Study on the Need for a Centralized Dental Recruitment Program, Dental Temporary Coverage Program and Dental Loan Forgiveness in Kansas
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A Study on the Need for a Centralized Dental Recruitment Program, Dental Temporary Coverage Program and Dental Loan Forgiveness in Kansas

PREFACE

The United Methodist Health Ministry Fund contracted with Rural Health Education and Services (RHES) of the University of Kansas Medical Center to assess the need among the state’s rural communities, safety net clinics and rural health networks for a 1) centralized dental recruitment program, 2) dental temporary coverage program, and a 3) dental loan forgiveness program. In addition, RHES conducted telephone surveys to a selected number of states regarding dental recruitment programs, dental temporary coverage programs, and dental loan forgiveness programs. The purpose of examining programs in other states was to identify the services these programs provide to their constituents and to identify “best practices” in state dental recruitment, dental temporary coverage, and dental loan forgiveness initiatives.

Information for this study was obtained by mailing written surveys to Kansas licensed dentists, Kansas registered dental hygienists, Kansas chambers of commerce, Kansas league of municipalities, and Kansas safety net clinics and community health centers. Telephone interviews were conducted with representatives from dental school placement offices and with Primary Care Association or Primary Care Office representatives in other states. On-line surveys were conducted with current dental students in surrounding states as well as current dental hygiene students in Kansas.

The following staff conducted the study: Lorene R. Valentine, Director; Joyce Tibbals, Assistant Director; Laurie Stroebel, Research Assistant; Susan Belden, Office Coordinator; Andrea Ellis, Assistant Director; and Marinn Rank, KRC Office Coordinator.

The results of the surveys are described in this document. For additional information or if you have questions, please contact me.

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A Study on the Need for a Centralized Dental Recruitment Program, Dental Temporary Coverage Program and Dental Loan Forgiveness in Kansas

EXECUTIVE SUMMARY

The Project

The United Methodist Health Ministry Fund contracted with Rural Health Education and Services (RHES) of the University of Kansas Medical Center to assess the need among the state’s rural communities, safety net clinics, and rural health networks for a 1) centralized dental recruitment program, 2) dental temporary coverage program, and a 3) dental loan forgiveness program. In addition, RHES performed telephone surveys to a selected number of states regarding dental recruitment programs, dental temporary coverage programs, and dental loan forgiveness programs. The purpose of studying programs in other states was to identify the services these programs provide to their constituents and to identify “best practices” in state dental recruitment, dental temporary coverage, and dental loan forgiveness initiatives. The study consisted of written surveys mailed to Kansas licensed dentists, Kansas registered dental hygienists, Kansas chambers of commerce, Kansas league of municipalities, and Kansas safety net clinics and community health centers. Telephone interviews were conducted with representatives from dental school placement offices and with Primary Care Association and Primary Care Office representatives from programs in other states. On-line surveys were conducted with current dental students in surrounding states as well as current dental hygiene students in Kansas.

The Need in Kansas for a Dental Recruitment Program

Fifty-eight percent (58%, 7) of the safety net clinics/community health centers and 21% (97) of the dentists stated that they currently need assistance recruiting dentists. If, in the future, there was a need to recruit a dentist, 58% (7) of the safety net clinics/community health centers and 52% (241) of the dentists stated that they would use a dental recruitment service.

Of the dental students and dental hygiene students surveyed, 64% (328) of the dental students and 75% (70) of the dental hygiene students do not have an employment opportunity for after graduation. Sixty-five percent (65%, 334) of the dental students and 67% (62) of the dental hygiene students reported they would use a dental recruitment service to explore available practice opportunities.

Eighteen percent (18%, 79) of the dentists and 41% (5) of the safety net clinics/community health centers reported that they are recruiting for at least one dentist. Over the next three years, 39% (179) of the dentists and 66% (8) of the safety net clinics/community health centers plan to recruit at least one dentist.

Thirteen percent (13%, 59) of the dentists and 42% (5) of the safety net clinics/community health centers are recruiting at least one dental hygienist; over the next three years, 35% (165) of the dentists and 66% (8) of the safety net clinics/community health centers plan to recruit at least one dental hygienist.

Within the next five years, 11% (55) of the responding dentists plan to retire; within the next five to ten years, 26% (120) of the dentists plan to retire. Fifty-five percent (55%, 253) of the responding dentists state that they will recruit a new dentist upon retirement.

The Need in Kansas for a Dental Temporary Coverage Program

Thirty-one percent (31%, 144) of the dentists
would use a temporary coverage program for dentists and 40% (183) of the dentists would use a temporary coverage program for dental hygienists.

