



Efficacy of Rural Highschool Pre-Health Profession Pipeline Programs

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Background

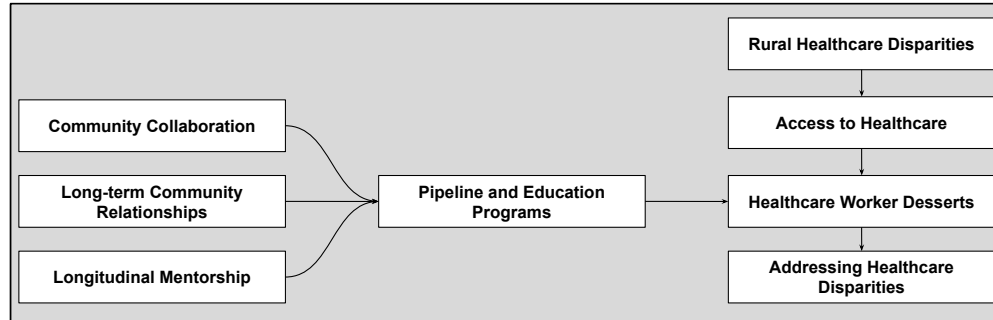
- In Colorado, rural physician shortages are pronounced
- 61% of primary care health profession shortage areas were located in rural areas, many of them are located on reservations
- “Since 2015, 181 rural hospitals have closed across the country”
- Colorado Area Health Education Center (COAHEC) uses outreach programs such as COAHEC CADAVERS and COAHEC HOPE Program and Institute to provide educational outreach and opportunities for students in rural areas to enter healthcare workforce training.
- Early exposure to healthcare increases interest in the medical field

Objectives

- Examine how rural pre-health pipeline programs influence workforce development and health equity
- Discuss past and current programs that have seen success in community engagement
- Understand how cultural context influences engagement in rural and Indigenous communities
- Analyze the role of longitudinal engagement in sustaining student career pathways

Methods

- Conducted literature review of peer-reviewed research on rural health workforce development
- Reviewed culturally grounded intervention models in Indigenous and rural communities
- Assessed program evaluation reports including outcomes from rural training placements
- Reviewed literature on diversity, representation, and educational inequities in medicine
- Analyzed studies examining rural healthcare disparities and barriers to access



Key Findings

- Rural communities face persistent healthcare access barriers including geographic isolation, transportation limitations, and provider shortages
- Workforce shortages are intensifying as many rural physicians approach retirement with limited replacements entering rural practice
- Early exposure to healthcare careers significantly increases rural students' interest and confidence pursuing health professions
- Longitudinal mentorship and community-based learning experiences produce stronger educational outcomes than single-event programs
- Rural clinical training placements significantly increase participants' intention to practice medicine in underserved rural communities
- Short and Long-term mentorship is key for high school student retention and engagement.
- Students from underrepresented racial and ethnic groups continue facing structural barriers entering higher education and medical training
- Healthcare workforce diversity does not reflect growing Latino and Indigenous populations in many rural regions

Conclusions

- Rural pipeline programs represent a promising strategy for addressing workforce shortages
- Short and Longterm mentorship increase retention and engagement
- Longitudinal tracking is needed to evaluate long-term workforce impacts
- Culturally grounded programming strengthens engagement in Indigenous and rural communities.
- Early exposure combined with sustained mentorship produces stronger long-term career outcomes.
- More work is needed in order to have longitudinal programs with a lasting effect

Disclosures

- There are no disclosures to discuss

References

