

Research Brief

Very Large Dental Practices Seeing Significant Growth in Market Share

Authors: Thomas Wall, M.A., M.B.A.; Albert H. Guay, D.M.D.

The Health Policy Institute (HPI) is a thought leader and trusted source for policy knowledge on critical issues affecting the U.S. dental care system. HPI strives to generate, synthesize, and disseminate innovative research for policy makers, oral health advocates, and dental care providers.

Who We Are

HPI's interdisciplinary team of health economists, statisticians, and analysts has extensive expertise in health systems policy research. HPI staff routinely collaborates with researchers in academia and policy think tanks.

Contact Us

Contact the Health Policy Institute for more information on products and services at hpi@ada.org or call 312.440.2928.

Key Messages

- *From 2002 to 2012, market share increased for dental firms with 20 employees or more, while dental firms with fewer than five employees experienced a decline in market share.*
- *During the same period, very large dental firms – those with 500 employees or more – also saw increases in number of establishments, number of employees and annual receipts.*
- *Market penetration of very large firms varies by state, from a low of none in seven states to a high of seven percent of the Florida market.*

Introduction

Among several important structural changes that have occurred in the U.S. dental sector in recent years is the trend toward larger, consolidated multi-establishment dental practices.¹ One study reported that, although relatively small in number, large multi-establishment dental enterprises grew in terms of the number of establishments and the percentage of annual receipts from 1992 to 2007.² A second study reported that over a two-year period, the number of large group dental practices grew by 25 percent.³ However, very large dental practices with 20 or more dentists accounted for just three percent of all dental practices in 2008. The trend toward larger, multi-establishment dental practices is expected to continue, driven by changes in the practice patterns of new dentists, a drive for efficiency and increased competition for patients.⁴

In this research brief, we examine recent trends in the number of dental establishments, dental employees and annual dental receipts. We include a breakdown of this information by dental firm size based on number of employees. We also focus on growth in the largest dental firms during the last decade, and show how the percentage of dental establishments

accounted for by the largest dental firms varied by state in 2012.

Data & Methods

We used annual data about the offices of dentists from the U.S. Census Bureau's Statistics of U.S.

Businesses (SUSB).⁵ The SUSB provides annual data on the number of firms, the number of establishments, employment and annual payroll for most U.S. business establishments. In addition, estimated annual receipts data are included for years ending in 2 and 7. Due to a consistent methodology, information in the SUSB can be used to track changes in the number and size of dental firms and establishments over time.

The SUSB consists of a compilation of data extracted from the Business Register (BR), which contains the U.S. Census Bureau's most complete, current, and consistent data for U.S. business establishments. The BR is updated continuously and incorporates data from the Census Bureau's economic censuses and current business surveys, quarterly and annual Federal tax records, and other departmental and federal statistics.

The SUSB includes business establishments with paid employees.⁶ Employment consists of full- and part-time employees, including salaried officers and executives of corporations. A business establishment is defined as a single physical location where business is conducted. An enterprise is a business organization consisting of one or more domestic establishments under common ownership or control. A firm is a business organization consisting of one or more domestic establishments in the same state and industry under common ownership or control.⁷ Firm size in the SUSB is determined by summed employment of all associated establishments.

Business establishments in the Economic Census are grouped and identified with codes based on the North American Industry Classification System (NAICS).⁸ In

the SUSB offices of dentists are identified as NAICS code 8212. According to NAICS, "This industry comprises establishments of health practitioners having the degree of D.M.D. (Doctor of Dental Medicine), D.D.S. (Doctor of Dental Surgery), or D.D.Sc. (Doctor of Dental Science) primarily engaged in the independent practice of general or specialized dentistry or dental surgery. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. They can provide either comprehensive preventive, cosmetic, or emergency care, or specialize in a single field of dentistry."

The SUSB provides information regarding establishments, employees and annual receipts for the following firm employment size categories: 0 to 4,⁹ 5 to 9, 10 to 19, 20 to 99, 100 to 499 and 500 or more. We focused on the period 2002 to 2012, the most recent year for which data are available.

