

Engagement of private providers with immunization programmes- Summary of literature

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Outline

- Summary of 2 literature reviews-General Findings
- Specific findings regarding private provider-Illustrative examples:
 - Contribution to **coverage**
 - **Service quality** issues
 - **AEFI and vaccine-preventable disease surveillance; performance reporting**
 - **Regulation**
 - **Engagement and role in decision-making processes**
- Conclusion

Review-2011. Levin and Kaddar

General findings:

- Few studies- 37 papers, varied focus
- Private sector: varying roles (e.g. delivery of vaccines provided by gov't or not)
- Contribution to coverage poorly documented
- Not-for-profit (NGOs):
 - extend service delivery of EPI vaccines in urban or remote, especially in fragile or low income countries
 - more likely to be coordinated with public
- For-profit: facilitates early adoption of new vaccines before public sector
- Quality of vaccination services sometimes inadequate, little monitoring
- Scant info on regulation or examples of private-public collaboration

Review-2017. Mitrovich et al. General findings:

- Literature still scant- 31 papers, 5 expert interviews
 - Contribution to coverage remains poorly documented
 - Limited information on successful models of private-public collaboration
- In private sector, lack of:
 - program monitoring
 - AEFI reporting
 - Vaccine preventable disease surveillance
- Quality concerns about private sector services remain
 - But most high-income countries had mechanisms to monitor service quality
- Void in information about interaction between pharmaceutical industry and private sector

Other recent literature (non-review) included

Survey: private providers' engagement in immunization in WPRO region¹

- 18 WPR countries invited, 14 responded
 - 32 public (e.g, EPI manager) respondents (14 countries), 28 private (6 countries)
- **3 areas:**
 - Regulation
 - Scope
 - Partnership with NIP

Study in 4 African countries using service provision assessment facility surveys²

Study of practices of private immunization providers, 2 large cities Gujarat India³

¹Amarasinghe, Davison, Diorditsa, *WPRO, report 2017*

²Olorunsaiye et al. *Missed opportunities and barriers for vaccination: A descriptive analysis of private and public health facilities in four African countries*, in press, Pan African Medical Journal. 2017

³Hagan et al. (2017) *Knowledge, Attitudes, and Practices of Private Sector Routine Immunization Providers in Gujarat, India*. Submitted

Contribution to coverage-

3 dimensions

- Proportion of *private providers providing vaccination services*
- Proportion of *vaccinations provided by private*
- Vaccination coverage *private compared to public*
- In each dimension, measurement not always standard across studies (e.g., “all vaccines” vs “any vaccines” given in private sector)

Contribution to coverage- illustrative examples

- **Proportion of *private providers providing vaccination***
 - Study in 4 African countries¹: Vaccination provided less commonly in for-profit
 - Private for-profit (range 25-37%) provided vaccination
 - Private not-for profit (range 79-95%)
 - Public (range 90-96%)
- **Proportion varies by antigen. Example-Cambodia study²:**
 - 36% of for-profit offered Hepatitis B vaccine; 4% offered measles, DPT

¹ Olorunsaiye et al. *Missed opportunities and barriers for vaccination: A descriptive analysis of private and public health facilities in four African countries*, in press, Pan African Medical Journal. 2017

