



THE UNIVERSITY OF IOWA  
**Public Policy**  
Center

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**Issue Brief**  
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**Changes in the  
Hours Worked  
per Week by  
Iowa Dentists,  
1997-2013**

**Fourth Brief in a Series**

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## Background

In this brief we examine changes in the work patterns of Iowa's dentist workforce from 1997-2013. A nationwide 2010 survey of American Dental Association members found that dentists are working fewer hours than in the past; in 1990, dentists worked an average of 35 hours per week, whereas in 2000 and 2010 they worked 33 and 32 hours on average, respectively.<sup>1</sup> A nationwide survey of *new* dentists in private practice found that the primary reason for practicing part-time was a desire to balance work and family.<sup>1,2</sup> This trend in dentists working fewer hours, along with the aging of the dental workforce, contribute to concerns over possible dentist shortages.<sup>3,4</sup>

The aim of this brief is to examine hours worked by Iowa dentists in relation to their sex, age, practice activity, and practice location.

## Approach

The Iowa Dentist Tracking System (IDTS) is the primary source of data for this issue brief series. The IDTS is part of the University of Iowa's Office of Statewide Clinical Education Programs, which tracks state workforce information for five health professions: physicians, pharmacists, dentists, physician assistants, and advanced practice nurses. The dentist tracking system began operations in 1997. Since then, all active Iowa dentists have been contacted every six months to update information regarding individual and practice characteristics. In this series, the term "part-time" refers to those who reported working less than 32 hours per week.<sup>3</sup> Only private practice dentists are included in this issue brief because this group has more autonomy with regard to preferences in hours worked compared to non-private practice dentists.

We used the United States Department of Agriculture's 2013 Rural-Urban Continuum Code (RUCC) system to classify counties as urban or rural. RUCCs are determined by population size and adjacency to a metro area. Codes 1-3 represent metro (or urban) counties and 4-9 represent non-metro (or rural) counties.<sup>5</sup>

## Results

### Dentist Characteristics Associated with Working Part-time

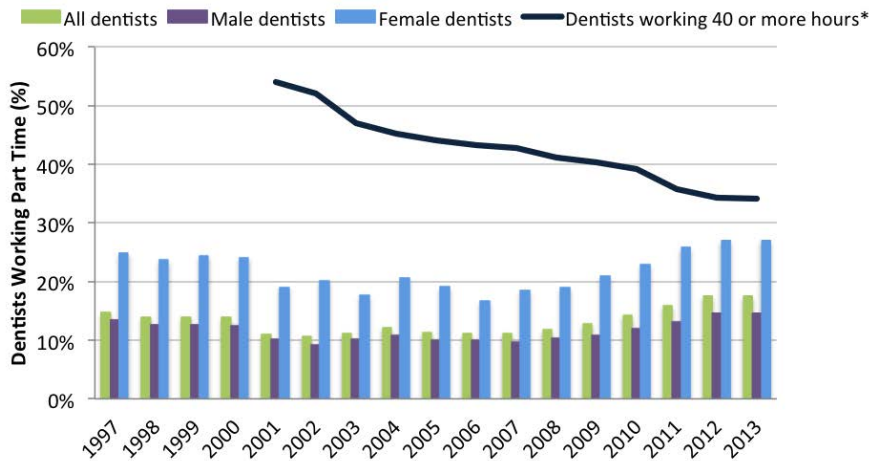
#### Gender

From 1997-2001, the proportion of dentists working part-time decreased from 15% to 11%, remained steady until 2007, and then increased to 17% in 2013 (Exhibit 1). During this time period, female dentists, on average, were 1.8 times as likely as their male counterparts to work part-time. The trend of a greater percentage of female dentists working part-time, combined with an increasing proportion of women entering the dental workforce may impact the capacity of Iowa's dentist workforce.<sup>6,7</sup> However, capacity is related to many more factors than simply hours worked, including scheduling practices, use of auxiliary dental personnel, and the number of dental chairs.<sup>8</sup>

Our operational definition of full-time work includes anyone working 32 hours or more per week. However, it is important to examine those who are working at the upper end of this spectrum in order to gain a better understanding of trends in hours worked. The percent of private practitioners who work 40 or more hours per week has declined substantially during the past decade, from 52% in 2001 to 34% in 2013 (Exhibit 1). Therefore, not only is there an increasing trend in part-time work, but there is also a decreasing trend in 40+ hour work-weeks among those who are working full time.

