The Future Of Dentistry (Part 1): How Will The Level Of Competition Change?

APRIL 2012

What does the future of dentistry hold? In our first installment, we examine how the level of competition will be affected by the growing number of dental school graduates, longer dental careers, increased dental productivity, changing scope of dental services, introduction of paraprofessionals, and changes in workforce laws and demand for dental services.

According to the ADA, the mean real (adjusted for inflation) net income of dentists has risen dramatically over the past 30 years. The average practice net income increased almost 68% from $140,000 in 1981 to $235,000 at its peak in 2007, before dropping to approximately $220,000 in 2009, the last year reported by the ADA, due to the economic recession.

Number of Dental School Graduates Increasing

The dramatic increase in dental net profits and the poor economic outlook in medicine were the biggest factors behind the significant increase in the number of dental school applicants. From 1990 to 2009, the number of individual applicants rose by 138%, or approximately 6% a year. 12,210 individuals applied to dental school in 2009, the last year reported by the ADA, and 4,871 were enrolled for a 2.5:1 ratio. Applications may be peaking now, due to the high cost of dental education. Costs for some dental school programs (including living expenses) now exceed $450,000, which could require over $60,000 annually in student loan repayments.

The number of dental school graduates had previously declined from a peak of 5,756 in 1982 to a low of 3,778 in 1993, for a 34% drop. Since 1993, the number of dental school graduates has rebounded to 4,171 in 2000, 4,443 in 2003, and 4,873 in 2010, the last year reported by the 61 dental schools operating in the U.S. and Puerto Rico. With five new dental schools opening since 2000 and 12 more on the drawing boards, it's highly likely that the number of dental school graduates will once again top 5,000 within the next few years.

Number of Dentists Practicing Increasing

Meanwhile, doctors are practicing longer, delaying retirement due to economic and lifestyle factors. “70 is the new 65” in dentistry, as the number of doctors retiring at age 65 dropped dramatically following the 2008 stock market and real estate decline.

With more dental students graduating each year and doctors working longer, the
The number of professionally active dentists (actively licensed) has soared from 166,383 in 2000 to 184,578 in 2010, for an increase of 18,195, or 10.94%, over this decade. In comparison, the U.S. population has been expanding at a slightly slower pace than the number of dentists. Accordingly, the U.S. population per dentist has declined from 2,254 in 1996 to 2,246 in 2009.

According to the 2010 ADA Workforce Model, the number of professionally active dentists is projected to increase to 195,267 in 2020 and 202,330 in 2030. However, since this growth is projected to be slightly lower than the overall population growth, the ratio of dentists per 1,000 U.S. residents is projected to decline from .59 in 2010 to .54 in 2030.

Another factor affecting the level of competition is the number of female dentists in the profession. According to the ADA, female dentists made up 21.56% of total dentists in 2009, up from 14.4% in 1999. Moreover, 47% of first year dental school classes are female now, up from 35.3% in 1999 and 15.6% in 1982. As a result, the percentage of female dentists is projected to increase significantly to 29.2% of the dental workforce by 2020.

A much higher percentage (30%) of female dentists were working on a part-time basis (less than 30 hours per week) in 1999, compared to only 14.7% of male dentists. This trend has changed somewhat in recent years due to economic conditions. We’ve seen an increasing number of female dentists now electing to convert from part-time to full-time to increase their family’s income. Yet, we remain convinced that a higher percentage of women will elect to work only part-time in the future, which will reduce the competition level.

**Dental Productivity Increasing**

Aided by new technology, improved systems and treatment techniques, and a higher caliber of dental school graduates, dental productivity per doctor is increasing, adding to the effective level of competition. A decade or so ago, a dental practice grossing $1,000,000 or more was an elite status, achieved by only a handful of practices. Now, it is not uncommon to find solo general dental practices producing $1,000,000 - $1,500,000 per year or more. Even after adjusting for inflation, the increased productivity is very impressive.

Certainly, new technologies have boosted the level of dental productivity. However, another little-noticed trend has yet to be recognized. The quality of dental school graduates and their productivity is substantially higher than in the 1970s and 1980s. Back then, many dental school graduates were happy to produce $200,000 - $300,000 in their first year. Now, it is not uncommon for newly graduated dentists to be producing $500,000 - $1,000,000 annually within three years following graduation.

**Changing Scope of Dental Services**
The future competition level will also be affected by the nature and scope of services provided and who provides them. Historically, all dental services have been provided in the dental office either by or under the direct supervision of a licensed dentist. That’s changed recently, and even greater changes are expected in the future.

Tooth whitening services have been “peeled off” from the scope of services provided exclusively by a licensed dentist, or under his supervision. Efforts by state dental boards to prohibit tooth whitening (bleaching) centers operated by non-dentists were struck down by the Federal Trade Commission (FTC) in December of 2011, on antitrust grounds.

