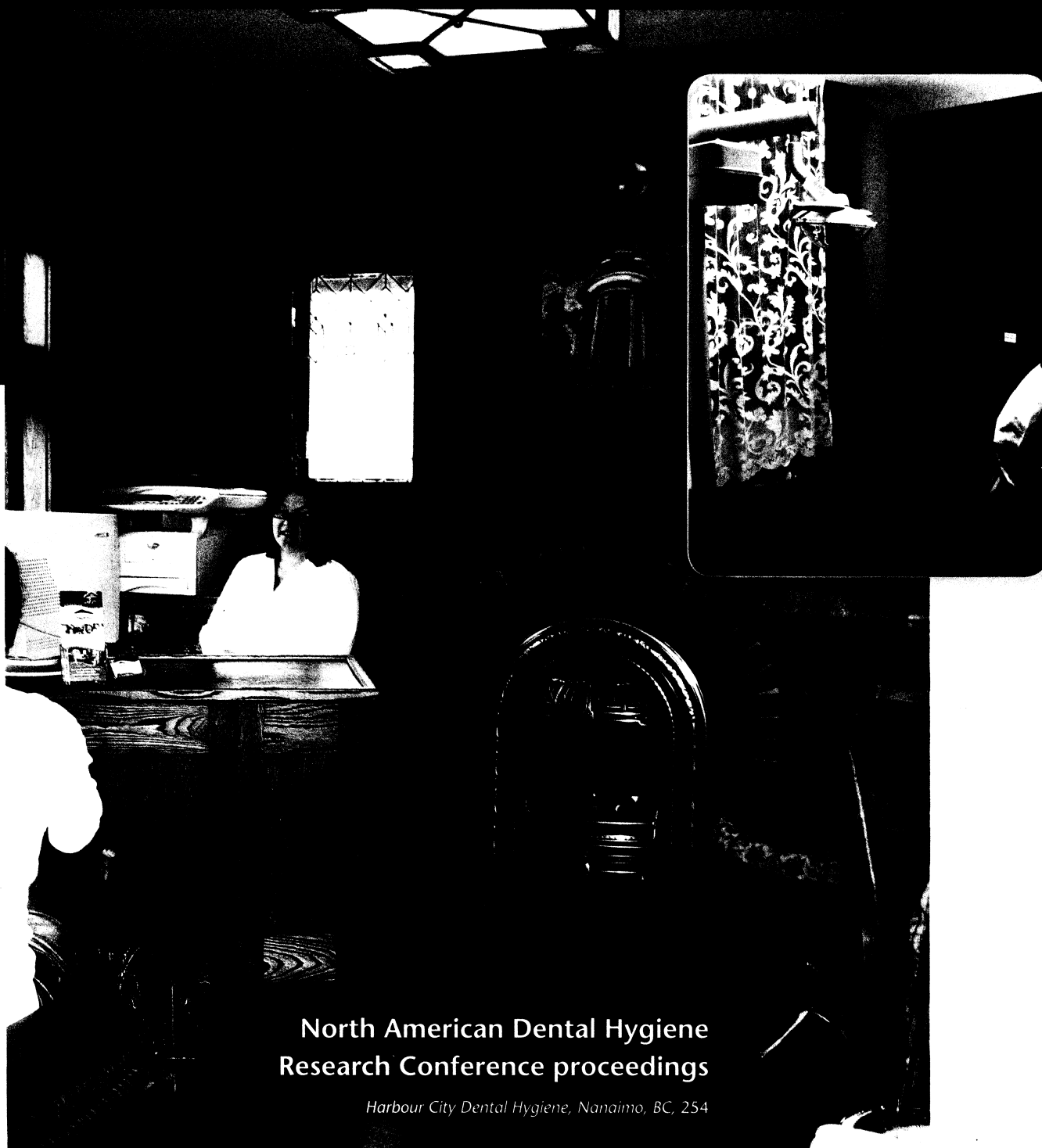


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## **An update from “The Dental PBRN”**

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The Dental Practice-Based Research Network (DPBRN) was developed in response to a 2004 initiative from the National Institute of Dental and Craniofacial Research (NIDCR).<sup>1</sup> The mission of DPBRN is “To improve oral health by conducting dental practice-based research and by serving dental professionals through education and collegiality.” It is committed to maximizing the practicality of conducting research in daily clinical practice across geographically dispersed regions, so its structure is designed to focus some activities at the regional level (e.g., close interactions with practitioner-investigators) and other

activities that can be done on behalf of the entire network centrally (e.g., study development).<sup>1,2</sup>

The DPBRN central administrative base is at the University of Alabama at Birmingham, comprising the Office of the Network Chair and the Coordinating Center. DPBRN is unique in that it encompasses 4 regions in the U.S. and 1 in Scandinavia. For 2 DPBRN regions, collaborations were established with 2 organizations: HealthPartners (HP) of Minneapolis, Minn. and Kaiser Permanente Northwest/Permanente Dental Associates (PDA) of the greater metropolitan Portland, Ore. area. HP is a prepaid, multi-specialty group that provides comprehensive health care. PDA is a multi-specialty dental group that contracts with Kaiser Permanente Northwest (KPNW) to provide dental services for KPNW prepaid comprehensive health plan members. The 5 DPBRN regions are:

1. The Alabama/Mississippi region, which almost entirely comprises persons in private practice, although a few practices are in public health settings
2. The Florida/Georgia region, which also comprises almost entirely persons in private practice, although a few practices are in public health settings
3. The Minnesota region, which comprises providers employed by HealthPartners and providers in private practice in Minnesota
4. The Permanente Dental Associates region (PDA), which comprises entirely practitioner-investigators in Oregon and Washington in the PDA organization, in cooperation with the Kaiser Permanente Northwest Research Foundation's Center for Health Research
5. The Scandinavian region, which comprises dentists and dental hygienists in Denmark, Norway and Sweden, about one-half are in private practice and one-half are in a public health setting

