Pharmacy & Dental Workforce in Iowa

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Data Sources

Iowa Health Professions Inventory
- University of Iowa Carver College of Medicine
- Iowa Dentist Tracking System
- Plus physician & pharmacist data

Medicaid administrative data
- Claims & provider data

Delta Dental of Iowa administrative data
- Claims & provider data
Workforce Issues of Interest

Dentists:
- Aging workforce; replacing retirements
- Increasing proportion of female dentists
- Increasing proportion of dentists working part-time
- Geographic distribution

Pharmacists:
- Fewer independent pharmacies
- Rise in chain-based practice
Acknowledgements

• Colleagues at the PPC
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  – Betsy Momany

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  – Teresa Dunkin
  – Francisco Olalde
WORKFORCE TRENDS
Workforce Sizes, 2000-2012

- Dentists
- Pharmacists
- Physicians
Private Practice Dentists, 2000-2012

- Approximately 90% of active dentists are engaged in private practice.
- Approximately 75% of active dentists are general practitioners in private practice.
Private Practice Dentists, 2000-2012

- 83% of private practitioners are general dentists
- Most common specialties:
  - Ortho
  - Oral Surgery
  - Pediatrics
Age Distributions, 2012

**Dentists**
- <40: 30%
- 40-49: 18%
- 50-59: 28%
- 60+: 24%

**Pharmacists**
- <40: 40%
- 40-49: 24%
- 50-59: 22%
- 60+: 14%

**Physicians**
- <40: 22%
- 40-49: 28%
- 50-59: 31%
- 60+: 19%
Trends in Age Distribution

Private practice dentists, age 60+, 2000-2012

- 14% in 2000
- 15% in 2004
- 18% in 2008
- 24% in 2012

- 26% in 2013
- Average age of retirement is 67
Gender Distribution, 2012

**Dentists**
- Male: 75%
- Female: 25%

**Pharmacists**
- Male: 40%
- Female: 60%

**Physicians**
- Male: 72%
- Female: 28%
Trends in Gender, 2000-2012

**Dentists**

- 2000: Female - 12, Male - 51
- 2005: Female - 15, Male - 58
- 2010: Female - 22, Male - 60
- 2012: Female - 24

**Pharmacists**

- 2000: Female - 47, Male - 51
- 2005: Female - 51, Male - 58
- 2010: Female - 58, Male - 60
- 2012: Female - 60
Part-Time Workforce by Sex, 2012

Dentists

- Male: 13%
- Female: 25%

16% of dentists overall

Pharmacists

- Male: 9%
- Female: 18%

17% of pharmacists overall

Part-time defined as <30 hours/week for pharmacists, <32 hours/week for dentists
Trends in Workforce Activity
Community pharmacists, 2000-2012

The number of communities with independent pharmacists has decreased by 30% since 1996.
Educational Source

Private Practice Dentists, 2012

- Univ of Iowa: 78%
- Creighton: 11%
- Univ of Nebraska: 7%
- Other: 4%
- Other: 4%
- Other: 4%
- Other: 4%
Educational Source

All Pharmacists, 2012

- 47% Univ of Iowa
- 29% Drake
- 24% Other
Dental Shortage Areas (HPSAs)

County or other geographic area: 5000:1 FTE
Or 4000:1 if high dental need
Health Professional Shortage Areas (HPSA) - Dental Health Designated Populations

Designated Population - a population within an area that is designated as a HPSA.

Source: Health Resources and Services Administration (HRSA), Bureau of Health Professions (BHPR); July 1, 2014.

Note: Alaska and Hawaii not shown to scale.
Iowa: Federal Dental Health Care Shortage Designations

This map is a snapshot and should not be used for the determination or approval of programs requiring a shortage designation. The official site for determination of shortages is: http://hpsafind.hrsa.gov.