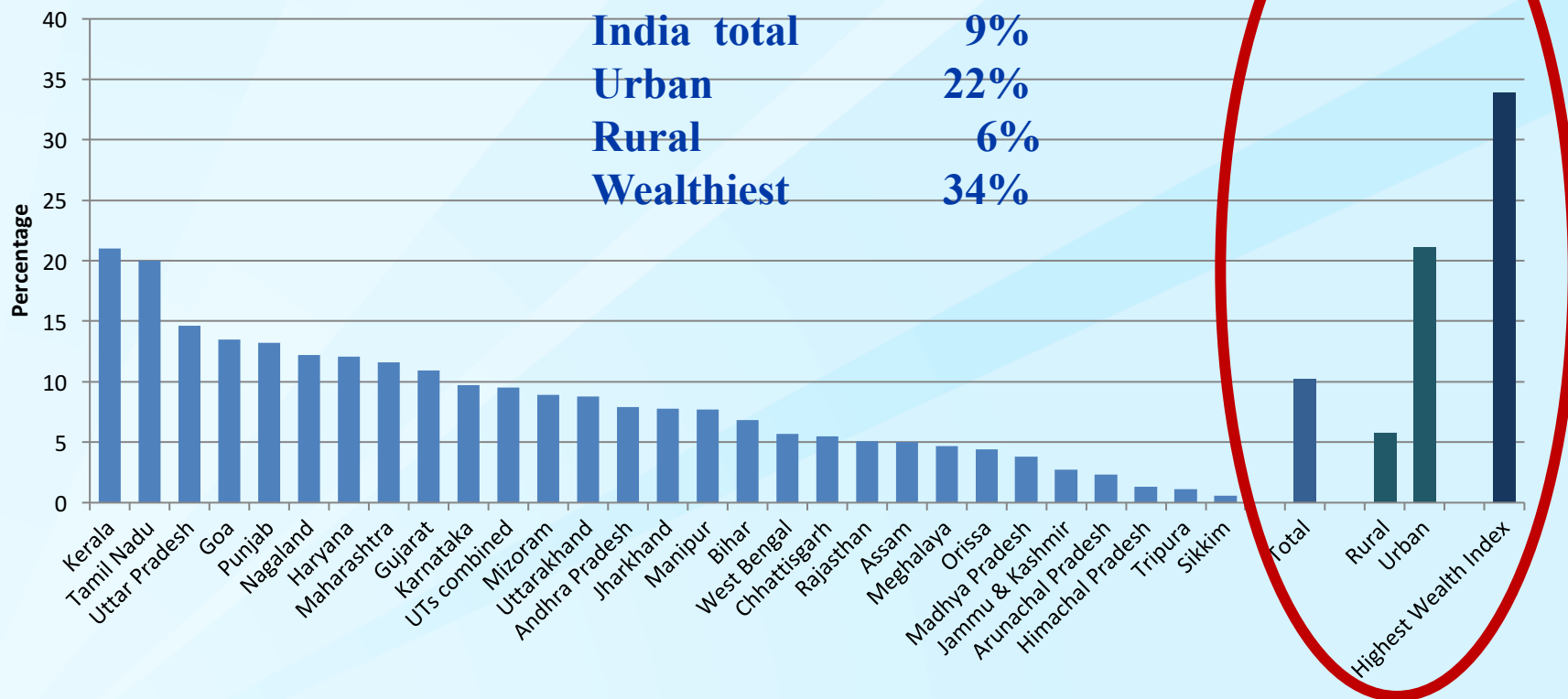
² Soeung et al. *Evaluation of immunization knowledge, practices, and service-delivery in the private sector in Cambodia*. J Heal Popul Nutr. 2008

Contribution to coverage- illustrative examples

- **Proportion of *vaccinations provided* by private providers.**
 - Varies by antigen. Spain study example¹
 - Private providers gave 31% of EPI routine vaccines but 63% of varicella and 47% PCV
 - Varies by country, region, measurement (partially vs totally vaccinated)
 - *Next slide shows example*

