Data Brief

Dentists’ Knowledge, Support, and Participation in Proposed Dental Care Access Solutions: Results of the North Dakota Survey of Practicing Dentists

This data brief is complementary information to a series of fact sheets regarding Oral Health in North Dakota.

Shawnda Schroeder, PhD and Nathan Fix, MPH

Key Findings

- North Dakota dentists reported more knowledge about dental therapy (40% had significant knowledge) than any other proposed access solution.
- Dentists indicated more support for increasing Medicaid reimbursement than for any other initiative (98% supported on some level), though only 23% identified significant knowledge on the topic.
- Roughly 46% of dentists indicated they would not participate (utilize) dental hygienists at their current scope of practice, which was previously expanded during the 2013 Legislative session.
- Only 15% of all dentists would participate at some level in dental therapy.
- Dental therapy was the only model with a statistically significant difference in level of participation between rural (23% would participate at some level) and urban dentists (11%).
- Only two models had more than 50% of the dentists agree or strongly agree that they would increase access to dental care for rural, American Indian, Medicaid, or low-income residents in North Dakota.
  - Roughly 66% of dentists agreed/strongly agreed that case management would increase access.
  - Nearly 76% agreed/strongly agreed that expanding reach of safety-nets would increase access.

Introduction

During 2015, the North Dakota Legislature considered the licensure of a new dental provider, a dental therapist (DT). The proposed legislation did not pass, though Senate Concurrent Resolution number 4004 called for additional study of the proposed oral health workforce solutions, to include assessing the State infrastructure needed to support DT as a profession. During 2017, House Bill 1256 was proposed to license DTs in the State. In response to previous and current legislation, the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences developed a survey to assess dentists’ knowledge of proposed oral health workforce legislation, support...
for the proposed workforce models among dentists, and the willingness of dental providers to participate in each. Following is the general presentation of the results with particular attention to DT, as was requested in Senate Concurrent Resolution number 4004. Disparities between rural and urban dentists, dental practice type, and other demographics will be addressed more specifically in topic-specific fact sheets.

**Methods**

Researchers at the Center for Rural Health developed a survey to assess dentists’ knowledge, support for, and willingness to participate in nine oral health workforce solutions identified in key oral health legislation, and by the North Dakota Dental Association. See Table 1. The tool was developed in partner with a Dr. Catalanotto from the Southeast Center for Research to Reduce Disparities in Oral Health. He serves as the Chair of Oral Health America’s Board of Directors and had recently developed a similar survey assessing dentists’ attitudes toward dental therapy (DT) in Florida, Georgia, and Mississippi. Researchers disseminated a paper copy of the survey with a pre-paid return envelope, and a link to an online version. The first round of surveys were sent through priority mail in December 2016 to all dentists in the State with a practice address on record with the State Board of Dental Examiners. Only those who did not initially respond received a reminder with an additional survey and pre-paid return envelope, sent through USPS standard shipping in early January 2017. Responses were anonymous.

Table 1. Proposed Dental Care Access Solutions: Survey Variables

<table>
<thead>
<tr>
<th>Workforce Model</th>
<th>Abbreviation</th>
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</thead>
<tbody>
<tr>
<td>Funding and implementation of case management, including as a reimbursable service</td>
<td>Case Management</td>
</tr>
<tr>
<td>Increasing opportunities for dental students to complete residencies in North Dakota</td>
<td>Residencies</td>
</tr>
<tr>
<td>Additional locations and funding for dental safety-net clinics, including mobile units</td>
<td>Safety-nets</td>
</tr>
<tr>
<td>Increasing Medicaid reimbursement for dental services</td>
<td>Medicaid</td>
</tr>
<tr>
<td>Expanding the service area (funding) of Seal!ND, providing sealants in a school setting</td>
<td>Seal!ND</td>
</tr>
<tr>
<td>Utilizing dental hygienists (DH) at their expanded scope of practice (once certified), including limited restoration procedures under direct supervision of a dentist</td>
<td>Current DH</td>
</tr>
<tr>
<td>Further expansion of the scope of practice for dental hygienists (DH) including expanded restorative procedures, and general or indirect supervision</td>
<td>Expand DH</td>
</tr>
<tr>
<td>Expanding the scope of practice for dental assistants (DAs) including preventative and restorative services, and utilizing the workforce if certified</td>
<td>Expand DA</td>
</tr>
<tr>
<td>Develop and utilize a CODA* certified dental mid-level provider (which may or may not borrow from emerging workforce models in MN and/or AK)</td>
<td>Dental Therapy</td>
</tr>
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</table>

*CODA is the Commission on Dental Accreditation. CODA serves the public and profession by developing and implementing accreditation standards that promote and monitor the continuous quality and improvement of dental education programs.