Results

The number of dental firms increased from 113,128 in 2002 to 125,151 in 2012 (+10.6%); the number of dental establishments (individual locations) increased from 117,812 in 2002 to 133,107 in 2012 (+13.0%); and the number of dental employees increased from 750,129 to 873,172 (+16.4%). See Table 1. These rates of growth were greater than the rate of growth of the U.S. population, which grew by 9.0% from 2002 to 2012.¹⁰

Figure 1 shows the percentage of total receipts by dental firm size category measured in terms of the number of employees. From 2002 to 2012 there was an increase in the percentage of total receipts accounted for by dental firms with 20 employees or more – from 15.7 percent to 20.1 percent. The percentage of total receipts accounted for by the

Research Brief

smallest dental firms (0 to 4 employees) fell from 19.9 percent to 16.0 percent.

Growth among large dental firms can also be considered in terms of the number of establishments owned and controlled by these firms. Figure 2 shows that the number of establishments accounted for by the largest dental firms grew rapidly from 1,172 in 2002 to 3,732 in 2012. Growth in the number of establishments accounted for by the second largest category of dental firms (100 to 499 employees) was relatively modest, from 838 in 2002 to 1,028 in 2012.

In 2002, the three categories with the smallest number of employees (0 to 19 employees) comprised 94.2 percent of the dental establishments in the United States and generated 84.3 percent of dental revenue. In 2012, they made up 91.9 percent of the dental establishments and generated 79.9 percent of dental revenue. The greatest relative reduction in revenue occurred in the 0 to 4 employee category. The largest size category (greater than 500 employees) comprised 1.0 percent of dental establishments in 2002 and generated 2.3 percent of revenue. In 2012, they comprised 2.8 percent of dental establishments and generated 4.6 percent of dental revenue. See Figure 3. The greatest growth was seen within the largest practices and the greatest shrinkage within the smallest size practices. Growth was pretty much flat within the middle size categories.

From 2008 to 2010, roughly corresponding to the Great Recession (officially December 2007 to June 2009), the total number of dental firms, establishments and employees continued to grow. See Table 1. The only segment that did not participate in this growth was the firm size category with 20 to 99 employees. Overall growth continued from 2010 to 2012, except for a drop in the number of employees among the smallest firm size category and a drop in the number of employees and the number of firms in the firm size category with

10 to 19 employees. In the largest firm size category, there was a decrease in the number of dental firms, but an increase in the number of establishments and employees.

The percentage of dental establishments accounted for by the largest dental firm size category varied by state in 2012. See Figure 4. As shown in this map, large dental firms are concentrated in the West and Southwest, the upper Midwest, as well as in the Southeastern states of Georgia and Florida.

Discussion

From 2002 to 2012, the number of dental firms, dental establishments (individual locations) and dental employees grew faster than the U.S. population. According to a recent HPI research brief, the per capita supply of dentists in the United States increased from 2003 to 2013, and will continue to increase through 2033.¹¹ At the aggregate level, the United States could be entering a period of expanding supply of dentists and flattening demand for dental care.

In 2012, dental firms with 20 or more employees accounted for a larger share of receipts than in 2002, while dental firms with fewer than five employees accounted for a smaller share. The largest dental firms (i.e., 500 or more employees) also grew rapidly in terms of the number of dental establishments owned and controlled by these firms. However, as a percentage of total dental establishments, the percentage accounted for by the largest dental firms is still small.

From 2008 to 2010, roughly corresponding to the Great Recession, the number of dental firms, establishments and employees continued to grow. From 2010 to 2012, rapid growth in the number of establishment and employees accounted for by the largest dental firms was associated with a decrease in the number of large

dental firms. This suggests a recent consolidation among the largest multi-establishment dental firms. Also, the growth in revenue did not match the extent of the growth in the number of establishments within the largest practice category. This may be indicative of the difficulty of identifying new markets large enough to support big practices or the emerging of diseconomies of scale as practices become larger. Unfortunately, little is known about the economies of scale in dental practices with multiple dentists or the range of practice size where economies of scale may be present.

The results presented in this research brief indicate that the concentration of large dental firms varies by state. The experience within local markets may differ in degree or nature. Large practices, although growing, still are a small portion of dental practices in the United States and generate a small percentage of dental revenue.

Although the growth of large, multi-establishment dental firms represents a significant structural change in the U.S. dental sector, information about the various types of specific firms is lacking. A recent study proposed a classification consisting of the following categories: (1) dentist owned and operated group

practice, (2) dental management organization affiliated group practice, (4) not-for-profit group practice, (5) government agency group practice and (6) hybrid group practice.¹² Unfortunately, the SUSB does not contain information about type of dental firm.