*From 1997-2001, the proportion of dentists working part-time decreased from 15% to 11%, remained steady until 2007, and then increased to 17% in 2013*

**Exhibit 1. Iowa private practice dentists working 40 or more hours per week, and those working part-time, by sex, 1997-2013**

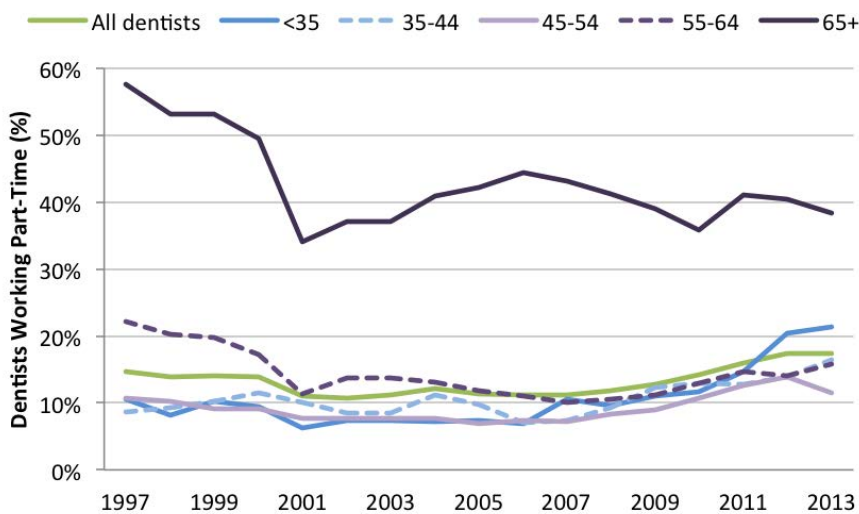


\*Data not available prior to 2001 due to a change in IDTS data collection protocol.

**Age**

Trends in the proportion of Iowa dentists working part-time vary by age. As expected, dentists nearing retirement age – age 65 and over – were the most likely to work part-time (Exhibit 2). This age group experienced a general decrease in the percent working part-time, although it fluctuated considerably. Of those age 55-64, the proportion working part-time decreased from 22% to 10% from 1997-2007, and then increased to 16% in 2013. The percent of dentists younger than age 35 who work part-time has almost doubled – from 11% in 1997 to 21% in 2013. This corresponds with other studies reporting younger dentists working fewer hours than their older counterparts.<sup>2,4,9</sup>

**Exhibit 2. Iowa Private Practice dentists working part-time, by age, 1997-2013**



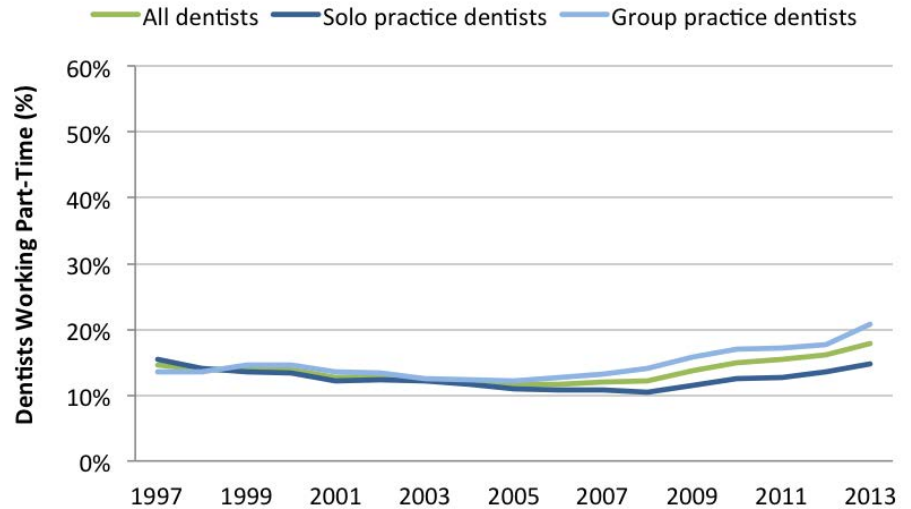
**Practice Arrangement**

The association between part-time practice and practice arrangement in Iowa has changed during this time period. Although solo and group practitioners practiced part-time at the same rate from 1997-2005, since then dentists in group practice were slightly more likely to work part-time compared to those in solo

*The percent of dentists younger than age 35 who work part-time has almost doubled – from 11% in 1997 to 21% in 2013.*

practice (Exhibit 3). Corporate practices were a recent addition to the IDTS classification scheme of practice activity in 2011, but are not included here due to the inability to determine a trend based on so few years of information. As of 2013, 13% of dentists worked in a corporate practice.