Fifty-eight percent (58%, 7) of the safety net clinics/community health centers would use a temporary coverage program for dentists and 50% (6) of the safety net clinics/community health centers would use a temporary coverage program for dental hygienists.

The Need in Kansas for a Dental Loan Forgiveness Program

Ninety-two percent (92%, 466) of the responding dental students have student loan debt and of those, 58% (295) owe more than $100,000. Seventy-six percent (76%, 71) of the dental hygiene students have student loan debt and of those, 57% (53) owe more than $11,000.

Sixty-nine percent (69%, 351) of the dental students and 62% (58) of the dental hygiene students reported that their decision regarding where to practice would be influenced by the availability of a loan forgiveness program.

RECOMMENDATIONS

Centralized Recruitment Program for Dentists and Dental Hygienists

Based on the results of this study, Rural Health Education and Services recommends a centralized recruitment program for dentists and dental hygienists be established if long-term funding is available to sustain the program. Fifty-eight percent (58%, 7) of the safety net clinics/community health centers and 21% (97) of the dentists stated that they currently need assistance recruiting dentists. If, in the future, there was a need to recruit a dentist, 58% (7) of the safety net clinics/community health centers and 52% (241) of the dentists stated that they would use a dental recruitment service.

According to the results, communities and dentists are reluctant to pay for services provided by a recruitment program. In addition to recruitment, staff will need to build relationships and inform community representatives and dentists about the value of a recruitment program. With information from the study, it will take additional time for program fees to sustain the program; therefore, long-term funding will be necessary.

Temporary Coverage Program for Dentists and Dental Hygienists

To provide practice coverage when a dentist or dental hygienist is away, Rural Health Education and Services recommends a temporary coverage program for dentists and dental hygienists be established. Although many dentists may locate dentists on his or her own that will cover the practice while he or she is away, the study shows that 31% (144) of the dentists would utilize a temporary coverage program for dentists and 40% (183) of the dentists would utilize a temporary coverage program for dental hygienists. Fifty-eight percent (58%, 7) of the safety net clinics/community health centers would utilize a temporary coverage program for dentists and 50% (6) of the safety net clinics/community health centers would utilize the program for dental hygienists.

In order to provide temporary coverage, dentists must have current Kansas licensure and profes-
sional liability insurance. Dental residents could potentially provide temporary coverage services as well.

**Loan Forgiveness Program for Dentists and Dental Hygienists**

To be competitive with other states, Kansas would benefit from a loan forgiveness program designed for dentists and dental hygienists. The study shows that 69% (351) of the dental students and 62% (58) of the dental hygiene students would be influenced in their decision when choosing a practice if a loan forgiveness program was available.

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**SURVEY INFORMATION**

**Kansas Licensed Dentists**
- 1424 surveys mailed out
- 463 surveys received
- Return rate: 33%

**Kansas Registered Dental Hygienists**
- 1606 surveys mailed out
- 632 surveys received
- Return rate: 39%

**Kansas Safety Net Clinics and Community Health Centers**
- 24 surveys mailed out
- 12 surveys received
- Return rate: 50%

**Kansas League of Municipalities**
- 627 surveys mailed out
- 156 surveys received
- Return rate: 25%

**Kansas Chambers of Commerce**
- 196 surveys mailed out
- 41 surveys received
- Return rate: 21%

**Kansas Dental Hygiene Students**
- 158 students were eligible for the survey
- 93 students took the survey
- Return rate: 59%
CENTRALIZED RECRUITMENT PROGRAM FOR DENTISTS AND DENTAL HYGIENISTS

The Need for a Centralized Recruitment Program for Dentists and Dental Hygienists in Kansas

The following currently need assistance recruiting for dentists:

- 58% (7) of the safety net clinics/community health centers
- 21% (97) of the dentists

Graph 1.

If, in the future, there was a need to hire a dentist or dental hygienist, the following would use a dental recruitment service:

- 52% (241) of the dentists
- 58% (7) of the safety net clinics and community health centers
- 29% (12) of the chambers of commerce
- 24% (38) of the league of municipalities
Current need for recruitment of dentists:

- 15% (71) of the dentists and 33% (4) safety net clinics/community health centers are recruiting for at least one dentist
- 2% (7) of the dentists and 8% (1) of the safety net clinics/community health center are recruiting for 2-3 dentists
- One percent (1%, 1) of the dentists is recruiting for 4 or more dentists
- The remainder of the dentists and safety net clinics/community health centers were not in need of recruiting a dentist or did not answer the question.