Relatively new to the care of children in Medicaid are Medicaid-predominant general practices affiliated with dental management organizations (DMOs), which are expanding dramatically in numbers and locations.¹³ As of 2009, there were at least 300 locations across the country dedicated to care of children in Medicaid that were managed by the five largest DMOs and there were at least 10 additional smaller DMOs contributing to the care of these children. It was estimated that 21 percent of Medicaid children obtained dental services from these practices in 2009.

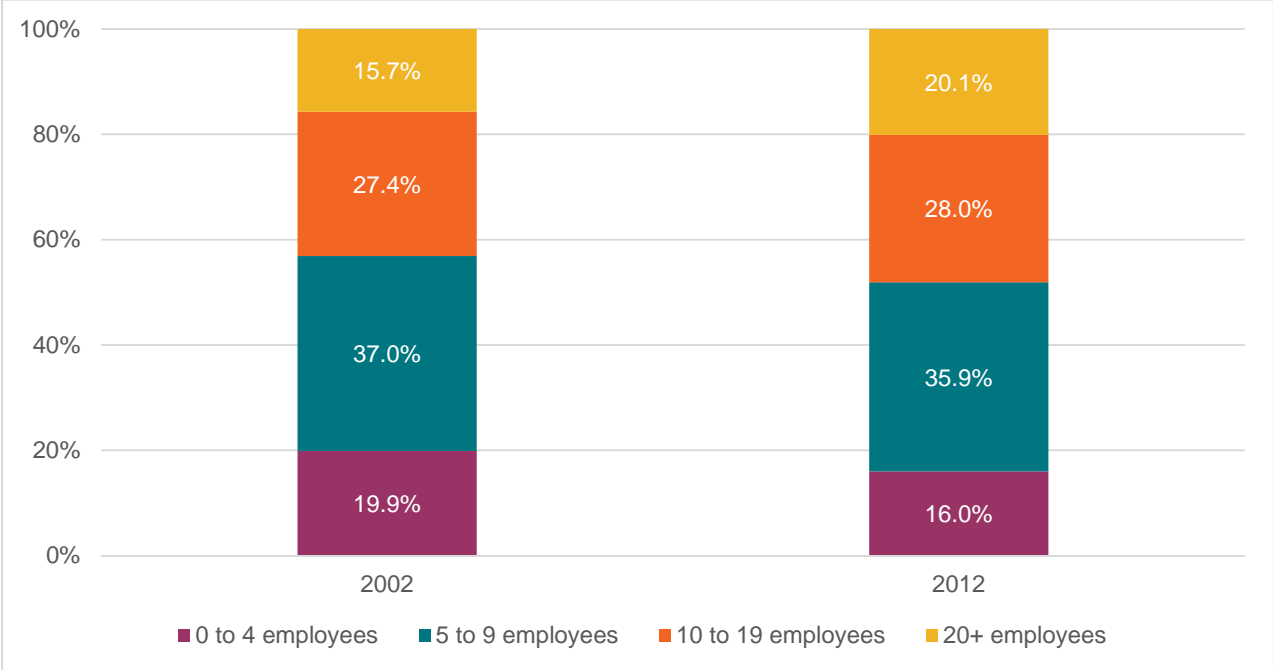
Large multi-establishment dental firms represent a relatively small but growing segment of the dental marketplace. It will be important to monitor the future growth of large dental firms. Additional research is needed about the various types of multi-establishment dental firms. The ADA Health Policy Institute will continue to study changes in the structure of dental practice in the U.S.

