

Low volumes, high costs: preliminary findings from DRC's C19 vaccination

The cost of delivering COVID-19 vaccines in DRC



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Background

On April 19th, 2021, DRC launched the C19 vaccination program, initially targeting priority populations, but quickly expanded its target to everyone aged 18 and older (~54 million people). Following an interruption due to vaccine stockouts, the country resumed vaccinations in August 2021 and endorsed the use of mass campaigns to help reach the goal of fully vaccinating 10.8 million people (20% of target population) by June 2022. However, vaccine rollout proceeded slowly, also due to widespread vaccine hesitancy, and by July 2022 most provinces had only implemented one campaign. By mid-July 2022 the country had delivered ~3.7 million doses, fully vaccinating about 4% of its target population. As of April 2023, DRC had fully vaccinated 24% of its 54M target population.

Key takeaways

- The cost per dose of delivering C19 vaccines in DRC is high, due to low volumes delivered
- Sites delivered an average of 10-21 doses/day in routine and 31-50 doses/day in campaigns
- Campaign delivery was less costly than routine, due to higher delivery volumes, but is more costly than in other countries
- Cost drivers were similar across routine and campaign delivery, despite the use of different delivery strategies
- High uncertainty around doses delivered causes a wide range in estimated cost per dose for routine

Methods

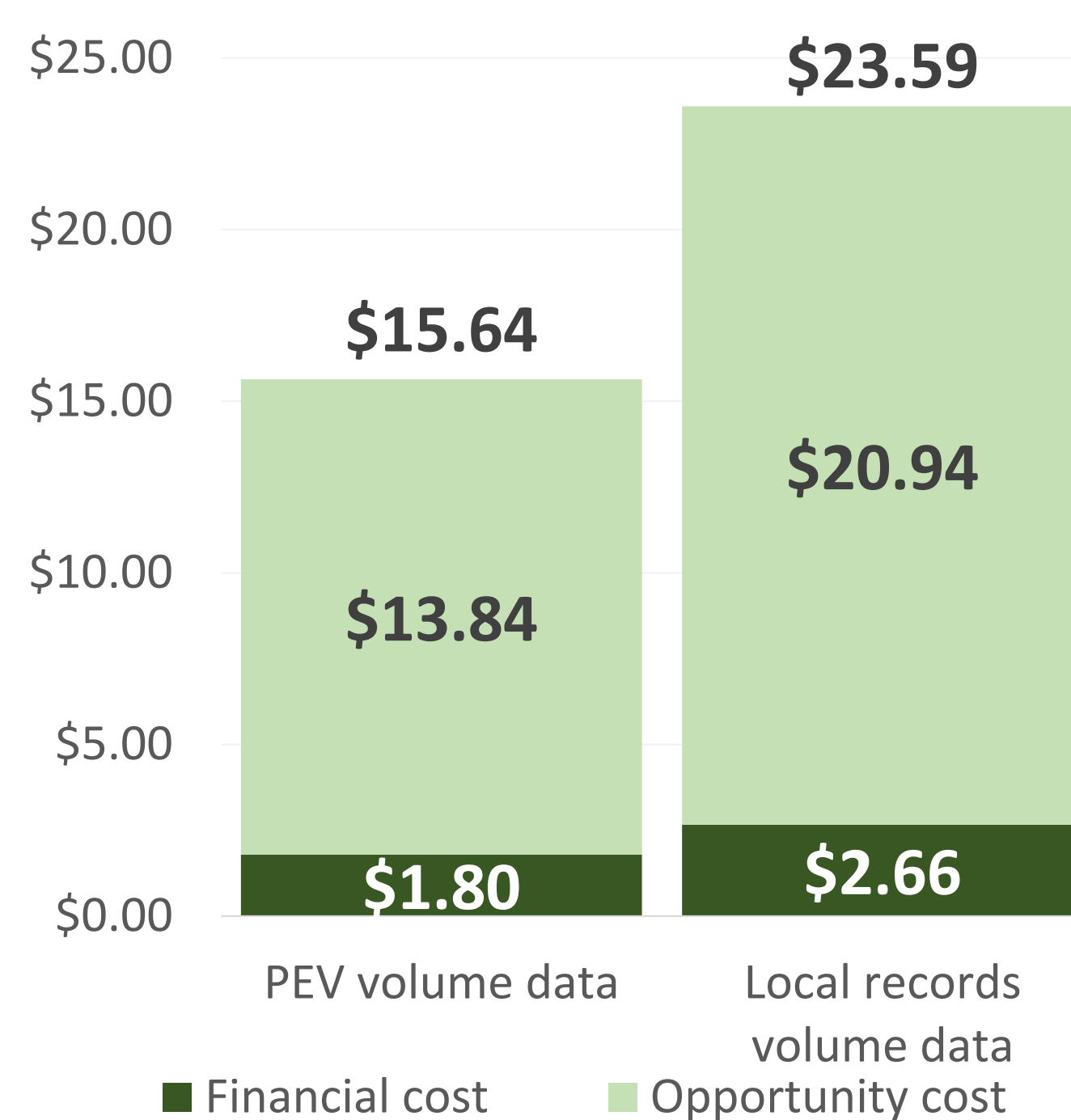
- **Retrospective, bottom-up** costing study with primary data collection at **26 purposively sampled immunization sites** in the urban and high coverage provinces of Kinshasa and Haut-Katanga and the rural and lower coverage Kongo Central.
- **Payer perspective**, including costs incurred by the PEV (EPI) at implementation and administrative levels. Contributions by development partners will be added to final results but are not included in the preliminary findings presented here.
- **Recurrent costs** were collected for June 2022 and for the last C19 vaccination campaign implemented by each site; **start-up investments** were collected from March 2021 to June 2022. Findings are presented in 2022 USD.
- **Uncertainty** on doses delivered data (findings are calculated using doses delivered reported by sampled sites during data collection as well as doses delivered provided by the PEV) and on the price of AD syringes (sensitivity analysis on syringe prices will be added to final results).