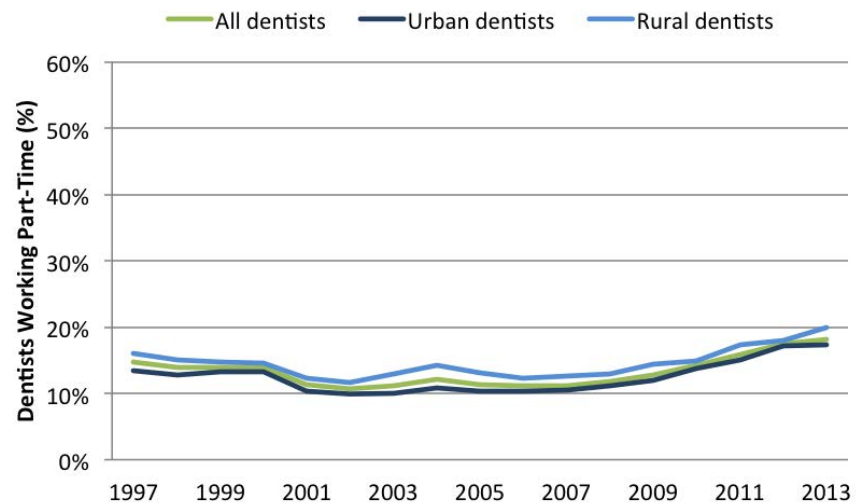
**Exhibit 3. Private practice dentists working part-time, by practice arrangement, 1997-2013**



*Urbanicity*

Consistently, between 1997-2013, dentists in rural areas were slightly more likely to work part-time than urban dentists (Exhibit 4). Both rural and urban dentists followed a similar trend, with a greater percent working part-time after the mid-2000s.

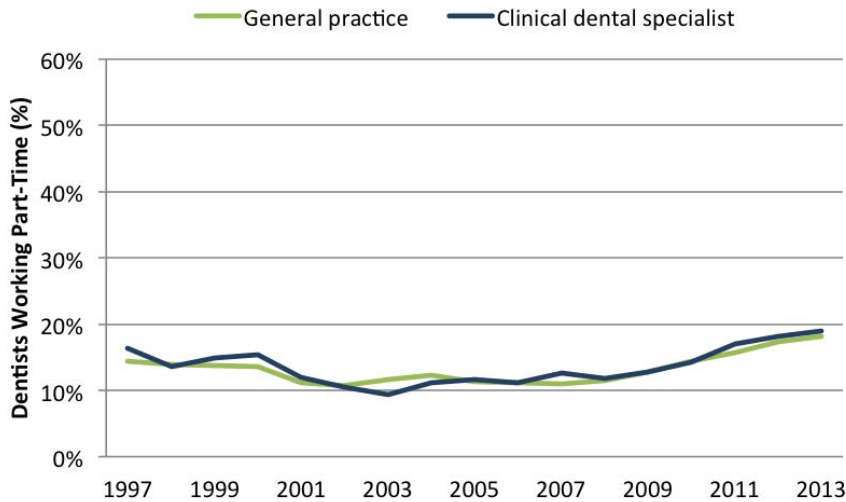
**Exhibit 4. Private practice dentists working part-time, by urbanicity, 1997-2013**



*Specialty*

From 2001-2013, both general dentists and clinical specialists (including orthodontists, oral surgeons, pediatric dentists, endodontists, periodontists, and prosthodontists) experienced a similar increasing trend in those working part-time. Among clinical specialists, orthodontists (n=83) were the most likely to work part-time (27% in 2013), and oral surgeons (n=58) were the least likely to work part-time (7% in 2013).

## Exhibit 5. Private practice dentists working part-time, by specialty, 1997-2013



## Conclusions & Policy Implications

This brief examines 17 years of historical dentist workforce data to document trends in Iowa's dentist workforce patterns by age, sex, location, and practice arrangement. These results show an increasing trend in dentists working part-time since 2008 and, among those working full-time, a decrease in those working 40 hours or more per week.

This increase in dentists working part-time also impacts the hours worked by allied dental professionals, such as dental hygienists and dental assistants. Fewer dentists working full time, combined with a large proportion of dentists nearing retirement may impact the capacity of Iowa's dentist workforce to ensure access to care for Iowa's residents.

## Author Information

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*From 2001-2013, both general dentists and clinical specialists experienced a similar increasing trend in those working part-time.*

## Endnotes

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