**Introduction of Dental Paraprofessionals**

The Surgeon General’s 2000 Report on Oral Health cited a pressing need for access to dental care for 17 million low-income children. In response, two charitable organizations, the Pew Charitable Trust and the W.K. Kellogg Foundation, have funded projects recommending three new mid-level dental providers (dental therapists, community dental health coordinators, and advanced dental hygiene practitioners), similar to Physician Assistants (P.A.s) and Nurse Practitioners (N.P.s) in medicine, to attempt to address the unmet dental needs.

Alaska was the first state to allow licensed dental therapists. Alaska’s Native Dental Health Aide Therapists (DHATs) are providing dental services – including restorations, extractions, and other surgical dental procedures, in remote tribal villages following two years of technical training and work under the direct supervision of dentists. Minnesota next approved the licensing of dental therapists in 2009 and at least six other states (New Mexico, Kansas, Vermont, Ohio, Washington, and California) are either considering such legislation or studying the issue.

While the ADA and state dental boards have universally opposed licensing dental therapists, it’s too early to determine how far and how fast this trend will spread.

**Changing Workforce Laws**

A change in workforce laws affecting dental hygienists and dental assistants will also affect the future competition level for dentists. Professional dental hygienist organizations are lobbying state legislators to expand their allowable duties to include administering nitrous oxide, local anesthesia, and providing laser therapy, as well as to practice without direct supervision of a dentist, or even independently, as Colorado now allows.

Likewise, expanding duties for dental assistants and expanded function assistants promise to increase the number of procedures which can be delegated to these staff members who perform them under the doctor’s direct supervision.
That will allow doctors to increase production using the same staff and facility. This increased efficiency is essential to maintain acceptable profitability in the face of increasing managed care penetration.

Unfortunately, the introduction of dental paraprofessionals and expanded delegation of procedures to other dental staff will decrease the need for licensed dentists. Accordingly, these factors will increase the effective level of competition in the future.

Demand for Dental Services

The decline in profits for the average dentist in recent years shows that dentistry is no longer “recession-proof.” In evaluating the causes of the decline, the ADA found that while the gross billings (production) per patient visit had risen from $131.75 in 1996 to $176.72 in 2009, patients were delaying visits and treatment.

The percentage of the U.S. population visiting the dentist during the past 12 months had dropped from 41.2% in 2003 to 38.6% in 2009. Meanwhile, the average visits per patient per year had dropped from 2.05 in 1996 to 1.91 in 2009.

Also, dental services purchased during those visits also changed with fewer bigger-ticket, restorative procedures and more lower-cost, preventative and diagnostic procedures. As a result, dental spending declined for the first time ever in 2009, before increasing by 2.3% to $104.8 billion in 2010.

While the current economic recovery is benefiting practices nationwide, the declining role of dental insurance represents a huge negative effect. Fewer patients have dental insurance coverage than in the past, and the coverage they have is paying for a small portion of the dental bills these days. As a result, the average out-of-pocket payment for dental costs rose from $264 a year in 1996 to $325 in 2008. Higher out-of-pocket costs and declining real income levels for middle class patients have resulted in a dramatic increase in the percentage of patients with unmet dental needs due to affordability problems, from 8% in 1997 to 13% in 2010.

In the future, dentistry will benefit from the increased demand from a growing, aging population. The 65 and older age demographic will grow from 12% of the total population currently to a peak of 20% in 2035. As patients age, they tend to spend more on dentistry. Seniors were forecasted to purchase 23% of total dental expenditures in 2006, rising to 28% in 2018, and 32% by 2030.

Unfortunately, most dental insurance coverage is employer-based, and basic Medicare does not cover dental benefits. Since most seniors do not have employer-based coverage, they pay a much higher percentage of dental costs out-of-pocket (68%), compared to only 45% for patients 41-50 years old.

Political factors will also affect dental demand. Pediatric dental demand will
increase once pediatric coverage is required in 2014 under health care reform. Unfortunately, demand for big-ticket procedures will decline in 2013, once health care reform slices the maximum flexible spending account (FSA) limit from $5,000 to $2,500 annually.

The economic recovery and the growing senior population will increase demand for dental services in the future. However, affordability will be the key issue limiting growth, since real income increases will be nominal, out-of-pocket costs will increase, interest rates will rise as the economy improves, and taxes are slated to increase.

The significant increase in the percentage of female dentists, who are more apt to work only part-time, will help the competition level. However, increased dental productivity, more limited scope of dental services, introduction of paraprofessionals, more expansive workforce laws, growth of managed care plans and corporate practices, and restricted demand for dental services, leads us to believe competition in dentistry will increase slightly over the next five years.