Table 1: Dental Firms, Establishments, Employees and Annual Receipts by Enterprise Employment Size, 2002, 2008, 2010 and 2012

2002	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 99 employees	100 to 499 employees	500 + employees	Total
Firms	47,961	43,592	18,159	3,268	111	37	113,128
Establishments	48,023	43,898	19,148	4,733	838	1,172	117,812
Employment	109,279	290,007	230,322	93,578	12,674	14,269	750,129
Receipts (\$1,000)	\$17,458,837	\$32,558,629	\$24,095,527	\$9,821,983	\$1,983,299	\$2,009,945	\$87,930,191
2008							
Firms	49,374	48,428	20,104	3,569	153	58	121,686
Establishments	49,453	48,701	21,016	5,110	764	2,833	127,877
Employment	111,445	323,486	254,004	103,355	15,923	27,671	835,884
2010							
Firms	50,411	48,932	20,201	3,533	176	69	123,322
Establishments	50,513	49,208	21,090	5,017	901	3,101	129,830
Employment	114,883	326,084	255,448	102,811	17,758	29,480	846,092
2012							
Firms	50,711	50,140	20,143	3,898	194	65	125,151
Establishments	50,781	50,350	21,225	5,991	1,028	3,732	133,107
Employment	114,669	334,855	255,150	114,695	20,049	33,754	873,172
Receipts (\$1,000)	\$16,801,830	\$37,539,741	\$29,336,182	\$13,812,623	\$2,402,683	\$4,847,232	\$104,740,291

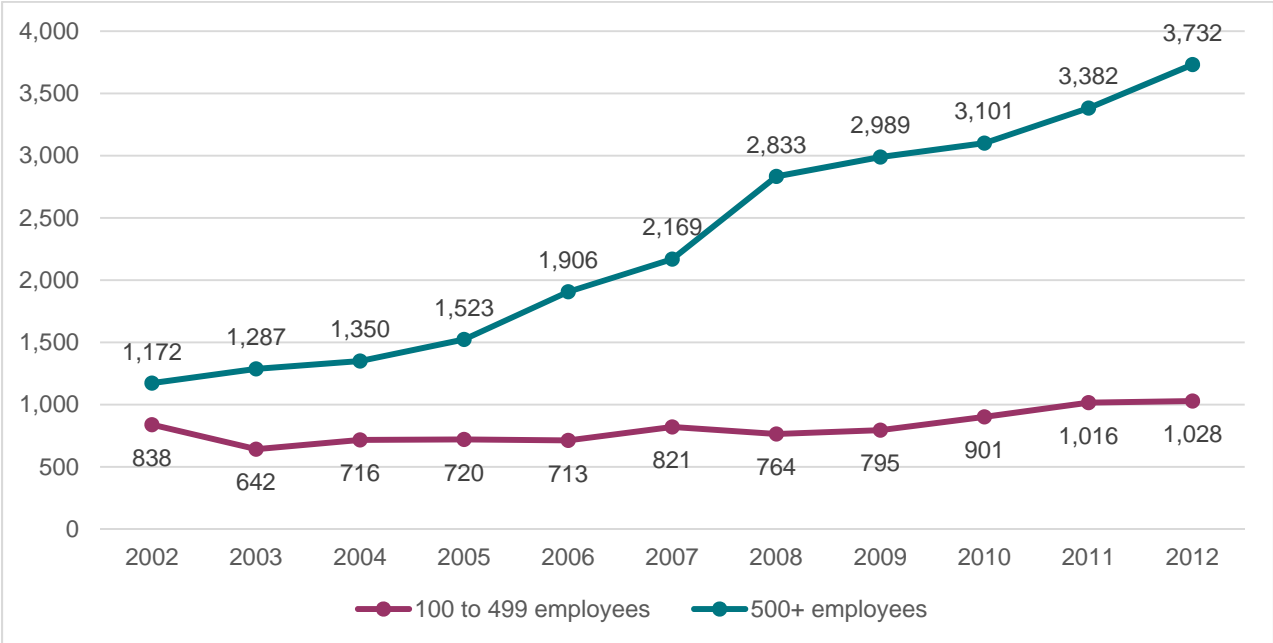
Source: U.S. Census Bureau, Statistics of U.S. Businesses. **Notes:** receipts for 2002 are in 2012 dollars using GDP deflator.

