Dental workforce shortages in rural communities are endemic, despite research on best practices to enhance the rural workforce. This study examines evidence-based workforce strategies in the US and the alignment of policy and infrastructure to enable their success.

**Methods**
- Literature search identified 10 global strategies to enhance the rural dental workforce.
- Classified each strategy as retention-, recruitment-, or redesign-focused and graded each as low, medium, or high evidence (few, mixed, or strong studies/outcomes, respectively) based on prevalence and effectiveness in the US.
- Highlighted any policies (federal, state, or local) to assess whether implementation aligned with the evidence base.

**Results**
- Recruitment approaches such as loan repayment programs (LRP) and pipeline programs are shown to have some effectiveness in the short-term but lack long-term retention, while unexplored avenues such as J-1 visas for foreign-trained dental professionals may have some promise.
- Exposure to rural lifestyle—either through upbringing, rural dental programs, or rural externships—may have positive long-term impacts on rural workforce retention.
- There is extensive research and support for introducing new mid-level providers and expanding scope of practice as well as utilizing systems outside of traditional office practice.

**Key Findings**

**Recruitment**
- Available evidence on LRPs supported on the state and federal levels shows some effectiveness in recruiting providers to these areas, but long-term retention has proven difficult.
- Pipeline programs have been shown to have a positive impact on rural/underserved communities.
- Utilizing J-1 visas for foreign-trained medical professionals has shown some effectiveness, but is not used in the dental field.
- Some state-based initiatives to increase dentists' salary through increased Medicaid reimbursement, but there is minimal evidence to support this strategy.

**Redesign**
- There is some evidence supporting the utilization of the entire dental team (community dental health coordinators, dental therapists, and dental hygienists) to the full scope of their training.
- Incorporating preventive oral health services into primary care is widely supported but state and federal policy can better align with the evidence.
- Mobile clinics, school-based dental programs, and Rural Health Clinics in particular, are integral to providing access to care that would otherwise be nonexistent.

**Retention**
- High level of evidence supporting increasing the number of dental students with rural upbringings improves retention.
- 66 dental programs in US (9 opened in the last 10 years, 2 in the last 5 years), but most are in urban centers of rural states with rural externships. Long-term impacts have not been adequately assessed.
- Federal funding available for externships to underserved communities, lack of dental services to serve as training sites in rural communities may be a limitation and extensive research on this strategy is limited.

**Discussion**
- The strongest evidence to inform recruitment/retention efforts was found in efforts that combined multiple approaches into a pipeline program with an explicitly rural focus.
- Addressing personal and professional factors such as enjoying rural lifestyle and sense of integration in the community are important for retention.
- Structural approaches to changing the model of care delivery are largely absent in practice but have been extensively studied and found to be beneficial to improve rural dental access.
- Limitations: restricting to reviewing literature and documents only where they were available. Lack of evidence does not indicate lack of efficacy; only that researchers can't find strong studies.

**References**

**Acknowledgements**
- Funding from the Oral Health Workforce Research Center (OHWRC) and the Health Resources and Services Administration.
- Thanks to OHWRC and Davis Patterson.