Graph 3.

Three year outlook for recruitment of dentists:

- 31% (146) of the dentists and 25% (3) of the safety net clinics/community health centers are planning to recruit at least one dentist
- 7% (32) of the dentists and 33% (4) of the safety net clinics/community health centers are planning to recruit 2-3 dentists
- One percent (1%, 1) of the dentists and 8% (1) of the safety net clinics/community health centers will be recruiting for 4 or more dentists
- The remainder of the dentists and safety net clinics/community health centers were not in need of recruiting a dentist or did not answer the question.
Current need for recruitment of dental hygienists:

- 42% (5) of the safety net clinics/community health centers and 11% (50) of the dentists are recruiting for one dental hygienist
- 2% (9) of the dentists are recruiting for 2-3 dental hygienists
- The remainder of the dentists and safety net clinics/community health centers were not in need of recruiting a dental hygienist or did not answer the question.
Three year outlook for recruitment of dental hygienists:

- 26% (121) dentists and 25% (3) safety net clinics/community health centers will recruit for one dental hygienist
- 9% (44) dentists and 42% (5) safety net clinics/community health centers will recruit for 2-3 dental hygienists
- The remainder of the dentists and safety net clinics/community health centers were not in need of recruiting dental hygienists or did not answer the question.

Graph 6.
Utilization of a dental recruitment program

A variety of services were thought to be useful, including candidate identification, preparation of promotional materials, background checks, reference checks, and coordination of on-site visits, among others.

Graph 7.

Useful Recruitment Services

- Candidate identification
- Preparation of promotional materials
- Background checks
- Reference checks
- Coordination of on-site visits
- Development of recruitment plan
- Contract negotiations
- Consultation of compensation package
- Retention plan development
- Interview candidates

Legend:
- Dentists
- Safety net clinics/community health centers
Eleven percent (11%, 55) of the dentists plan to retire within the next five years and 26% (120) plan to retire within the next 5-10 years. Fifty-five percent (55%, 254) of the dentists plan to continue their practice for more than 10 years.

Graph 8.

When asked what they plan to do with their practice upon retirement, 55% (253) of the dentists plan to recruit a new dentist and 36% (166) plan to sell their practice. They could check all that applied.

Graph 9.
COLLECTING FEES FOR DENTAL RECRUITMENT SERVICES

Recruitment of Dentists

The following would not pay for the recruitment of dentists:

- 93% (146) of the league of municipalities
- 76% (31) of the chambers of commerce
- 45% (206) of the dentists
- 17% (2) of the safety net clinics/community health centers

Would pay $1,000:

- 8% (1) of the safety net clinics/community health centers
- 2% (1) of the chambers of commerce
- 4% (6) of the league of municipalities

Would pay $2,000:

- 17% (2) of the safety net clinics/community health centers

Would pay $3,000:

- 8% (1) of the safety net clinics/community health centers
- 18% (85) of the dentists

Would pay $5,000:

- 25% (3) of the safety net clinics/community health centers

- 9% (44) of the dentists
- 1% (2) of the league of municipalities
- 2% (1) of the chambers of commerce

Would pay $10,000:

- 3% (14) of the dentists
- 1% (1) of the league of municipalities

Would pay $15,000:

- 1% (4) of the dentists

Maybe:

- 2% (1) of the chambers of commerce

Did not answer:

- 1% (1) of the league of municipalities
- 25% (3) of the safety net clinics/community health centers
- 24% (126) of the dentists
- 17% (7) of the chambers of commerce
Recruitment of Dental Hygienists

Graph 11.

How much are you willing to pay for recruitment of a dental hygienist?

<table>
<thead>
<tr>
<th>Amount</th>
<th>Percentage willing to pay</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>2%</td>
<td>86%</td>
</tr>
<tr>
<td>$500</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>$1,000</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>$1,500</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>$2,000</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>$3,000</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>$5,000</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>$8,000</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

The following are not willing to pay for dental hygiene recruitment services:

- 42% (5) of the safety net clinics/community health centers
- 51% (238) of the dentists
- 86% (35) of the chambers of commerce
- 86% (134) of the league of municipalities

Would pay $500:
- 8% (1) of the safety net clinics/community health centers

Would pay $1,000:
- 8% (1) of the safety net clinics/community health centers
- 18% (86) of the dentists
- 2% (4) of the league of municipalities

Would pay $1,500:
- 8% (1) of the safety net clinics/community health centers

Would pay $2,000:
- 17% (2) of the safety net clinics/community health centers

Would pay $3,000:
- 3% (16) of the dentists

Would pay $5,000:
- 1% (1) of the league of municipalities

Would pay $8,000:
- 1% (2) of the dentists

Maybe
- 2% (1) of the chambers of commerce

No Answer
- 12% (5) of the chambers of commerce
- 26% (128) of the dentists
- 17% (2) of the safety net clinics/community health centers
- 11% (17) of the league of municipalities

Would you consider using a recruitment service to explore available practice opportunities?

