Using Concept Mapping to Understand Multi-State Perspectives on Barriers and Facilitators to HPV Vaccination

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Background

• Human papillomavirus (HPV) infection causes about 35,000 cases of cancer annually
• The HPV vaccine is recommended to prevent HPV infection and its associated cancers
• Despite the existence of multiple interventions, HPV vaccination remains below that of other adolescent vaccines
• We conducted a multi-state concept mapping project to elicit feedback from state-level stakeholders about reasons for low HPV vaccination rates

Phase 1 Participants

• We identified state-level stakeholders working in adolescent health, cancer prevention, or immunization in 5 states
• We sent email invitations to 134 stakeholders asking them to participate in an online concept mapping project

Methods and Results

The online concept mapping process consisted of two phases.

Phase 1: Brainstorming

• Participants respond to the following: What factors do you believe have the greatest influence on HPV vaccination rates in your state? Please provide an exhaustive list and consider both rural and urban regions, as well as both positive and negative influences.

Phase 2 + 3: Pile Sorting and Rating

• Participants grouped statements by how similar in meaning they were and then rated each statement on a 5-point scale:
  - Importance: How important is addressing this factor for impacting HPV vaccination rates in rural areas of your state?
  - Feasibility: It would be feasible to address this issue in rural areas of my state within the next 6 months. (agree/disagree)

Conclusions

• Results contextualize low HPV vaccination rates and identify priority areas for improvement
• Lower feasibility ratings for several of the most important—and possibly most effective—clusters suggest that stakeholders perceive significant barriers to their work
• The similarity across states indicates that pooling resources and ideas across states may increase efficiency and avoid duplication of effort
• Concept mapping is a useful way to gather information from geographically diverse audiences and could be used to better understand state level efforts for cancer prevention and control

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2. https://www.cdc.gov/mmwr/volumes/68/wr/mm6833a2.htm