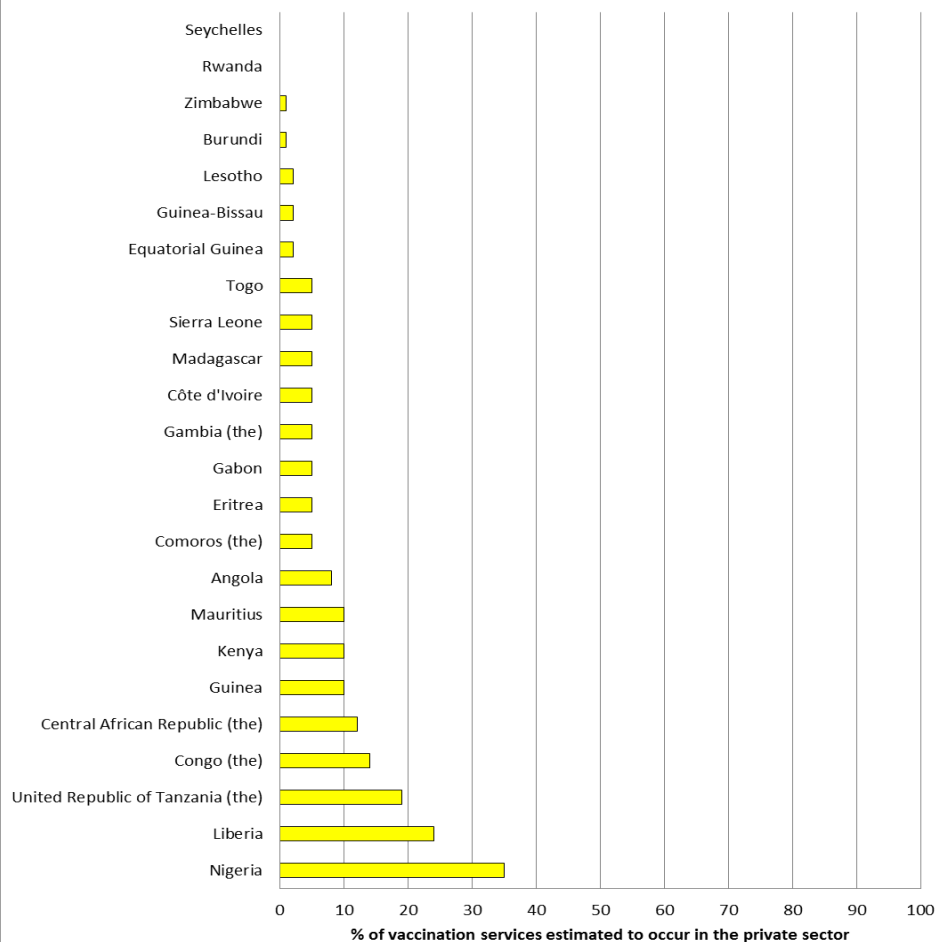
¹ Borrás et al. The influence of public or private paediatric health care on vaccination coverages in children in Catalonia (Spain). European Journal of Public Health 19.1 (2009): 69-72.

Percentage of Children Aged 12-23 Months Partially or Fully Immunized in Private Sector in India, 2009 (survey)

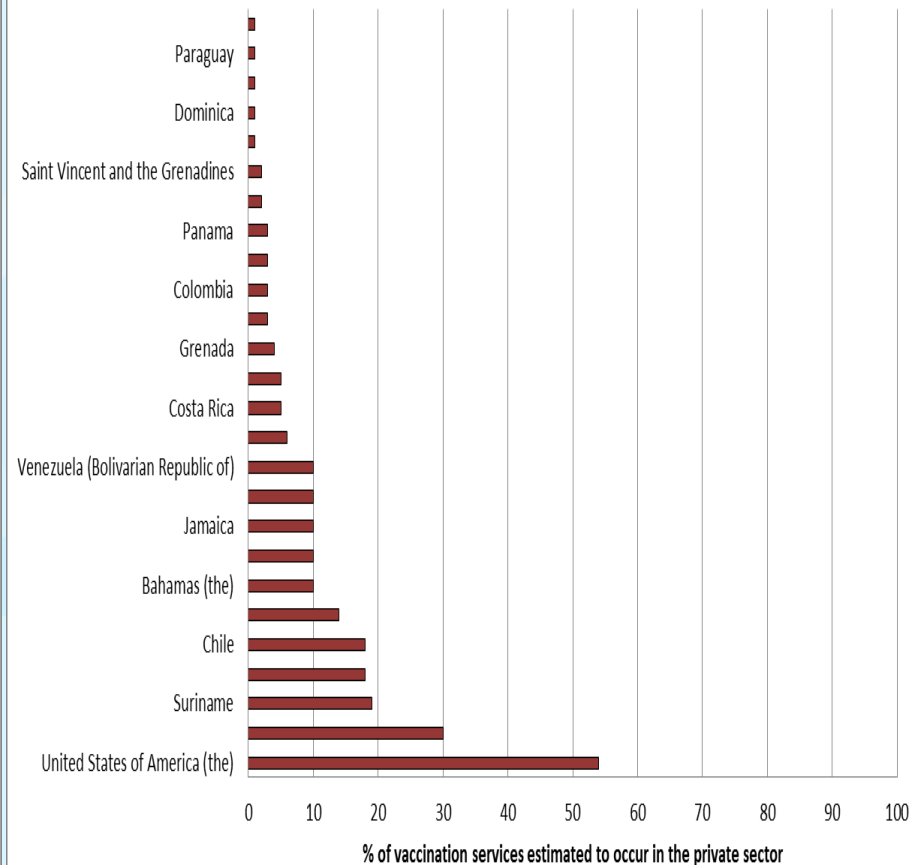


Estimate of % of vaccination provided in private sector, as reported on the JRF 2015-1