**Results**

Approximately 421 North Dakota dentists received the survey; analyses included 187 completed surveys for a response rate of 44%. Roughly 58% of respondents served predominantly urban communities while 42% provided care primarily to rural residents. A large majority (77%) practiced general family dentistry. Dentists predominately served in either a solo (49%) or small group (37%) practice. Only 13% of respondents were not members of the North Dakota Dental Association.
**Knowledge**

Dentists were more knowledgeable about DT than any other proposed dental care access solution. More than half of the responding dentists had no knowledge regarding case management (65%), and dental residencies (57%). See Figure 1. North Dakota does not have a school of dentistry, nor does the State have a reciprocity agreement with any regional dental school. As a result, dentists likely have little knowledge regarding residencies for dental students. However, the North Dakota Dental Association introduced and proposed case management as a model, and yet, only 9% of dentists identified significant knowledge of the proposal, while 25% had some knowledge, and 65% identified no knowledge.

**Support**

Dentists illustrated more support for increasing Medicaid reimbursement (98% supported, or would support depending on the specifics) than any other proposal. In contrast, a large majority (86%) did not support DT. See Figure 2. However, DT was the only model in which there was significant variation in the level of support between rural and urban dentists. A little more than one in five rural dentists supported DT at some level (21%), compared to only one in ten (10%) of urban dentists.
Results also indicated that 89% of dentists supported case management at some level, though 65% had reported having no knowledge around the given initiative. Dentists also indicated strong support for developing dental residencies for students, expanding the reach of dental safety-nets, and increasing the reach of Seal!ND.

**Participation**

Dentists were more willing to participate in proposed access solutions that did not involve changing the current workforce within their dental practices. Expanding Seal!ND and increasing Medicaid reimbursement had the highest anticipated participation among dentists, while models that proposed utilizing DHs, expanding the scopes of practice for DAs and DHs, and utilizing DTs had the lowest anticipated participation. See Figure 3. Roughly 85% of dentists indicated they would not participate in DT. However, similar to dentists anticipated support, rural dentists were significantly more likely to participate in DT at some level (23%) than were urban dentists (11%).

![Figure 3. Dentists' Support for Proposed Access Solutions](image)

**Improve Access Issues**

Dentists were asked to indicate their level of agreement that the proposed workforce solutions would increase access to dental care for rural, American Indian, Medicaid, or low-income residents in North Dakota. Only two proposed dental care access solutions had more than 50% of the dentists agree or strongly agree that the models would address access issues for populations in need. See Figure 4.

- Roughly 66% of dentists agreed/strongly agreed that case management would increase access.
- 76% agreed/strongly agreed that expanding reach of safety-nets would increase access.
- A majority of dentists disagreed/strongly disagreed that using the existing workforce at current, or further expanded, scopes of practice would improve access.
  - Roughly 61% strongly disagreed/disagreed that the current expanded scope of practice for DHs would increase access.
  - 70% and 57% respectively strongly disagreed/disagreed that expanding the scope of practice for DHs or DAs would improve access.
  - A large majority (91%) strongly disagreed/disagreed that DT would address the access issues facing rural, American Indian, Medicaid, or low-income residents in North Dakota.
Conclusions

During 2015, the North Dakota legislature reviewed significant oral health legislation, including enacting legislation that changed the dental loan repayment program and creating the Advanced Practice Dental Hygienist statute. It also reviewed and defeated a DT bill in a 40-6 vote. Between 2015 and the following 2017 session, the Center for Rural Health and other organizations educated the public and oral health professionals on the access issues prevalent in North Dakota. Studies reported the need for access to care among rural residents living in the 17 counties with no practicing dentist. Data illustrated significantly high rates of decay and need for treatment among American Indian youth, and reports also highlighted the need for dental care among Medicaid enrollees with 72% of children enrolled in Medicaid reporting no preventive dental visit during 2015.