- Yes: 65%
- No: 5%
- No Answer: 30%

September 20, 2007
Dental Students and Dental Hygiene Students

Of the dental students and dental hygiene students surveyed, the following do not have an employment opportunity for after graduation:

• 75% (70) of the dental hygiene students
• 64% (328) of the dental students

Graph 12.

The following students reported that they would use a dental recruitment service to explore available job opportunities:

• 65% (334) of the dental students
• 67% (62) of the dental hygiene students

Graph 13.
Types of practices dental students are interested in:

- Private practice: 83% (423) of the dental students
- Safety net clinic or community health center: 11% (55) of the dental students
- Other: 3% (15) of the dental students (“other” includes private and community health center, group practice, overseas dental missions, academic, hospital, and community health)
- 3% (18) did not answer

Graph 14.

Types of practices dental hygiene students are interested in:

- Private practice: 88% (82)
- Safety net clinic or community health center: 4% (4)
- Other: 7% (6) (“other” includes missions, government/VA/military, extended care, and specialty practices.)

Graph 15.
Seventy-nine percent (79%, 73) of the dental hygiene students intend to practice in Kansas after graduation.

- The 73 dental hygiene students that intend to practice in Kansas were asked to indicate which areas they were interested in. They could check all that applied.

- Population of community that dental hygiene students would be interested in practicing in. They could check all that applied.

<table>
<thead>
<tr>
<th>Area</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Central (outside of Sedgwick county)</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td>Northeast (outside of Douglas, Shawnee, Johnson and Wyandotte counties)</td>
<td>24</td>
<td>26%</td>
</tr>
<tr>
<td>Johnson county</td>
<td>23</td>
<td>25%</td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>21</td>
<td>23%</td>
</tr>
<tr>
<td>Southeast</td>
<td>16</td>
<td>17%</td>
</tr>
<tr>
<td>Northwest</td>
<td>12</td>
<td>13%</td>
</tr>
<tr>
<td>North Central</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Douglas county</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Southwest</td>
<td>9</td>
<td>10%</td>
</tr>
<tr>
<td>Shawnee</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Wyandotte county</td>
<td>2</td>
<td>2%</td>
</tr>
</tbody>
</table>

Eight percent (8%, 42) of the dental students intend to practice in Kansas after graduation.

- The 42 dental students that indicated they would like to establish a practice in Kansas were asked what regions of Kansas they are most interested in. They could check all that applied:

<table>
<thead>
<tr>
<th>Area</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson county</td>
<td>18</td>
<td>4%</td>
</tr>
<tr>
<td>South Central (outside of Sedgwick county)</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>Douglas county</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>Northeast (outside of Douglas, Shawnee, Johnson and Wyandotte counties)</td>
<td>12</td>
<td>2%</td>
</tr>
<tr>
<td>Southeast</td>
<td>10</td>
<td>2%</td>
</tr>
<tr>
<td>Shawnee county</td>
<td>10</td>
<td>2%</td>
</tr>
<tr>
<td>Wyandotte county</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>Northwest</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>Southwest</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>North Central</td>
<td>3</td>
<td>1%</td>
</tr>
</tbody>
</table>

- Community population preference. They could check all that applied.

<table>
<thead>
<tr>
<th>Population Size</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 50,001</td>
<td>260</td>
<td>51%</td>
</tr>
<tr>
<td>20,001-50,000</td>
<td>184</td>
<td>36%</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>136</td>
<td>27%</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>94</td>
<td>18%</td>
</tr>
<tr>
<td>Undecided</td>
<td>84</td>
<td>16%</td>
</tr>
<tr>
<td>1,001-5,000</td>
<td>55</td>
<td>11%</td>
</tr>
<tr>
<td>Less than 1,000</td>
<td>11</td>
<td>2%</td>
</tr>
</tbody>
</table>
**TEMPORARY COVERAGE PROGRAM FOR DENTISTS AND DENTAL HYGIENISTS**

**The Need for a Temporary Coverage Program in Kansas:**

**Temporary Coverage for Dentists**

Thirty-one percent (31%, 144) of the dentists would use a temporary coverage program for dentists and 2% (8) might use a temporary coverage program for dentists.

