**Systematic review of the costs for vaccinators to reach vaccination sites: incremental costs of reaching hard-to-reach populations**

**Appendix 1.** Literature search terms for vaccinator costs

|  |  |
| --- | --- |
| **Vaccination Mechanism** | **PubMed Search Terms** |
| 1. Vaccinator is trained to administer vaccines | ((((cost\*[Title/Abstract]) OR costs [Title/Abstract])) AND (((immuniz\*[Title/Abstract]) OR vaccin\*[Title/Abstract]) OR immunis\*[Title/Abstract])) AND ((train\*[Title/Abstract]) ) |
| 2. Vaccinator is willing and available to vaccinate | ((cost\*[Title/Abstract]) AND (((immuniz\*[Title/Abstract]) OR immunis\*[Title/Abstract]) OR vaccinat\* [Title/Abstract])) AND (((((labor[Title/Abstract]) OR incentives[Title/Abstract]) OR salary[Title/Abstract]) OR salaries[Title/Abstract]) OR per diem[Title/Abstract]) |
| 3.  Vaccinator knows location of beneficiary | ((cost\*[Title/Abstract]) AND (((immuniz\*[Title/Abstract]) OR immunis\*[Title/Abstract]) OR vaccinat\*[Title/Abstract])) AND ((((((((records[Title/Abstract]) OR registry[Title/Abstract]) OR find unvaccinated[Title/Abstract]) OR information system[Title/Abstract]) OR identify unvaccinated[Title/Abstract]) OR record keeping[Title/Abstract]) OR locate unvaccinated[Title/Abstract]) OR tracking[Title/Abstract]) OR geographical information system[Title/Abstract]) OR GIS[Title/Abstract]) OR microplan\* [Title/Abstract]) OR map\* [Title/Abstract]) |
| 4. Vaccinator can travel to vaccination site | ((cost\*[Title/Abstract]) AND (((immuniz\*[Title/Abstract]) OR immunis\*[Title/Abstract]) OR vaccinat\*[Title/Abstract])) AND ((((((transport\*[Title/Abstract]) OR travel[Title/Abstract]) OR outreach[Title/Abstract]) OR campaign[Title/Abstract]) OR SIA[Title/Abstract]) OR supplementary immunization activity[Title/Abstract]) |

**Appendix 2.** Inclusion and exclusion criteria

|  |  |
| --- | --- |
| **Inclusion** | **Exclusion** |
| Studies that report primary costs that are disaggregated/specific to following components of vaccination programs or interventions:   1. Costs of training vaccinators; 2. Costs of labor, salaries, per diems, and incentives for vaccinators; 3. Costs of immunization record-keeping, immunization registries, immunization information systems, geographic information systems(GIS), microplanning and other interventions/tools used by vaccinators to track and locate vaccine beneficiaries; and 4. Costs of travel/transportation for vaccinators traveling to vaccination sites. | * Study not specific to human vaccination programs or interventions * Does not include costing information * Cost data is not disaggregated or specific to mechanism/component of interest (for example, study reports overall transport costs including costs for transporting vaccines or cold-chain equipment i.e. not specific to costs for vaccinators) * Does not include primary costs (e.g. modeling studies) * Study is a systematic review * Not in English * Published prior year 2000 |