Pediatric Research Priorities in Healthcare-Associated Infections and Antimicrobial Stewardship

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For which topic were research priorities identified?
healthcare-associated infections and antimicrobial stewardship

In which location was the research priority setting conducted?
North America - USA

Why was it conducted at all?
The burden of healthcare-associated infections (HAIs) among hospitalized infants and children is substantial and approximates rates reported in adults. Importantly, several observations demonstrate why evidence derived from adult studies cannot always be applied to children. A pediatric research agenda is needed to focus on pediatric HAIs and AS questions that will yield the highest possible impact on child health.

What was the objective?
to develop a pediatric research agenda focused on pediatric healthcare-associated infections and antimicrobial stewardship topics that will yield the highest impact on child health

What was the outcome?
a list of 12 research topics

How long did the research prioritization take?
7 months

Which methods were used to identify research priorities?
Delphi; meeting; survey

How were the priorities for research identified exactly?
Step 1: literature review. Step 2: Delphi round 1: survey: participants were asked to identify research topics, to provide a brief rationale, approach to study design, feasibility, and potential overall cost, overall 15 topic ideas were submitted by participants, resulting in longlist of 55 topics together with topics from literature review, 55 topics were then aggregated to 28 topics. Step 3: Delphi round 2: survey: list of 28 topics, participants were asked to rate each topic on three criteria, participants were also asked to identify a specific target population for each topic. Step 4: Delphi round 3: via meeting: several participants presented key published articles that focused on gaps in pediatric HAI and AS research, participants were then grouped by their major domain of research (HAI or AS) to discuss the results of round 2, each group was asked to identify the top 10 priority topics in their domain, participants then convened to share perspectives, participants then asked to rank the 13 HAI topics and 15 AS topics from highest to lowest priority. Step 5: survey with payoff matrix: list of 13 HAI topics and 15 AS topics, participants assigned each topic into 1 of 4 categories: group 1 (feasible and high-impact), group 2 (low feasibility but high-impact), group 3 (feasible, but low-impact) and group 4 (low feasibility and low-impact). Step 6: final selection of topics: via two teleconferences: the HAI expert group developed consensus that the top 6 research topics should be considered high priority, the AS expert group identified 9 research topics from the payoff matrix and chose to re-rank them, the group then developed consensus that the top 6 should be considered high priority

Which stakeholders took part?
26 HAI and AS expert clinicians and researchers.

How were stakeholders recruited?
Experts from geographically diverse institutions with research and clinical operations expertise in HAI or AS were identified.

Were stakeholders actively involved or did they just participate?
Stakeholders were mere participants of the research prioritization process; they were not actively involved in the process.