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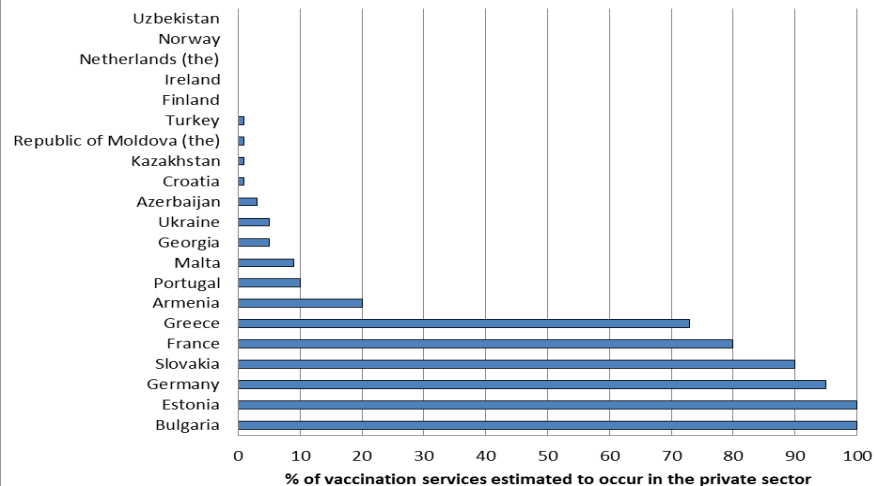
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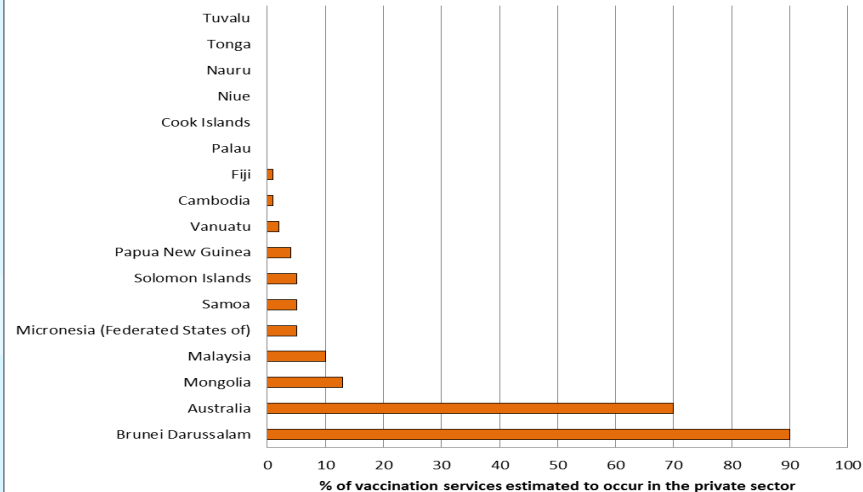
% of vaccination services estimated to occur in the private sector

Estimate of % of vaccination provided in private sector, as reported on the JRF 2015-2

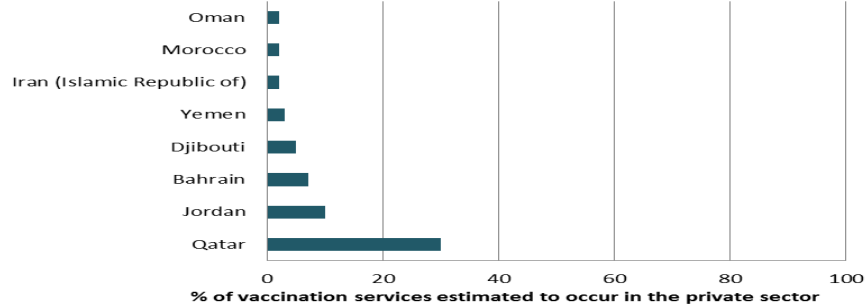
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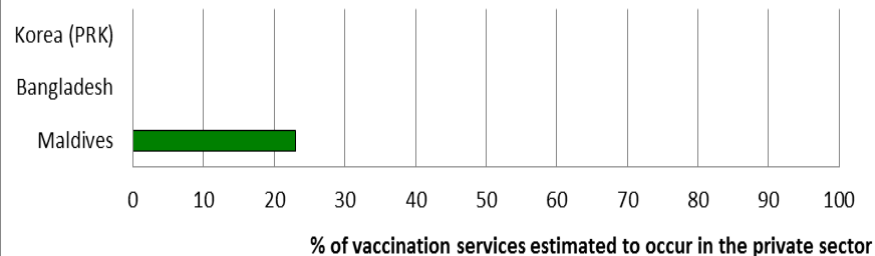
WPR



