Changes in dentist retirement, relocation, and net inflow of dentist supply in Iowa, 1997-2014: Fifth brief in a series

Julie C. Reynolds
*University of Iowa*

Susan C. McKernan
*University of Iowa*

Raymond A. Kuthy
*University of Iowa*

*Please see article for additional authors.*

**DOI:** [https://doi.org/10.17077/8da4-yx01](https://doi.org/10.17077/8da4-yx01)**

Copyright © 2016 the authors

Comments
At head of title: Issue brief.

Hosted by [Iowa Research Online](https://research.uiowa.edu). For more information please contact: lib-ir@uiowa.edu.
Changes in Dentist Retirement, Relocation, and Net Inflow of Dentist Supply in Iowa, 1997-2014: Fifth Brief in a Series

Julie C. Reynolds, DDS, MS
Visiting Assistant Professor

Susan C. McKernan, DMD, MS, PhD
Assistant Professor

Raymond A. Kuthy, DDS, MPH
Professor

Nyla Balakrishnan, BDS, MPH
Graduate Research Assistant
Background

The number of dentists in Iowa has gradually increased over the past two decades. However, this increase has not kept pace with the national rate. As an increasing proportion of Iowa dentists approach retirement age, the supply and geographical distribution of Iowa’s dentist workforce may be adversely affected in coming years. This brief examines the flow of dentists in and out of Iowa’s dental workforce from 1997 to 2014, an 18-year period. We focus on voluntary retirement and relocation out of Iowa, since these are the primary means by which dentists leave the state’s workforce.

Approach

Data from the Iowa Dentists Tracking System (IDTS) were used to examine inflows and outflows of dentists. The IDTS is maintained by the University of Iowa’s Office of Statewide Clinical Education Program, which tracks state workforce for 5 professions: physicians, pharmacists, dentists, physician assistants, and advanced practice nurses. IDTS has tracked Iowa’s dentist workforce since 1997, with assistance from the Iowa Dental Board and other public information sources. All active Iowa dentists are contacted at least semiannually to update their practice information. Our current analysis is limited to dentists who entered and left the workforce from 1997 through 2014. Dentists left the state workforce primarily due to retirement or relocation to another state. Other, less common, reasons included illness, death, loss of license, inactivity, further educational training, or joining the Armed Forces.

Results

The total number of dentists entering and leaving the state dental workforce from 1997-2014 were approximately equal (Exhibit 1). In total, 1,045 dentists entered and 1,021 left the state’s workforce over this time period. For comparison, in 2014, there were 1,538 active dentists in Iowa.

Exhibit 1. Iowa dentist workforce inflow & outflow, 1997-2014

The number of dentists entering Iowa’s workforce exceeded the number leaving in most years, including every year from 2009-2013. However, given the increase in Iowa’s dentists nearing retirement age, the number of dentists leaving the workforce may consistently exceed the number entering in coming years.

Among those who left the state dental workforce, slightly more than half (52%) left due to retirement and one-third (32%) relocated to another state. The remaining 16% left the workforce for some other reason.
**Dentist retirement**

Dentists who retired (n=531) were predominantly older males in private practice who had graduated from the University of Iowa (Exhibit 2). A majority worked in urban counties prior to retiring.

**Exhibit 2. Characteristics of retired dentists, 1997-2014 (n=531)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>96%</td>
</tr>
<tr>
<td>Age 65+</td>
<td>62%</td>
</tr>
<tr>
<td>Private Practice</td>
<td>89%</td>
</tr>
<tr>
<td>UI Dental Graduates</td>
<td>76%</td>
</tr>
<tr>
<td>Rural Practice</td>
<td>44%</td>
</tr>
</tbody>
</table>

Exhibit 3 shows the total number of dentists who retired each year and mean age of retirement. In comparison with national trends that show a recent increase in dentists’ age at retirement¹, Iowa dentists’ mean retirement age remained relatively stable from 1997-2014. Annual number of retirements ranged from 13 in 2002 to 51 in 2014.

**Exhibit 3. Number of and mean age of Iowa dentists at retirement, 1997-2014**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Retiring Dentists</th>
<th>Mean Age at Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>32</td>
<td>65</td>
</tr>
<tr>
<td>1999</td>
<td>29</td>
<td>66</td>
</tr>
<tr>
<td>2001</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>2003</td>
<td>32</td>
<td>65</td>
</tr>
<tr>
<td>2005</td>
<td>34</td>
<td>64</td>
</tr>
<tr>
<td>2007</td>
<td>39</td>
<td>67</td>
</tr>
<tr>
<td>2009</td>
<td>36</td>
<td>70</td>
</tr>
<tr>
<td>2011</td>
<td>30</td>
<td>66</td>
</tr>
<tr>
<td>2013</td>
<td>24</td>
<td>67</td>
</tr>
</tbody>
</table>

**Dentist relocation**

Among the 330 dentists who relocated to another state, approximately two-thirds were males; slightly less than half were under the age of 35 and UI dental graduates (Exhibit 4). Most were in private practice prior to relocating. Less than one-third worked in a rural county; fewer had worked in either a public health setting or the University of Iowa College of Dentistry.
Exhibit 4. Characteristics of dentists who relocated to another state, 1997-2014 (n=330)

The most common states that dentists relocated to were, in descending order, Nebraska, Illinois, Wisconsin, Minnesota, and South Dakota (Exhibit 5).

Exhibit 5. Dentist relocations from Iowa to other states, 1997-2014

Dentists Entering Iowa Workforce

Dentists entering Iowa’s workforce (n=1,045) were primarily males who had graduated within the preceding 5 years (Exhibit 6). Specifically, 58% had graduated dental school within the previous year, 21% within the previous 2-5 years, 7% within 6-10 years, and 13% greater than 10 years prior. Almost two-thirds graduated from the University of Iowa College of Dentistry.

Most new Iowa dentists went into private practice when they entered Iowa’s workforce; less than one-third went to work in a rural county or a public health setting.
Conclusion & Policy Implications

From 1997 through 2014, approximately equal numbers of dentists entered and left the state workforce in Iowa. The most common reason for dentists leaving was retirement; until 2014 the number of retirements per year remained relatively stable. Unlike national trends, Iowa dentists do not appear to be delaying retirement into older ages; mean retirement age has remained stable over the study period. The second most common reason for dentists leaving Iowa’s workforce was relocation to other states; most relocated to nearby Midwestern states.

Dentists entering the state workforce tended to be recent graduates and most had graduated from the University of Iowa. Less than one-third worked in a rural county when they entered the workforce.

Inflows and outflows to Iowa’s dentist workforce impact the supply of dentists. It will be increasingly important to monitor these trends as baby boomer dentists continue nearing retirement age in order to ensure an adequate supply of dentists to serve the state’s citizens.

Author Information

Julie Reynolds is a visiting assistant professor, Susan McKernan is an assistant professor, Raymond Kuthy is a professor, and Nyla Balakrishnan is a graduate research assistant at the University of Iowa College of Dentistry and the University of Iowa Public Policy Center.

Acknowledgements

This policy brief series was funded, in part, by the Health Resources and Services Administration, DHHS (T12HP14992). We also thank the Office of Statewide Clinical Education Programs for their assistance with this series.
References