Recognizing the continued need for oral health care access in North Dakota, the 2017 State Legislature again proposed bills related to the dental care services and access. Specifically, House Bill 1256 again identified licensing DTs in North Dakota to address access concerns for rural, Medicaid, and American Indian populations. The Bill received a “do-pass” from the House Human Services Committee, but was later defeated in the State House by a 32-59 vote.

The 2017 DT bill did not pass. However, a recent nationwide survey found that 81% of voters favored licensing and utilizing DTs in their states. A DT cannot practice, even if licensed by their state, if there are not dentists who support and believe in utilizing the new provider type to meet the needs of disparate populations. There has been little support for DT among dentists, and a large majority of those surveyed in North Dakota (85%) would not participate. However, data also illustrated a shift in thinking among rural dentists with 23% indicating they would participate, or would depending on the specifics.

Acknowledgements

Thank you to the dentists in North Dakota who responded to the survey. Thank you to Dr. Catalanotto for providing insight on the survey, and mailing method. This survey was funded by the Pew Charitable Trusts, though the tool and findings are the original work of the Center for Rural Health, without influence from the foundation. The Center for Rural Health neither supports nor opposes DT legislation, but instead, has a mission to connect resources and knowledge to strengthen the health of people in rural and tribal communities.
Data Table

See Table 2 for a presentation of the Likert scale questions assessing knowledge, support, and participation. Data are valid percents and omit missing data.

Table 2. Dentists’ Knowledge, Support, and Anticipated Participation

<table>
<thead>
<tr>
<th>Case Management</th>
<th>No Knowledge</th>
<th>Some Knowledge</th>
<th>Significant Knowledge</th>
<th>No Support</th>
<th>Support Depends</th>
<th>Support</th>
<th>No Participate</th>
<th>Participation Depends</th>
<th>Participate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residencies</td>
<td>65%</td>
<td>26%</td>
<td>9%</td>
<td>11%</td>
<td>62%</td>
<td>27%</td>
<td>20%</td>
<td>64%</td>
<td>17%</td>
</tr>
<tr>
<td>Safety-Nets</td>
<td>57%</td>
<td>37%</td>
<td>7%</td>
<td>3%</td>
<td>46%</td>
<td>52%</td>
<td>23%</td>
<td>53%</td>
<td>25%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>43%</td>
<td>46%</td>
<td>11%</td>
<td>13%</td>
<td>39%</td>
<td>48%</td>
<td>25%</td>
<td>51%</td>
<td>24%</td>
</tr>
<tr>
<td>PassND</td>
<td>24%</td>
<td>53%</td>
<td>23%</td>
<td>2%</td>
<td>12%</td>
<td>87%</td>
<td>16%</td>
<td>27%</td>
<td>57%</td>
</tr>
<tr>
<td>Current DH</td>
<td>32%</td>
<td>49%</td>
<td>19%</td>
<td>11%</td>
<td>37%</td>
<td>52%</td>
<td>22%</td>
<td>43%</td>
<td>36%</td>
</tr>
<tr>
<td>Expand DH</td>
<td>17%</td>
<td>54%</td>
<td>29%</td>
<td>41%</td>
<td>36%</td>
<td>23%</td>
<td>46%</td>
<td>37%</td>
<td>18%</td>
</tr>
<tr>
<td>Expand DA</td>
<td>19%</td>
<td>53%</td>
<td>29%</td>
<td>50%</td>
<td>34%</td>
<td>16%</td>
<td>55%</td>
<td>32%</td>
<td>14%</td>
</tr>
<tr>
<td>Dental Therapy</td>
<td>25%</td>
<td>52%</td>
<td>23%</td>
<td>36%</td>
<td>41%</td>
<td>24%</td>
<td>42%</td>
<td>41%</td>
<td>17%</td>
</tr>
</tbody>
</table>

References


For more information

Visit the CRH webpage for additional oral health publications and information.
ruralhealth.und.edu/what-we-do/oral-health

Shawnda Schroeder, PhD
701.777.0787 • shawnda.schroeder@med.und.edu

Center for Rural Health
University of North Dakota School of Medicine & Health Sciences
1301 North Columbia Road, Stop 9037, Suite E231
Grand Forks, ND 58202-9037
701.777.3848 • ruralhealth.und.edu