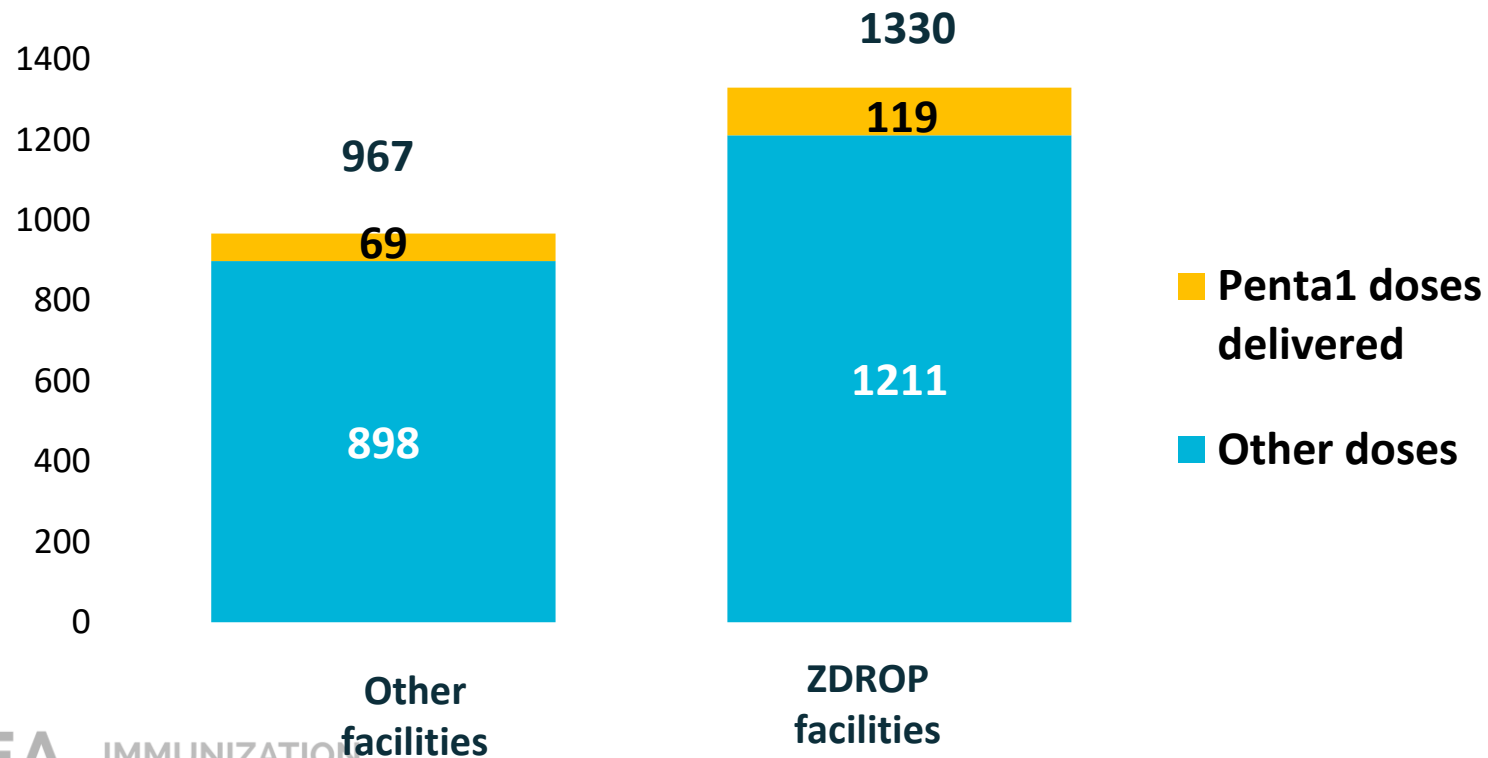


When implementing ZDROP, facilities delivered more vaccine doses



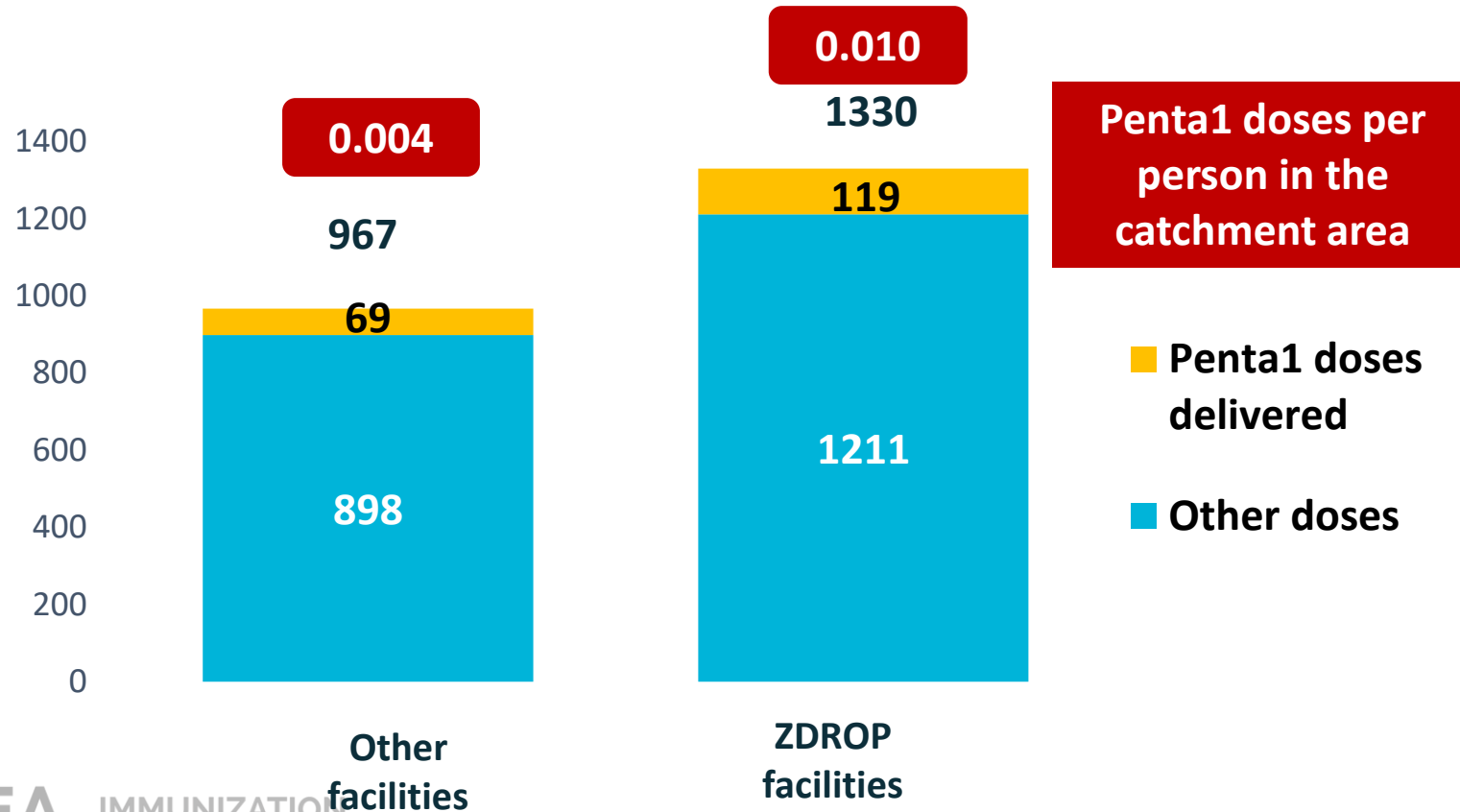
- Implementation of ZDROP and zero-dose focused initiatives commenced in our sample between 2023-Q4 2024,
- Implementation of initiatives lasted for 2 to 12+ months

During ZDROP, supported facilities **delivered more doses** and **reached more new children** than other facilities



Every Penta1 dose delivered indicates an additional child had been reached, and although it includes children being reached on time, it is a strong indicator of additional zero-dose children reached

