

# Lessons Learned During 20 Years of the National Dental PBRN



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## OBJECTIVES

To describe lessons learned in the 20-year history of the National Dental Practice-based Research Network (PBRN; NationalDentalPBRN.org).

## METHODS

In existence since 2005, the network is an interdisciplinary collaboration of researchers seeking to improve oral health. It includes 8,000+ members, a National Administrative and Resource Center, National Coordinating Center, specialty node, and six U.S. regional nodes. Team science activities are administered centrally and regionally, using an administrative system designed to optimize decision-making and practitioner involvement, while enabling consensus building and Continuous Quality Improvement. Studies are funded via investigator-initiated grants. Scientific productivity is assessed using specific metrics.

## RESULTS

To date, 57 studies have been completed/in data collection, investigating a broad range of topics using a wide variety of study designs. Of studies with completed enrollment, 75,353 patients were enrolled, as were 20,832 practitioners (some participated in multiple studies), plus electronic health records for 790,493 patients in two data-only studies. To date, these studies have led to 225 peer-reviewed publications in 68 different journals. The mean (1.40) Relative Citation Ratio of Network publications connotes a greater-than-average influence in their fields. Processes evolved to benefit nodes and study teams directly and indirectly from the expertise of other nodes. Certain personnel in one node may be especially experienced in meeting a specific goal. A healthy tension exists between research and clinical practice regarding the need to collect detailed, comprehensive data in busy clinics; these lessons learned have helped streamline these PBRN studies.

## DISCUSSION & CONCLUSION

The network's team science approach supports continuous learning and quality improvement. Lessons learned from network studies have improved subsequent studies, processes, and scientific productivity. This infrastructure has enabled clinical scientists to conduct impactful, realworld research in non-academic settings on topics that affect oral (and overall) health, while also providing additional recruitment venues outside of the typical academic health center research context.





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