Graph 16.

Fifty-eight percent (58%, 7) of the safety net clinics/community health centers would use a temporary coverage program for dentists.

- 8% (1) of the clinics would use 0-5 days per year
- 17% (2) of the clinics would use 5-10 days per year
- 33% (4) of the clinics would use 10+ days per year
- 42% (5) did not answer
Graph 17.

Temporary Coverage for Dental Hygienists

Forty percent (40%, 183) of the dentists would use a temporary coverage program for dental hygienists. One percent (1%, 3) of the dentists might use a temporary coverage program for dental hygienists.

- 14% (67) of the dentists would use 0-5 days per year
- 17% (77) of the dentists would use 5-10 days per year
- 9% (42) of the dentists would use 10+ days per year
- 60% (277) of the dentists did not answer

Graph 18.

Number of days per year safety net clinics/community health centers would consider using a temporary coverage service for dentists

Number of days per year dentists would use a temporary coverage program for dental hygienists:

- 14% (67) of the dentists would use 0-5 days per year
- 17% (77) of the dentists would use 5-10 days per year
- 9% (42) of the dentists would use 10+ days per year
- 60% (277) of the dentists did not answer
Fifty percent (50%, 6) of the safety net clinics/community health centers would use a temporary coverage program for dental hygienists.

• 17% (2) of the clinics would use 0-5 days per year
• 8% (1) of the clinics would use 5-10 days per year
• 25% (3) of the clinics would use 10+ days per year
• 50% (6) did not answer

Graph 19.
LOAN FORGIVENESS PROGRAM FOR DENTISTS AND DENTAL HYGIENISTS

The Need for a Loan Forgiveness Program for Dentists and Dental Hygienists in Kansas

Ninety-two percent (92%, 466) of the dental students have student loan debt:

- 58% (295) owe more than $100,000
- 19% (95) owe $50,000-$100,000
- 15% (76) owe less than $50,000
- 4% (23) owe nothing
- 4% (22) did not answer

Graph 20.

Seventy-six percent (76%, 71) of the dental hygiene students have student loan debt:

- 23% (21) owe more than $20,000
- 34% (32) owe $11,000-$20,000
- 19% (18) owe less than $11,000
- 22% (20) owe nothing
- 2% (2) did not answer
If a loan forgiveness program was available for dentists and dental hygienists in Kansas, the following percentages of students would be influenced in their decision when choosing a practice:

• 69% (351) of the dental students
• 62% (58) of the dental hygiene students

Graph 22.
Table 1. Telephone Surveys from Other States

<table>
<thead>
<tr>
<th>State Surveyed</th>
<th>Recruitment activities for dentists and/or dental hygienists</th>
<th>Financial incentives for dental professionals practicing in a rural or underserved area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alaska</td>
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<td>NO</td>
</tr>
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<td>2. California</td>
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<td>3. Colorado</td>
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<td>4. Indiana</td>
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<td>5. Illinois</td>
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<td>6. Iowa</td>
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<td>7. Minnesota</td>
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<td>11. New Hampshire</td>
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<td>13. North Carolina</td>
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</tr>
<tr>
<td>14. North Dakota</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>15. Ohio</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>16. Oklahoma</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>17. Pennsylvania</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>18. South Carolina</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>19. South Dakota</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>20. Utah</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>21. Washington</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>22. Wisconsin</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>23. Wyoming</td>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

Primary Care Association representatives and Primary Care Office representatives from 23 states were asked many questions including the following:

1. Is a recruitment service for dentists and/or dental hygienists available?
2. Are state-funded incentives available for dentists and/or dental hygienists to practice in rural and underserved areas?

Of the 23 states surveyed, 91% (21) have recruitment activity for dentists and/or dental hygienists.

Ninety-six percent (96%, 22) of the surveyed states have a financial incentive program for dentists and/or dental hygienists to practice in a rural or underserved area of the state. The loan forgiveness amounts range from $6,000 - $140,000 with service obligations from 2 – 10 years in length.

From the state surveys, a variety of information was collected to assist in designing a recruitment and loan forgiveness program in the state of Kansas should programs be established.
ADDITIONAL DATA COLLECTED FROM SURVEYS

Dentists

Of the dentists that responded:

- 8% (37) have been in practice less than five years
- 12% (57) have been in practice for 5-10 years
- 8% (35) have been in practice for 11-15 years
- 10% (47) have been in practice for 16-20 years
- 56% (259) have been in practice for more than 20 years
- 6% (28) gave no answer

Graph 23.