Created by: Iowa Department of Public Health Bureau of Oral and Health Delivery Systems
Source: Health Resources and Services Administration Data Warehouse
Created on: April 16, 2014
Primary Care Office within the Bureau of Oral and Health Delivery Systems requests and maintains HPSA designations for Iowa.
### Active Dentists, 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>% Female</th>
<th>% General Practice</th>
<th>% 65+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>1,625</td>
<td>21%</td>
<td>77%</td>
<td>11%</td>
</tr>
<tr>
<td>Nebraska</td>
<td>1,112</td>
<td>19%</td>
<td>78%</td>
<td>12%</td>
</tr>
<tr>
<td>Illinois</td>
<td>8,345</td>
<td>25%</td>
<td>82%</td>
<td>11%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>3,201</td>
<td>22%</td>
<td>81%</td>
<td>9%</td>
</tr>
<tr>
<td>Missouri</td>
<td>2,865</td>
<td>17%</td>
<td>80%</td>
<td>13%</td>
</tr>
<tr>
<td>Kansas</td>
<td>1,446</td>
<td>18%</td>
<td>81%</td>
<td>14%</td>
</tr>
<tr>
<td>South Dakota</td>
<td>418</td>
<td>15%</td>
<td>82%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Dentist Workforce Availability

Change in Number of Dentists per City
Iowa, 1985 - 2005

Change (n)
-16 - -11
-10 - -4
3 - 1
1 - 6
7 - 24
>25

S. McKee
November 30, 2010
Data source: IDTS
Dentist Workforce Availability

Change in Number of Dentists by City between 2000 and 2010 (With Population Change by County)

Data sources:
• Iowa Dentist Tracking System
• US Census

How do primary care providers colocate in Iowa?

**In 2010:**

**Community Pharmacists**
- 1,689 in 228 cities

**Primary Care Physicians**
- 1,754 in 207 cities

**Primary Care Dentists**
- General and pediatric dentists
- N=1,125 in 216 cities

**Excluded providers in academic, CHC, or hospital settings**

Cities in Iowa

954 incorporated areas in the state
How do primary care providers collocate in Iowa?

Cities with at least 1 dentist, physician, and pharmacist (2000)
How do primary care providers colocate in Iowa?

**In 2010:**

- In cities with any healthcare providers, most common situation was to find all 3 types
- Most common solitary provider: **Pharmacist**
- Most common provider pairing: **Pharmacist + Physician**
Communities lacking a dentist

*With a practicing physician and pharmacist

25 cities in 2000
22 in 2010
THE DENTAL SAFETY NET IN IOWA: PUBLIC SOURCES OF CARE
FQHC Dental Clinics

- 9 clinics in 2007 + 1 satellite
- 12 clinics in 2012 + 5 satellites
Unique child patients per FQHC

*Medicaid enrollees <21 years

2012:
- 14,949 patients
- 27,961 visits
- Largest volume clinics:
  - Siouxland CHC
  - CHC, Inc
  - CHC of Southeastern Iowa

• 2003
• 2004
• 2005
• 2006
• 2007
• 2008
• 2009
• 2010
• 2011
• 2012
Trends in FQHC dental volume
*pediatric Medicaid patients

- In 2007: 4% of Medicaid enrolled kids received dental care at an FQHC.
- Increased to 7% in 2012
Catchment Areas for FQHC Dental Clinics

*pediatric Medicaid patients

Origins of FQHC Pediatric Dental Patients, 2012
THE DENTAL SAFETY NET IN IOWA: PRIVATE DENTISTS
2013 Survey of Iowa Dentists

Medicaid Participation

- 58% response rate to the mail/online survey
- 58% of private dentists accept new Medicaid patients
- 80% of dentists that do not currently accept Medicaid treated Medicaid patients in the past
Overall Medicaid Participation
Comparisons with previous surveys

Dentists in Iowa that accept new Medicaid patients

<table>
<thead>
<tr>
<th>Year</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>79%</td>
</tr>
<tr>
<td>1995</td>
<td>64%</td>
</tr>
<tr>
<td>2013</td>
<td>58%</td>
</tr>
</tbody>
</table>
Trends in Medicaid Participation
Comparisons with previous surveys

<table>
<thead>
<tr>
<th>Year</th>
<th>Some Medicaid</th>
<th>All Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>1995</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>2013</td>
<td>73%</td>
<td>27%</td>
</tr>
</tbody>
</table>
Where do dentists refer Medicaid patients that they do not accept?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The UI College of Dentistry</td>
<td>45%</td>
</tr>
<tr>
<td>Community Health Center</td>
<td>33%</td>
</tr>
<tr>
<td>Another local practice</td>
<td>25%</td>
</tr>
<tr>
<td>I don't have a good place to refer</td>
<td>25%</td>
</tr>
<tr>
<td>Iowa Medicaid &quot;Find a Provider&quot; website</td>
<td>10%</td>
</tr>
<tr>
<td>Local I-Smile coordinator</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>
Other Resources

Oral Health in Iowa: Inventory Report

http://ppc.uiowa.edu