

# Dental and primary care professionals learning and collaborating to improve oral health

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## 1 | PROBLEM

Oral health is a leading public healthcare priority in Healthy People 2030<sup>1</sup> and the Surgeon General's Report.<sup>2</sup> Access to oral health is problematic, especially in rural and underserved areas having dental care health professional shortage areas (HPSAs). Dental professionals partnering with nurse practitioners (NPs) working in community-based settings who serve HPSAs could be a solution to obtaining dental care. NPs are well positioned to complete oral health examinations, assess for potential oral

and systemic-related risks, provide aspects of preventive oral care, and make appropriate referrals. Enhanced oral health training for non-dental providers can result in positive outcomes when oral exams, risk assessments, patient education, and referrals occur routinely.<sup>3</sup>

## 2 | SOLUTION

During the initial development of a Nurse Practitioner Residency (NPR) program, a gap related to oral health

**TABLE 1** Competency statement survey.

Survey: as a result of the clinical rotation, please rate each competency statement according to agreement level using the following Likert scale:

1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree

1. Understanding how to perform a comprehensive history and physical exam in this specialty
2. Selecting which appropriate screening and diagnostic test to order in this specialty
3. Distinguishing between clinical situations which require consultation and clinical situations which may be managed without a referral
4. Understanding basic pharmacology and the selection and administration of medications commonly used in the specialty
5. Applying and evaluating the assessment, diagnosis, treatment, and management of common medical conditions seen in this specialty including those most commonly encountered in primary care
6. Understanding and recognizing clinical procedures commonly implemented in this specialty
7. The dental professionals effectively provided coaching regarding integrating knowledge in practice
8. The dental professionals exhibited professional communication skills that facilitated learning
9. The dental professionals modeled compassion and care in professional practice
10. The dental professionals modeled strong clinical reasoning skills
11. The dental professionals facilitated and demonstrated organizational and leadership traits
12. The dental professionals exhibited a positive attitude for coaching
13. The dental professionals were engaged in the clinical experience
14. The clinical environment was conducive to learning
15. The overall learning experience was positive

Additional comments:

TABLE 2 Competency survey results.

Competency	Resident responses to competency statements			N:3 Mean
	Resident 1	Resident 2	Resident 3	
1	5	4	4	4.33
2	5	3	4	4
3	5	4	5	4.67
4	5	2	5	4
5	5	4	4	4.33
6	5	4	5	4.67
7	5	3	5	4.33
8	5	5	5	5
9	5	5	5	5
10	5	5	5	5
11	5	5	5	5
12	5	5	5	5
13	5	4	5	4.67
14	5	5	5	5
15	5	4	5	4.67

TABLE 3 Survey—post rotation comments.

**Themes:****1. Collaborative experience***Comments:*

- A. “Strength of rotation (was) incorporating collaboration”
- B. “I was able to pick the professionals brain about what I can do in primary care”
- C. “This was a great rotation”

**2. Time frame of observational experience***Comments:*

- A. “I do think the 4 h were enough for us, if it were the full 8 h it would have gotten very monotonous”
- B. “One 1/2 day is appropriate” (for this rotation)
- C. (The rotation experience) “was (of) appropriate length”

**3. Interaction with dentist***Comments:*

- A. “Dentist was great. Definitely has a passion for practice and teaching”
- B. “Very eye opening and humbling to see the amount of dental needs there are in the community”

was identified. Consequently, the NPR director and dental hygiene faculty collaboratively developed enhanced oral health-related curricula.<sup>4</sup> Dental hygiene faculty used the free access Oral Health Nursing Education and Practice program and its *Smiles for Life*<sup>5</sup> curricula as a framework for specific content in the curriculum. Its open-source modules were adapted for educational purposes in the program.<sup>4</sup>

Next, an observational clinical experience was added. After modules were completed, NP residents participated in a rotation in the University’s dental hygiene clinic, partnering with dental hygiene students, faculty, and dentists. Frequently, consultation with medical practices clears patients for dental treatment. The rotations’ objectives included: improving understanding of the complexities

of caring for medically complex patients in dentistry and increasing residents’ confidence and competence in applying skills to collaborative practice.

Interprofessional collaborative practice occurred as the NP stood with the DDS and assessed the medical histories, observed the examination processes (including oral cancer screenings), and application of preventive treatments, and discussed potential complications interfering with the provision of dental care. Opportunities to discuss details of identified concerns emerged in real time. Mid-day, a collaborative discussion between dental participants and NP residents determined each rotation’s objective had been met.

A post-experiential survey (Table 1) was administered to measure confidence and competency associated with

incorporating oral health-related perspectives when providing care. This specialty rotation survey measured 15 competencies with 5 agreement levels from *strongly disagree (1) to strongly agree (5)*.

### 3 | RESULTS

Mean scores (Table 2) range from 4.0 to 5.0 indicating positive responses.

This project increased knowledge and confidence in these practitioners to adopt oral health risk assessment into daily practice. A clinical rotation with dental professionals enhanced the NP's understanding of the role of a dental professional/NP partnership in optimizing overall care. Further, the NPs better understood the specific concerns of dental professionals in providing care to patients having complicated medical histories. Post-survey narratives confirmed the appropriateness of the timeframe for the rotation (Table 3).

This project added an experiential observation in a dental clinic to the oral health content modules in a residency or graduate nursing program. It could serve as an inter-professional model addressing the dental needs prevalent across the nation.

### REFERENCES

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