Within the dental practices:

- 27% (125) do not have a dental hygienist
- 22% (101) have one dental hygienist
- 32% (150) have 2-3 dental hygienists
- 13% (61) have 4 or more dental hygienists
- 6% (26) gave no answer

When asked how the dentists recruit other dentists (they could check all that applied):

- 22% (103) through word-of-mouth
- 9% (41) through a commercial recruitment company
- 9% (43) through advertisement
- 9% (44) other
- 66% (305) non-applicable or no answer
The responding dentists are from the following regions:
Northwest 33 (7%)
Southwest 20 (4%)
North Central 26 (5%)
South Central (outside of Sedgwick county) 42 (9%)
Northeast (outside of Johnson, Wyandotte, Shawnee, or Douglas counties) 56 (12%)
Southeast 40 (9%)
Sedgwick county 61 (13%)
Johnson county 109 (24%)
Wyandotte county 11 (2%)
Shawnee county 14 (3%)
Douglas county 21 (5%)
No answer 30 (7%)

With the following populations:
• Less than 1,000 2 (1%)
• 1,001-5,000 81 (18%)
• 5,001-10,000 26 (5%)
• 10,001-20,000 32 (7%)
• 20,001-50,000 61 (13%)
• Over 50,001 229 (49%)
• No answer 32 (7%)

Number of practicing dentists in community:
• 8% (38) report that there is one dentist in their community
• 11% (51) report 2-3 dentists in their community
• 10% (44) report 4-6 dentists in their community
• 64% (298) report 7 or more dentists in their community
• 7% (32) did not answer
**Dental Hygienists**

Sixty-five percent (65%, 415) of the dental hygienists hold an associate’s degree in dental hygiene, 34% (214) hold a bachelor’s degree in dental hygiene, 1% (3) answered “Other” as follows:

- Diploma
- CMSDH Ed
- Master’s degree

Graph 24.

- Six percent (6%, 39) of the dental hygienists have an extended care permit, 93% (588) do not, 1% (5) gave no answer.

- Nine percent (9%, 57) of those not having extended care permits plan to obtain an extended care permit, 41% (258) do not, 43% (273) are undecided, 6% (35) answered not applicable, and 1% (9) did not answer.

- When asked what hours the dental hygienists work in a typical week. They could check all that applied.
  - 19% (117) work more than 36 hours a week
  - 39% (246) work 30-35 hours a week
  - 22% (142) work 20-29 hours a week
  - 18% (117) work less than 20 hours a week
  - 2% (12) gave no answer
• When dental hygienists were asked if they would be willing to relocate for the right practice opportunity: 59% (372) responded no, 13% (81) responded yes, 27% (173) responded maybe, and 1% (6) had no answer.

• If practicing dental hygienists were willing to relocate, they would be interested in the following regions of Kansas. They could check all that applied.

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson county</td>
<td>157</td>
<td>25%</td>
</tr>
<tr>
<td>Northeast (outside of Douglas, Shawnee,</td>
<td>149</td>
<td>24%</td>
</tr>
<tr>
<td>Johnson and Wyandotte counties)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>113</td>
<td>18%</td>
</tr>
<tr>
<td>Douglas county</td>
<td>77</td>
<td>12%</td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>75</td>
<td>12%</td>
</tr>
<tr>
<td>Southeast</td>
<td>73</td>
<td>11%</td>
</tr>
<tr>
<td>North Central</td>
<td>60</td>
<td>9%</td>
</tr>
<tr>
<td>Shawnee County</td>
<td>56</td>
<td>8%</td>
</tr>
<tr>
<td>Wyandotte County</td>
<td>47</td>
<td>7%</td>
</tr>
<tr>
<td>Southwest</td>
<td>38</td>
<td>6%</td>
</tr>
<tr>
<td>Northwest</td>
<td>32</td>
<td>5%</td>
</tr>
<tr>
<td>Northeast (outside of Douglas, Shawnee,</td>
<td>32</td>
<td>5%</td>
</tr>
<tr>
<td>Johnson and Wyandotte counties)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>32</td>
<td>5%</td>
</tr>
<tr>
<td>Douglas county</td>
<td>33</td>
<td>5%</td>
</tr>
<tr>
<td>Southeast</td>
<td>30</td>
<td>5%</td>
</tr>
<tr>
<td>North Central</td>
<td>30</td>
<td>5%</td>
</tr>
<tr>
<td>Northwest</td>
<td>28</td>
<td>4%</td>
</tr>
<tr>
<td>Shawnee County</td>
<td>22</td>
<td>3%</td>
</tr>
<tr>
<td>Southwest</td>
<td>15</td>
<td>2%</td>
</tr>
<tr>
<td>Wyandotte County</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>11%</td>
</tr>
</tbody>
</table>