The Executive Committee is the main decision-making body of the network and is structured to make DPBRN a practitioner-driven network. It makes decisions on operational issues, considers appropriateness and suggests changes

in study procedures, reviews the network's progress and prioritizes research topics, among other duties. The committee meets approximately 6 times each year, with most meetings held by videoconference. By design, majority voting authority resides with its 6 practitioner-investigator representatives. In addition to 1 practitioner-investigator from each of DPBRN's 5 regions, there is a member-at-large representative for the combined Alabama/Mississippi and Florida/Georgia regions. To be eligible to serve as a practitioner-investigator representative, a DPBRN practitioner must meet the following criteria: be a licensed practitioner, be a general dentist or dental hygienist who sees patients in a general practice setting, has participated in at least 1 DPBRN clinical study, has access to e-mail, is able to receive attachments via e-mail and is willing to communicate via e-mail on a regular basis and is able to participate in the regularly-scheduled meetings. One vote is also given to each of 3 non-practitioner-investigators (Network Chair, Principal Investigator of the Coordinating Center, NIDCR representative).

Both dentists and dental hygienists can be DPBRN practitioner-investigator members. To become a member of DPBRN, practitioners must complete a 101-item enrollment questionnaire. The Enrollment Questionnaire is publicly available at <http://www.DPBRN.org> under the Enrollment/Join tab. DPBRN has 20 approved studies as of June 2009. Stratified by phase, the titles of these studies are:

*Data collection completed*

- Dental tobacco control randomized clinical trial
- Practice-based root canal treatment effectiveness
- Assessment of caries diagnosis and caries treatment
- CONDOR case-control study of osteonecrosis of the jaws
- Retrospective cohort study of osteonecrosis of the jaws

- Distinguishes the practice from other practices, acting as a practice promoter or practice builder
- Increases the practice's visibility and stature among dental patients
- Enhances communication with patients by showing that the practitioner-investigator cares about the scientific basis of daily clinical practice
- Expands the vision for patient care by including a formalized research and quality improvement component
- Provides a focus for clinical excellence by devoting increased short-term attention to 1 particular area of clinical practice at a time
- Can improve the logistics of daily clinical operations, serve as a team builder for practice staff and engage the entire staff in the excitement of discovery and quality improvement
- Projects can improve the quality of dental care by contributing to the scientific basis for the dental procedures that are their focus

- Provides venues for collegial interactions and exchange of ideas with fellow practitioner-investigators become part of a community of learning and camaraderie
- Receive financial remuneration for the time spent doing research
- Allows practitioner-investigators to see what is effective in their practices in comparison to other practices—using results that are presented anonymously
- Practitioner-investigators decide what studies are done and what treatment is done - not third parties
- Potential to present at local, state, national and international dental meetings and research conferences
- Receive Continuing Education credit for attendance at DPBRN annual meetings and participating in training and certification activities for specific DPBRN studies
- Receive certificates suitable for framing and display in the office

Table 1. Benefits of participating in DPBRN as communicated by DPBRN practitioner-investigators

- Reasons for placing the first restoration on permanent tooth surfaces

*In data collection phase*

- Reasons for replacement or repair of dental restorations
- Patient satisfaction with dental restorations
- Longitudinal study of dental restorations placed on previously un-restored surfaces
- Prevalence of questionable occlusal caries lesions
- Development of a patient-based provider intervention for early caries management
- Blood sugar testing in dental practice

*Approved by the Protocol Review Committee, but not in data collection phase yet*

- Longitudinal study of questionable occlusal caries lesions
- Longitudinal study of repaired or replaced dental restorations
- Hygienists' internet tobacco cessation randomized clinical trial
- Perioperative pain and root canal therapy
- Persistent pain and root canal therapy
- Assessing the impact of participation in practice-based research on clinical practice and patient care
- Incidence of post-operative infection after oral osseous surgery
- CONDOR Temporomandibular Joint Disease Study

Experiences in DPBRN demonstrate that dentists and dental hygienists from a broad array of practice settings and geographic regions will readily contribute research ideas and participate in practice-based studies. Benefits to participating in DPBRN have comprised a broad range (Table 1). As practitioner-investigators become knowledgeable of the benefits to their practices and patients, and see others being successful with their PBRN participation, they become motivated to engage in the excitement of discovery and the camaraderie from interacting with fellow practitioner-investigators.

PBRNs are based on the understanding that the experience, insight and practical wisdom of daily clinical practitioners and their patients are powerful means to advance the health of the population and address challenges encountered in daily clinical practice. The dental care sector can play an active role in these advancements, showing that knowledge transfer not only happens in the research-to-practice direction, but also in the practice-to-research direction.

#### References

1. Gilbert GH, Williams OD, Rindal DB, Pihlstrom DJ, Benjamin PL, Wallace MC, DPBRN Collaborative Group. The creation and development of The Dental Practice-Based Research Network. *J Am Dent Assoc.* 2008;139(1):74-81.
2. Makhija SK, Gilbert GH, Rindal DB, Benjamin P, Richman JS, Pihlstrom DJ for the DPBRN Collaborative Group. Dentists in practice-based research networks have much in common with dentists at large: evidence from "The Dental PBRN," *Gen Dent.* 2009; in press.

about DPBRN is located at [www.DPBRN.org](http://www.DPBRN.org). Persons who comprise the DPBRN Collaborative Group are listed at <http://www.DPBRN.org/users/publications>. Opinions and assertions contained herein are those of the authors and are not to be construed as necessarily representing the views of the respective organizations or the National Institutes of Health.

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