Figure 1: Percentage of Total Receipts by Dental Firm Size Category



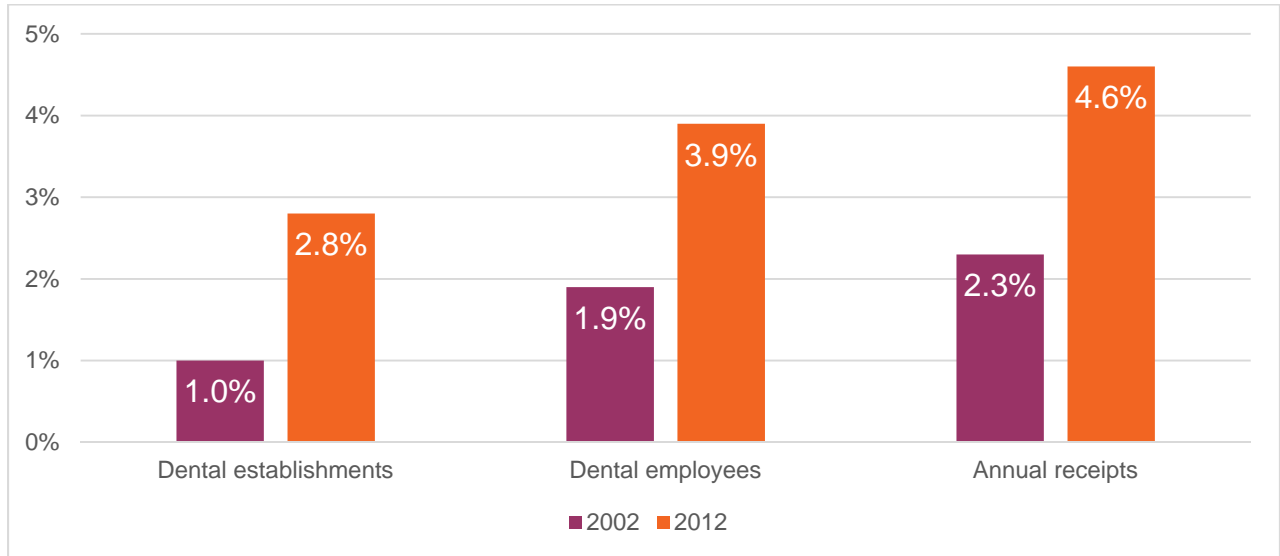
Source: U.S. Census Bureau, Statistics of U.S. Businesses.

Figure 2: Total Number of Establishments by Dental Firm Size Category



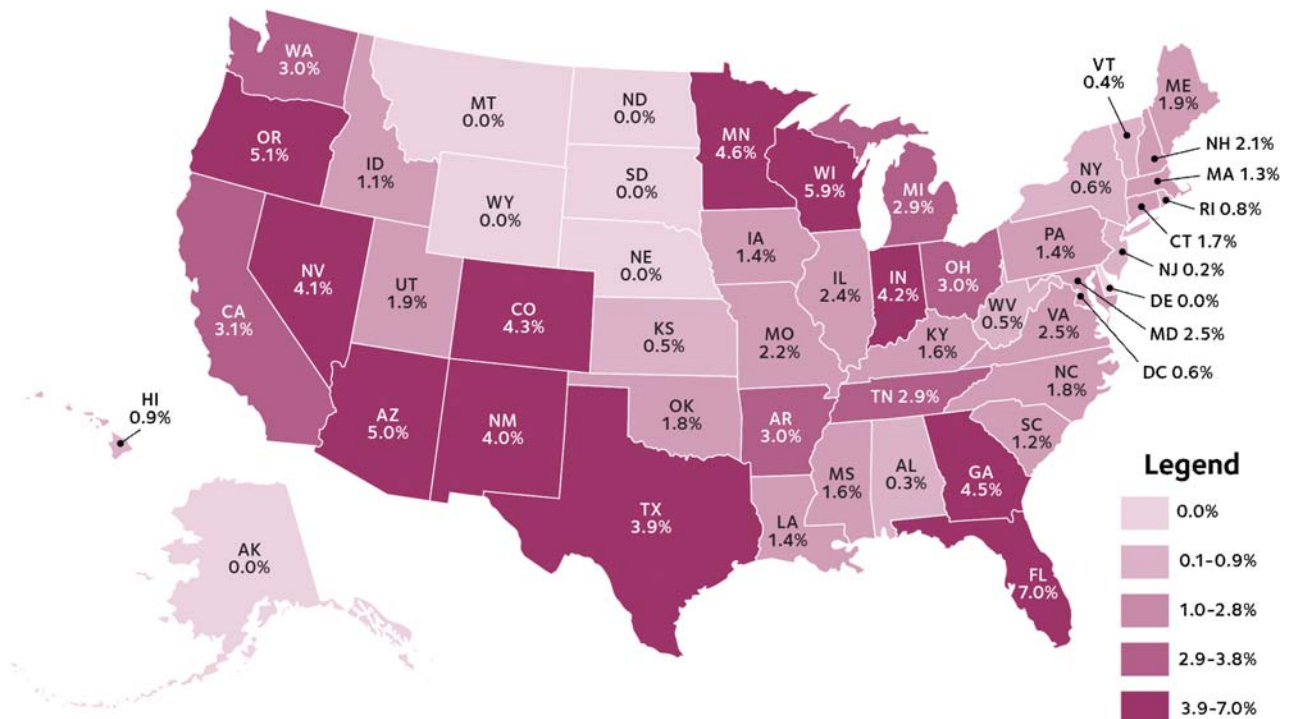
Source: U.S. Census Bureau, Statistics of U.S. Businesses.