• The dental hygiene survey participants are located in the following regions:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson county</td>
<td>152</td>
<td>24%</td>
</tr>
<tr>
<td>Sedgwick county</td>
<td>108</td>
<td>17%</td>
</tr>
<tr>
<td>South Central (outside of Sedgwick county)</td>
<td>81</td>
<td>13%</td>
</tr>
<tr>
<td>Northeast (outside of Douglas, Shawnee,</td>
<td>63</td>
<td>10%</td>
</tr>
<tr>
<td>Johnson and Wyandotte counties)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas county</td>
<td>33</td>
<td>5%</td>
</tr>
<tr>
<td>Southeast</td>
<td>30</td>
<td>5%</td>
</tr>
<tr>
<td>North Central</td>
<td>30</td>
<td>5%</td>
</tr>
<tr>
<td>Northwest</td>
<td>28</td>
<td>4%</td>
</tr>
<tr>
<td>Shawnee county</td>
<td>22</td>
<td>3%</td>
</tr>
<tr>
<td>Southwest</td>
<td>15</td>
<td>2%</td>
</tr>
<tr>
<td>Wyandotte county</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>11%</td>
</tr>
</tbody>
</table>

• The dental hygienists rated the importance of the following community amenities. They could check all that applied.

<table>
<thead>
<tr>
<th>Amenity</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>428</td>
<td>68%</td>
</tr>
<tr>
<td>Family environment</td>
<td>382</td>
<td>60%</td>
</tr>
<tr>
<td>Schools</td>
<td>333</td>
<td>53%</td>
</tr>
<tr>
<td>Size</td>
<td>298</td>
<td>47%</td>
</tr>
<tr>
<td>Recreational activities</td>
<td>211</td>
<td>33%</td>
</tr>
<tr>
<td>Local business</td>
<td>179</td>
<td>28%</td>
</tr>
<tr>
<td>Other</td>
<td>97</td>
<td>15%</td>
</tr>
</tbody>
</table>
Dental Students

• Participating students attend the dental schools in the following states:
  - Colorado 121 24%
  - Nebraska 117 23%
  - Missouri 80 16%
  - Indiana 78 15%
  - Oklahoma 57 11%
  - Illinois 38 7%
  - Iowa 20 4%

• Ninety-four percent (94%, 479) of the dental students are not participating in the National Health Service Corp Program, while 2% (12) are. Four percent (4%, 20) did not answer.

• Ninety percent (90%, 462) of the dental students are not participating in some kind of loan forgiveness program, while 6% (29) are. Four percent (4%, 20) did not answer.

  Of the 6% (29) who are participating in a loan forgiveness program, the survey asked from which state the student was participating in a loan forgiveness program:

  - Nebraska 6
  - New Mexico 6
  - Colorado 2
  - Missouri 2
  - Wyoming 2
  - Arizona 1
  - District of Columbia 1
  - Florida 1
  - Illinois 1
  - Oklahoma 1
  - Texas 1
  - Not applicable 5

• Twenty-eight percent (28%, 143) of the respondents are first year dental students, 20% (104) second year, 23% (118) third year, 25% (129) fourth year. Three percent 3% (17) of the students were other than 1-4 year dental students. These included: International Dentist Program students and dental residents.

• Attending a dental residency program interests 27% (138) of the dental students while 48% (246) are not interested, and 24% (126) are undecided. One percent (1%, 1) did not answer.

• Interested dental residency program participants were asked where they plan on attending a dental residency program:
  - Military/Government (93)
  - Undecided/don’t know (24)
  - Oklahoma (15)
  - Anywhere accepted (13)
  - Colorado (8)
  - Missouri (8)
  - Nebraska (6)
  - Idaho (5)
  - Iowa (4)
  - Ohio (4)
  - Illinois (3)
  - Georgia (2)
  - Indiana (2)
  - Texas (2)
  - Milwaukee (2)
  - Anywhere for Pedo program (2)
  - Midwest, South, Eastern U.S. (1 each)
  - Alabama, California, Florida, Hawaii, Kansas, Kentucky, New York, North Carolina, Tennessee, Washington (1 each)
  - Truman Medical Center – Lakewood, Kansas City, MO (1)

• Eight percent (8%, 40) of possible dental residency participants would consider the Advanced General Education Dentistry residency program currently being established in Wichita, Kansas, while 12% (64) would not, and 7% (36) might. Seventy three percent (73%, 371) did not answer.

