Methods used to produce the evidence gap reports.

We used the following seven steps to produce the evidence gap report.

1. **Identification of relevant systematic reviews**

   In partnership with PAHO team members, we prioritized specific topic domains relevant to improving the resilience of health systems. An information specialist then designed search strategies to identify relevant systematic reviews in each prioritized domain. The highest priority reviews in each domain were then identified by two researchers, working independently.

2. **Extraction of implications for future**

   From the selected systematic reviews, we extracted information about the implications for research stated by the original authors. We also extracted the date of their search and any restrictions (e.g., geographical), and the number of included studies.

3. **Classification of identified gaps**

   Two researchers independently classified the identified implications for research into five main categories: (A) More research is needed; (B) More high-quality research is needed; (C) More research with higher external validity is needed; (D) More research is needed to better understand a phenomenon; and (E) Other.

4. **Updating the searches of the systematic reviews**

   To identify whether the identified gaps may have been filled since the systematic review was produced, we conducted an updated search for potentially relevant research in PubMed using a modified version of the original search terms and strategies used in the systematic review to, for example, target the search to a specific gap or type of article.

5. **Classification of gaps by research type**

   For systematic reviews for which the search was more than 10 years in the past, we first ran a search limiting to systematic reviews in order to find more recent systematic reviews of the same topic as the original review. If we found no such reviews, we expanded the search to look for any more recent individual primary studies that would be eligible for the original review. If the prioritised review’s search date was less than 10 years ago, we searched both for more recent systematic reviews of the topic and individual primary studies that would be eligible for the original review.

6. **Results of the updated searches**

   We screened the records retrieved by our searches in duplicate to identify research with the potential to fill the identified research gap.

7. **Assessment of the status of the existing gaps**

   Finally, a third researcher determined whether this research fully or partially addressed the research gap identified by the original systematic review.