Records identified through searching Pubmed and Web of Science Core Collection (n = 7628)

Records screened after duplicates removed (n = 5522)

Records assessed for eligibility (n = 759)

Abstracts included in descriptive analysis (n = 698)

Full-text articles included in qualitative analysis (n = 24)

Records excluded based on: other discipline, no IBM, no transmission model or no research article (n = 4761)

Records excluded based on: full-text screening (n=100) for unclear model descriptions (n = 61)

Studies excluded for full-text screening based on: no vaccine-preventable childhood disease (n = 674)