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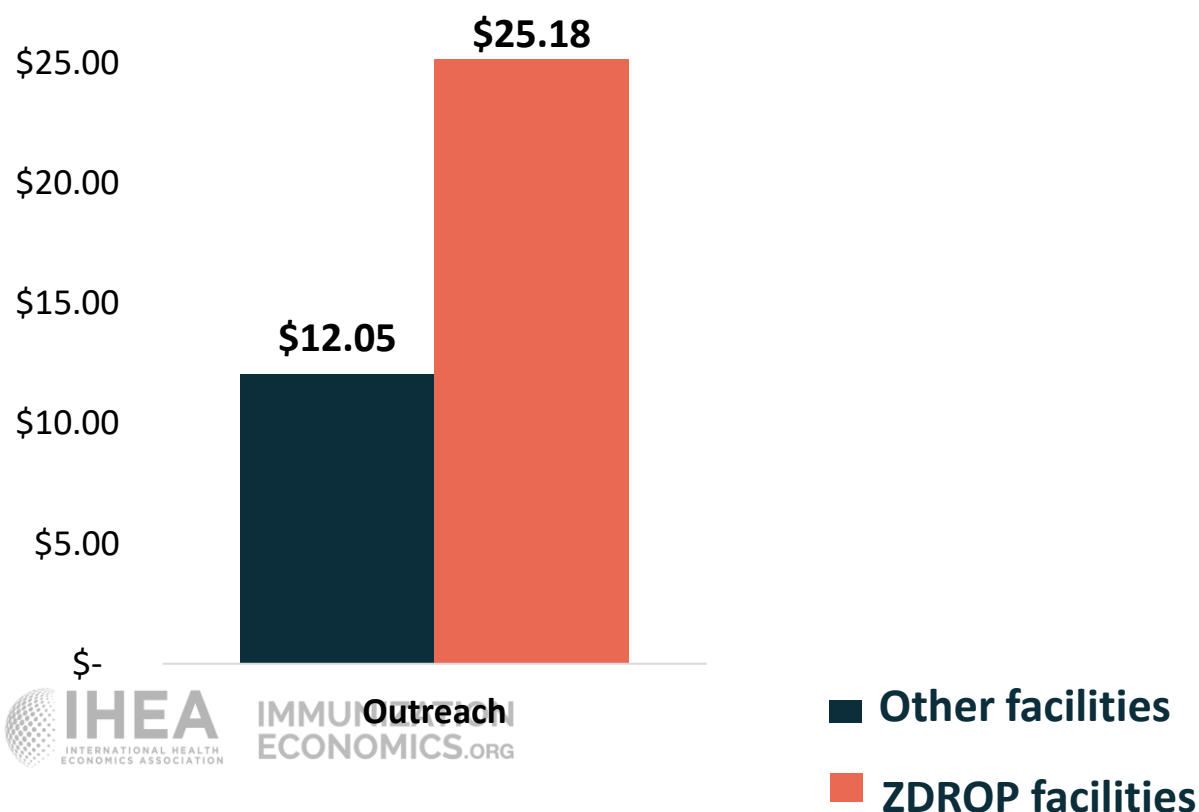


Relative to their catchment population, ZDROP facilities tended to outperform other facilities

Most of the additional children reached by ZDROP facilities were reached through outreach

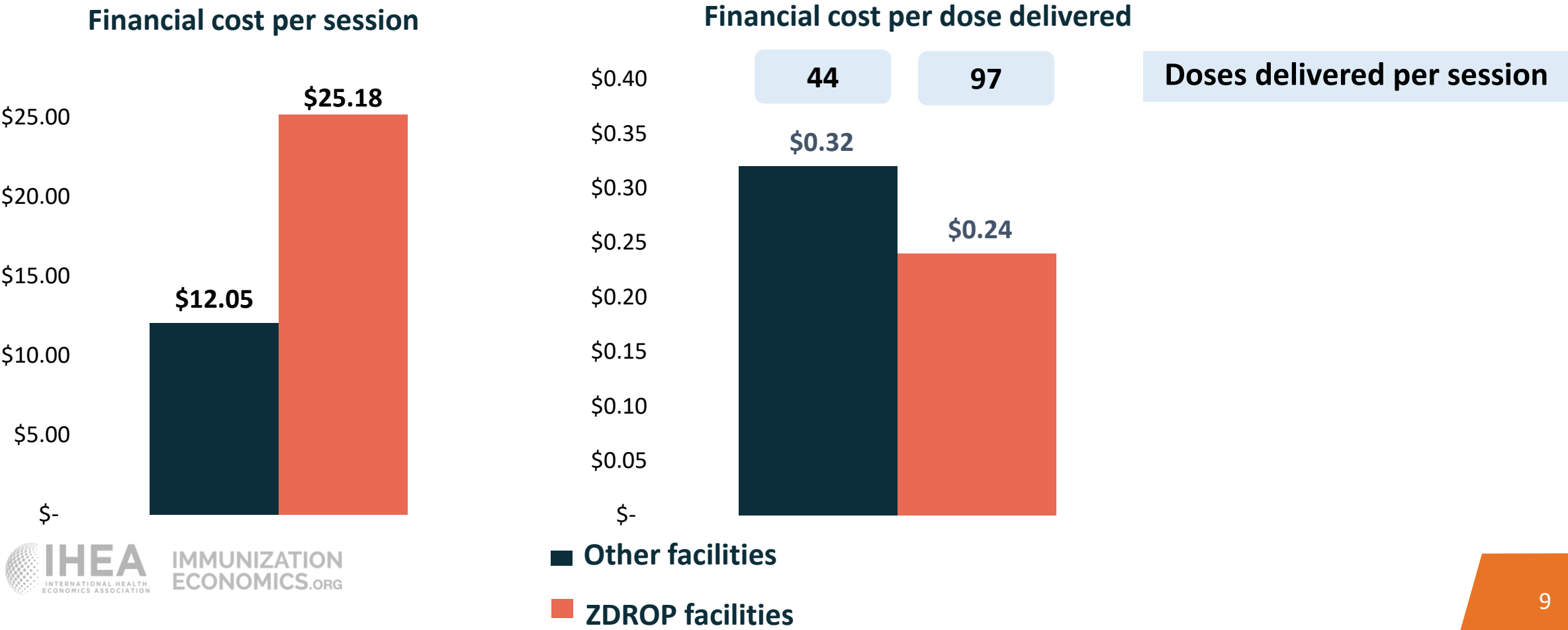
The average cost per outreach session was **higher at ZDROP facilities**, driven by staff incentives