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Contribution to coverage- illustrative examples

- **Vaccination coverage, private compared to public- few studies:**
 - Subsaharan Africa¹: Odds of not vaccinated ~5 times higher where all facilities are for-profit compared to areas with no for-profit facilities.
 - Philippines, Vietnam^{2,3}: lower timely Hep B birth dose coverage in private sector
 - Spain⁴: No difference private vs public (88% in both)
 - Libreville, Gabon (urban)⁵ : For-profit coverage higher than public sector

¹ Sood and Wagoner. For-profit sector immunization service provision: Does low provision create a barrier to take-up? *Health Policy Plan.* 2013;28(7):730–8.

² Patel MK et al. Findings from a hepatitis B birth dose assessment in health facilities in the Philippines: Opportunities to engage the private sector. *Vaccine.* 2014;32:5140–4.

³ Murakami H, Van Cuong N, Huynh L, Hipgrave DB. Implementation of and costs associated with providing a birth-dose of hepatitis B vaccine in Viet Nam. *Vaccine.* 2008;26(11):1411–9.

⁴ Borrás et al. *The influence of public or private paediatric health care on vaccination coverages in children in Catalonia (Spain).* *European Journal of Public Health* 19.1 (2009): 69-72. 2009

⁵ Ategbo et al. Immunization coverage of children aged 0 to 5 years in Libreville (Gabon). *Sante.* 2011;20(4):215–9.

Service quality issues- illustrative examples

- Cambodia¹: private workers lacked knowledge about schedules, vaccine management
- Mauritania and Malaysia¹: private sector lacked correct cold chain equipment

From recent studies (after literature reviews):

- KAP study² of private pediatricians, general practitioners, urban Gujarat
 - Few (22%) providers used vaccine register to record doses
 - 60% not using A-D syringes
 - Cold-chain
 - Stage 3-4 VVMs in 18% of observed refrigerators
 - Vaccine vials sometimes stored in unrefrigerated thermal boxes; most in domestic refrigerators
- Missed opportunities, urban Gujarat²
 - 60% would not give >2 injections/visit
 - 50% would not vaccinate child if no vaccination card
 - 50% would not vaccinate child with mild illness
- Missed opportunities, 4 African countries³
 - <1/3 private providers assessed vaccination status during curative visit

¹ Summarized in Levin and Kaddar, 2011

² Hagan et al. (2017) Knowledge, Attitudes, and Practices of Private Sector Routine Immunization Providers in Gujarat, India. Submitted

³ Olorunsaiye et al. Missed opportunities and barriers for vaccination: Descriptive analysis of private and public health facilities in four African countries, in press, Pan African Medical Journal. 2017

Vaccine safety and disease surveillance reporting, performance reporting-illustrative examples

- KAP study of pediatricians, general practitioners, urban Gujarat¹
 - Many private providers would not report AEFI or VPD surveillance
 - 64% would report a case of acute flaccid paralysis
 - 22% would report a case with rash with fever and cough
 - Most unaware of reporting requirement
- Reporting of Hepatitis B vaccine doses by private
 - India²: sporadic reporting; more consistent in states with coordinated mechanism for reporting
 - Philippines³: Hepatitis B birth doses
 - 36% of private hospitals reported
 - 96% of government clinics reported

¹ Hagan, J et al. (2017) Knowledge, Attitudes, and Practices of Private Sector Routine Immunization Providers in Gujarat, India. Submitted

² Lahariya C, Subramanya BP, Sosler S. An assessment of hepatitis B vaccine introduction in India: Lessons for roll out and scale up of new vaccines in immunization programs. Indian J Public Health. 2013;57(1):8–14

³ Patel MK et al. Findings from a hepatitis B birth dose assessment in health facilities in the Philippines: Opportunities to engage the private sector. Vaccine. 2014;32:5140–4.