Preliminary findings

1. Routine delivery was costlier than campaigns, due to lower delivery volume (8-18 vs. 34-52 doses/day/site)

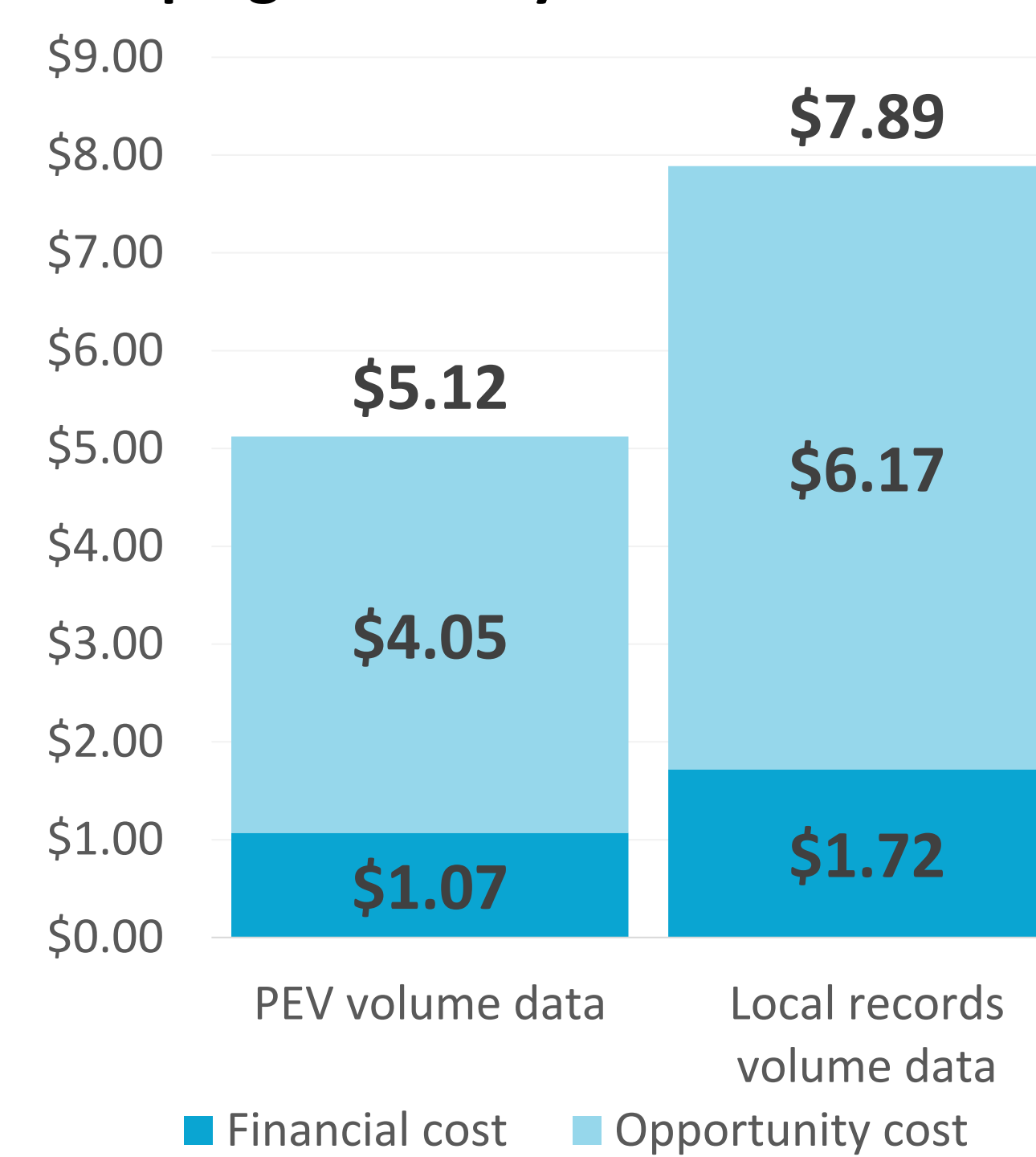
- The **economic cost per dose** for routine delivery ranged between \$15.64 and \$23.59
- Delivery though routine was more costly than though campaigns, due to **lower volumes** delivered on average across the sample
- **Opportunity** costs in routine represent **89%** of economic cost per dose, suggesting heavy reliance on existing resources

Figure 1. Economic cost per dose for routine delivery (June 2022)



2. Delivering through campaigns was more cost efficient but still costly when compared to other countries

Figure 2. Economic cost per dose for campaign delivery



- The **economic cost per dose** for campaign delivery ranged from \$5.12 and \$7.89
- Costs are higher than in other countries, due to low delivery volumes of 34-52 doses/day
- **Opportunity** costs represent **79%** of economic cost per dose, suggesting that campaigns received more additional funding compared to routine delivery

3. Cost drivers across routine and campaigns did not differ, despite use of different delivery strategies

- While only fixed sites were used in routine delivery, 14% of campaign doses in our sample were delivered through temporary sites. Despite this **difference in delivery strategy mix**, the **cost structure was very similar** across routine and campaign.
- **Labor** from health staff and volunteers was the largest cost component for both routine and campaign (~83% in routine and ~75% in campaigns), mostly relating to existing staff. More health staff and more volunteers were newly recruited for C19 vaccinations in routine when compared to campaigns (an average of 1.1 staff/site, compared to 0.7 in campaigns). New recruits were mostly paid by donors.
- Both in routine and campaigns, most costs went towards **vaccine administration activities** (~21% in routine and 23% in campaigns), followed by **program management** (~18% in routine and 19% in campaigns). Only 7-9% of the economic cost and 5-9% of financial costs went towards social mobilization.



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