Financial cost session



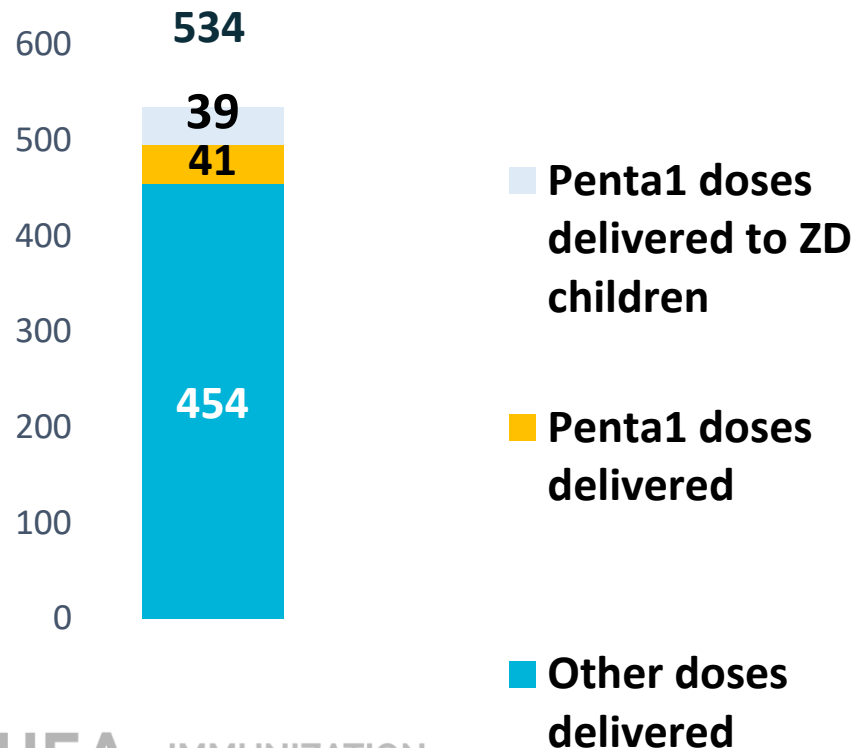
Higher incentives were given for outreach at facilities supported by ZDROP

When accounting for the increased volume delivered, outreach at ZDROP supported facilities appears to be **more cost-efficient**



The financial cost per zero-dose child reached through outreach **ranged between \$1.72-\$8.24** but data was limited

Average monthly output*



- **\$3.39**: average financial cost per ZD child reached
- **49%** of Penta1 doses were given to ZD children, higher proportion at facilities which offered incentives for care givers
 - Major root causes of zero-dose children varied across facilities

Key takeaways

- ➡ ZDROP support increased the number of vaccines doses delivered, as well as the number of **additional children reached with Penta1**
- ➡ If ZDROP facilities increase volume delivery without adding many more additional outreach sessions, **then cost efficiencies could be achieved, despite additional financial expenditures**
- ➡ Recording of zero-dose dose children reached is heterogeneous, further analysis needed to determine the impact of funding and contextual factors

Thank you

Acknowledgements

Dr Muyi Aina and **Dr Garba Ahmed Rufai**, National Primary Health Care Development Agency, Nigeria. **Dr Hamza Ibrahim**, Kaduna State Primary Health Care Board, **Dr Bolanle S. Adelokun**, Lagos State Primary Health Care Board, **Dr Shehu Ibrahim**, Jigawa State Primary Health Care Development Agency



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