Regulation-illustrative examples

- Very little literature on regulation of private sector
- Most LMICs lack mechanisms to adequately regulate and enforce standards, due to limited human and financial resources
 - But most high income countries have mechanisms in place
- WPRO survey¹:
 - 12 of 14 countries have system/institution to regulate vaccination services by private providers but 50% of private providers unaware of policies, laws or guidelines
 - 11 of 14 countries regulated service fees for vaccination by private providers

¹ Amarasinghe et al 2016. *Survey on private providers' engagement in immunization in the Western Pacific region*

Engagement and role in decision-making-illustrative examples

- Not-for-profit more likely than for-profit to have arrangements with public sector (MOUs, contracts)
- WPRO survey 2016¹: Low level (25%) of private provider involvement in decision making processes (e.g., guidelines development, NITAG).

¹ Amarasinghe et al 2016. *Survey on private providers' engagement in immunization in the Western Pacific region*

Engaging with private sector:

Risks, benefits, challenges

Risks (of not engaging)

- Limited knowledge on effect on population immunity
 - Contribution to coverage
 - Practices resulting in suboptimal immunization
 - Disparities among populations
- Inability to improve or enforce vaccination service quality, especially since private sector not closely monitored in many countries

Benefits

- Potential expanded reach to underserved populations (e.g., urban)
- Potential to maximize efficiency in program delivery through collaboration

Challenges:

- Lack of trust between sectors and concerns about excessive regulation
- No established platform to convene stakeholders on roles and responsibilities, engagement
- Not one size fits all (must be tailored to country situation)
- Little information on successful collaborations

Conclusion

- 2 reviews found limited literature on role of private sector in vaccination service delivery
 - Particularly lack on documentation of private-partnerships
- Contribution to coverage varies widely. Larger in urban, wealthy
 - For-profit provide vaccination services less commonly than not-for profit or public
- Service quality concerns and missed opportunities exist (but not systematically documented)
- Suboptimal vaccine safety (AEFI) reporting and disease reporting
- Most LMICs lack adequate regulatory and accreditation framework
- Low level of private provider involvement in decision-making processes (e.g., guidelines development, NITAG).

Thank you!

For more information please contact Centers for Disease Control and Prevention

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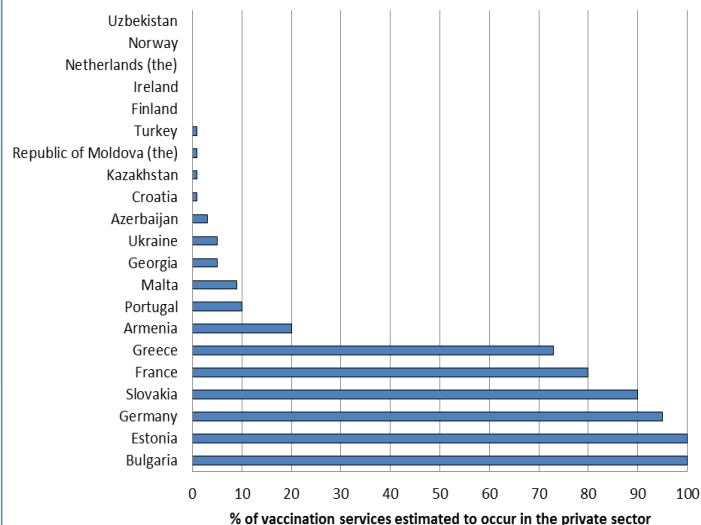
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

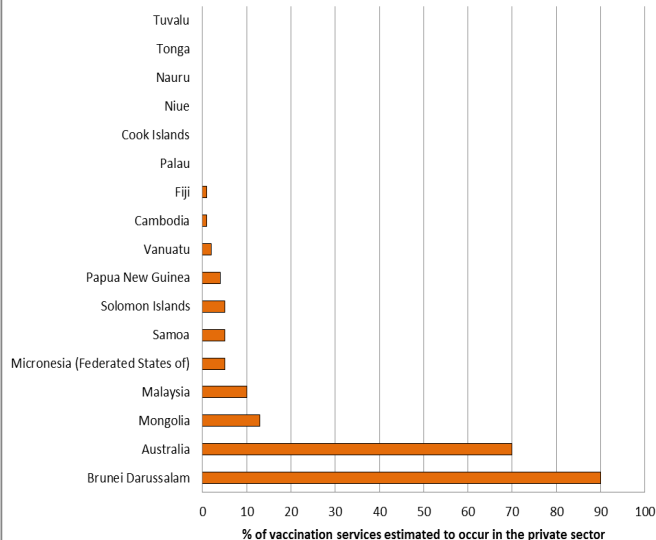
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Estimate of % of vaccination provided in private sector, as reported on the JRF 2015