Figure 3: Characteristics of the Largest Dental Firm Size Category as a Percentage of Total Dental Firms, 2002 vs. 2012



Source: U.S. Census Bureau, Statistics of U.S. Businesses. **Note:** Largest dental firms are those with 500 or more employees.

Figure 4: Percentage of Dental Establishments in the Largest Dental Firm Size Category by State, 2012



Source: U.S. Census Bureau, Statistics of U.S. Businesses. **Note:** Largest dental firms are those with 500 or more employees.

This Research Brief was published by the American Dental Association's Health Policy Institute.

211 E. Chicago Avenue
Chicago, Illinois 60611
312.440.2928
hpi@ada.org

For more information on products and services, please visit our website, www.ada.org/hpi.

References

- ¹ Vujcic M et al. A profession in transition. *JADA* 2014;145(2):118-121.
- ² Guay A, Wall T, Petersen B, Lazar V. Evolving trends in size and structure of group dental practices in the United States. *J Dent Educ* 2012;76(8):1036-44.
- ³ ADA News. ADA Explores Growth of Large Group Practices. April 9, 2012. Available from: <http://www.ada.org/en/publications/ada-news/2012-archive/april/ada-explores-growth-of-large-group-practices>
- ⁴ Vujcic M et al. A profession in transition. *JADA* 2014;145(2):118-121.
- ⁵ U.S. Census Bureau. Statistics of U.S. Businesses. Available from: <http://www.census.gov/econ/susb/index.html>
- ⁶ Not included are businesses that have no paid employees and are subject to federal income taxes. These nonemployer businesses are generally small, such as real estate agents and independent contractors. These firms average less than 4 percent of all sales and receipts nationally, and are excluded from most other Census Bureau business statistics.
- ⁷ An enterprise with establishments in more than one state would be counted as a firm in each state in which it operates an establishment, but is also counted as only one firm in national all-industry tabulations.
- ⁸ U.S. Census Bureau. North American Industry Classification System. Available from: <http://www.census.gov/eos/www/naics/>
- ⁹ The firm size group “0” includes firms for which no associated establishments reported paid employees in the mid-March pay period but paid employees at some time during the year.
- ¹⁰ U.S. Census Bureau. Census and inter-census estimates of the U.S. residential population. Available from: http://www.census.gov/popest/data/historical/2010s/vintage_2012/index.html.
- ¹¹ Munson B, Vujcic M. Supply of dentists in the United States is likely to grow. Health Policy Institute Research Brief. American Dental Association. October 2014. Available from: http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIBrief_1014_1.ashx.
- ¹² Guay A, Warren M, Starkel R, Vujcic M. A Proposed Classification of Dental Group Practices. Health Policy Institute Research Brief. American Dental Association. February 2014. Available from: http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIBrief_0214_2.ashx.
- ¹³ Children’s Dental Health Project. Dental Visits for Medicaid Children: Analysis and Policy Recommendations. Issue Brief. June, 2012. Available from: <https://www.cdhp.org/resources/173-dental-visits-for-medicaid-children-analysis-policy-recommendations>.

Suggested Citation

Wall T, Guay A. Very large dental practices seeing significant growth in market share. Health Policy Institute Research Brief. American Dental Association. August 2015. Available from: http://www.ada.org/sections/professionalResources/pdfs/HPIBrief_0815_2.pdf