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 region

- 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 surveys

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

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1. Amarasinghe, Davison, Diorditsa, *WPRO, report 2017*
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 countries\(^1\): 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 study\(^2\):**
  
  – 36% of for-profit offered Hepatitis B vaccine; 4% offered measles, DPT

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Contribution to coverage-illustrative examples

• **Proportion of vaccinations provided by private providers.**
  – Varies by antigen. Spain study example\(^1\)
    • 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*

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

- **India total**: 9%
- **Urban**: 22%
- **Rural**: 6%
- **Wealthiest**: 34%

GOI/UNICEF Coverage evaluation survey 2009
Estimate of % of vaccination provided in private sector, as reported on the JRF 2015-1

For all graphs, interpretation should consider possible varying interpretation of definition of “private provider”.
Estimate of % of vaccination provided in private sector, as reported on the JRF 2015-2

For all graphs, interpretation should consider possible varying interpretation of definition of “private provider.”
Contribution to coverage-illustrative examples

- Vaccination coverage, private compared to public- few studies:
  - Subsaharan Africa\(^1\): 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
  - Spain\(^4\): No difference private vs public (88% in both)
  - Libreville, Gabon (urban)\(^5\): For-profit coverage higher than public sector

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Service quality issues- illustrative examples

• Cambodia\(^1\): private workers lacked knowledge about schedules, vaccine management
• Mauritania and Malaysia\(^1\): private sector lacked correct cold chain equipment

From recent studies (after literature reviews):
• KAP study\(^2\) 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 Gujarat\(^2\)
  – 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 countries\(^3\)
  – <1/3 private providers assessed vaccination status during curative visit

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\(^1\) 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 Gujarat\(^1\)
  – 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
  – India\(^2\): sporadic reporting; more consistent in states with coordinated mechanism for reporting
  – Philippines\(^3\): Hepatitis B birth doses
    • 36% of private hospitals reported
    • 96% of government clinics reported

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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 survey\(^1\):
  - 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 2016\(^1\): 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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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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