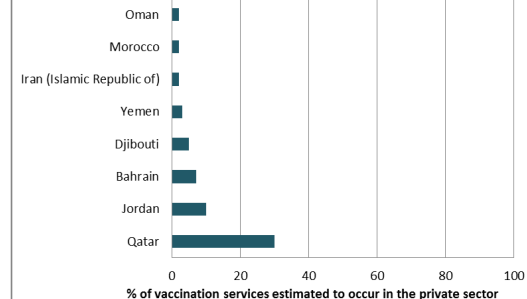
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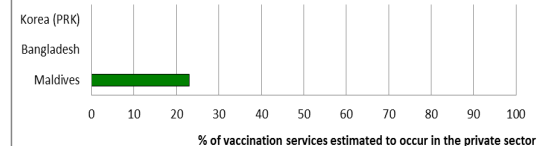
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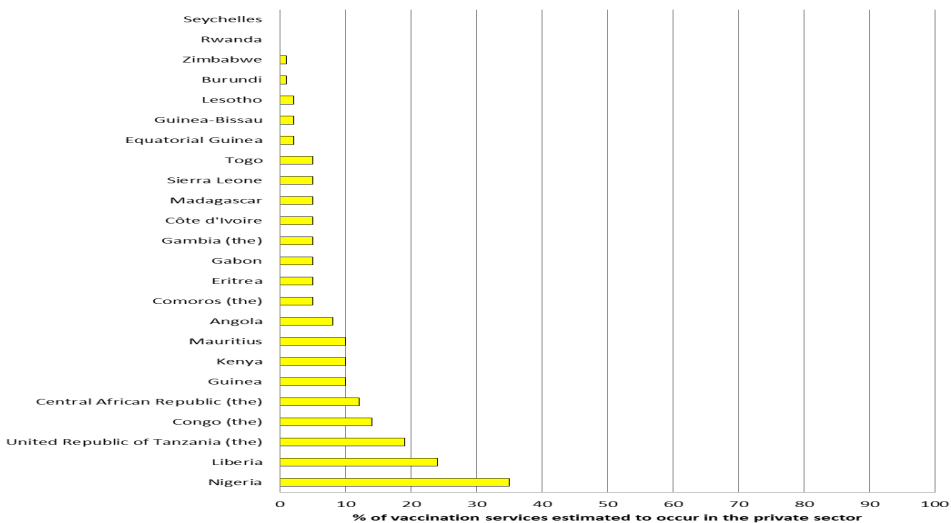
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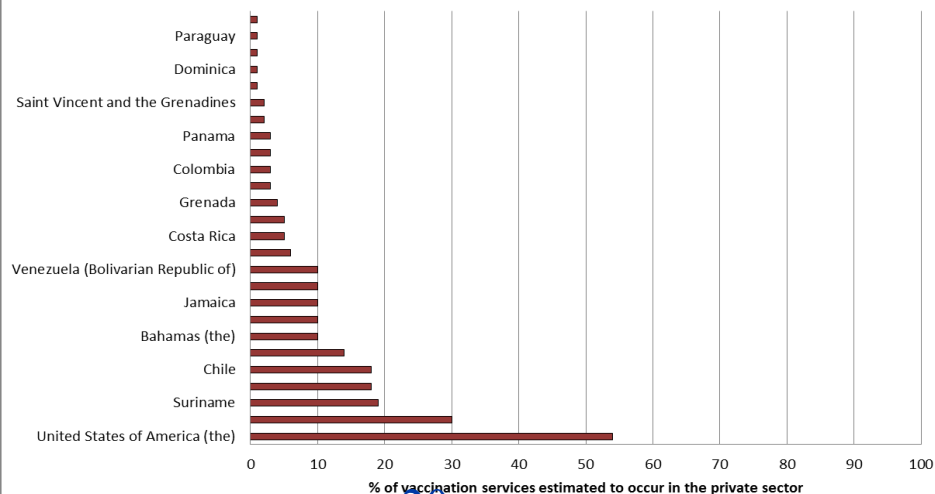
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For all graphs, interpretation should consider possible varying interpretation of definition of "private provider"