• Eighty percent (80%, 408) of the dental students are studying general dentistry.

• Specialties that 19% (96) of the dental students are pursuing (some answered more than once):
  - Orthodontics (25)
  - Pediatric Dentistry (23)
  - Oral and Maxillofacial surgery (21)
  - Endodontics (9)
  - Periodontics (7)
  - Prosthodontics (4)
  - Don’t know (10)
• Students were asked in which state they intend to establish a practice. The top choices included:
  - Colorado 15% (76)
  - Undecided 13% (68)
  - Kansas 8% (42)
  - Indiana 7% (39)
  - Oklahoma 7% (37)
  - Nebraska 6% (33)
  - Illinois 6% (32)
  - Missouri 4% (20)

• Community population preference of dental students. They could check all that applied.
  - Over 50,001 260 51%
  - 20,001-50,000 184 36%
  - 10,001-20,000 136 27%
  - 5,001-10,000 94 18%
  - Undecided 84 16%
  - 1,001-5,000 55 11%
  - Less than 1,000 11 2%

**Dental Hygiene Students**

• Seventy-three percent (73%, 68) of the dental hygiene students are pursuing an associate’s degree while 27% (25) are pursuing a bachelor’s degree.

Graph 26.
• Twenty-four percent (24%, 22) of the dental hygiene students plan on obtaining an extended care permit, 24% (22) do not plan on obtaining an extended care permit, and 52% (49) are undecided.

• When asked what hours that they wish to work, 42% (39) would like more than 36 hours/week, 58% (54) would like 30-35 hours/week, 12% (11) would like 20-29 hours/week, and 3% (3) would like less than 20 hours/week. They could check all that applied.

Graph 27.

<table>
<thead>
<tr>
<th>Number of Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 36</td>
<td>42%</td>
</tr>
<tr>
<td>30-35 hours</td>
<td>58%</td>
</tr>
<tr>
<td>20-29 hours</td>
<td>12%</td>
</tr>
<tr>
<td>Less than 20</td>
<td>3%</td>
</tr>
<tr>
<td>No answer</td>
<td>1%</td>
</tr>
</tbody>
</table>

• Dental hygiene students were asked which amenities are important to them when choosing a community to live in. They could check all that applied.
  - Family environment 73 78%
  - Location 69 74%
  - Schools 63 68%
  - Size 54 58%
  - Recreational activities 47 50%
  - Local businesses 44 47%
  - Other 12 13%

• The dental hygiene students were from the following states:
  - Kansas 79 85%
  - Missouri 6 7%
  - Nebraska 4 4%
  - Oklahoma 2 2%
  - Iowa 1 1%
  - Arkansas 1 1%

• Sixty-seven percent (67%, 62) of the dental hygiene students said they would use a recruitment service to explore available practice opportunities while 31% (29) would not. Two percent (2%, 2) did not answer.

• Population of the community that the dental hygiene student grew up in:
  - Less than 1,000 10 11%
  - 1,001-5,000 16 17%
  - 5,001-10,000 14 15%
  - 10,001-20,000 12 13%
  - 20,001-50,000 16 17%
  - Over 50,000 25 27%

• Population of the community that their spouse grew up in:
  - Less than 1,000 8 9%
  - 1,001-5,000 7 7%
  - 5,001-10,000 7 7%
  - 10,001-20,000 9 10%
  - 20,001-50,000 9 10%
  - Over 50,000 14 15%
  - Not applicable 39 42%
TELEPHONE SURVEYS TO DENTAL SCHOOL REPRESENTATIVES

The following dental schools were surveyed:

- University of Colorado School of Dentistry
- Creighton University School of Dentistry
- Indiana University School of Dentistry
- University of Iowa School of Dentistry
- University of Nebraska School of Medicine
- University of Illinois at Chicago School of Dentistry
- Southern Illinois University School of Dental Medicine
- University of Oklahoma College of Dentistry
- University of Missouri Kansas City School of Dentistry

A structured recruitment program is not in place at most of the surveyed dental schools. A majority of the schools post employment opportunities on bulletin boards and through email. The University of Iowa School of Dentistry advertises in the Iowa Dental Association Journal. The University of Missouri Kansas City School of Dentistry is working on creating a computerized database that can be searchable via the internet.

For questions or comments regarding this survey, please contact Rural Health Education and Services, University of Kansas Medical Center, at 316-293-2649 or toll free at 888-503-4221. Please visit our website at http://ruralhealth.kumc.edu.