The Benefits Created by Dental Service Organizations

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Introduction

According to the Kaiser Family Foundation, "dental caries, or tooth decay, remains the most common chronic disease among children ages 6-18."[1] The incidence of this problem is borne disproportionately by children from lower-income families. Dental Service Organizations (DSOs, also commonly referred to as Dental Practice Managements (DPMs), Dental Management Organizations (DMOs) or Dental Management Service Organizations (DMSOs)) are a management innovation that disproportionately benefits poor and uninsured patients. As stated by Shaw (2012),

> *While in theory Medicaid does offer dental benefits, only about one-third of dentists accept Medicaid patients. It's not difficult to understand why. Beyond the abysmally low reimbursements, dentists cite other issues such as frequently broken appointments, unappreciative patients, stifling red tape, and an often hostile bureaucracy to deal with. Fortunately, Dental Management Service Organizations have emerged to meet the challenge of providing dental care to the nation's poor.*
>
> *These practices and dentists are going where the other dentists can't or won't: Inner cities, rural America, and low-income neighborhoods.*
>
> *As such, certain efficiencies in operation can be realized, allowing Medicaid-reimbursed dentistry to become a viable business model. In addition, DMSOs permit dentists to leave the administrative functions to others, and focus on what they do best...dentistry.*[2]

Despite the obvious benefits created by DSOs, critics of the DSO concept cite the specific actions of a few unscrupulous organizations as a means to condemn the entire industry. And, the critics are correct that the actions of these organizations are wrong and that the perpetrators should be prosecuted to the fullest extent of the law. But, these actions are not representative of the DSO industry. According to a study of DSO practices in Texas by Laffer Associates (2012):

DMSOs permit dentists to leave the administrative functions to others, and focus on what they do best... dentistry.

> *…our review of the Texas Medicaid data from fiscal year 2011—some 25.9 million procedures—rejects virtually everything DSO detractors claim:*

- Across the state of Texas in 2011, dentists affiliated with Kool Smiles (the nation's largest Medicaid focused DSO) performed 8.24 procedures per patient and dentists belonging to DSOs performed 10.15 procedures per patient, versus 12.39 procedures per patient at non-DSOs. Clearly, Kool Smiles and other DSOs are not performing too many procedures—at least not relative to non-DSO dentists.

- The cost per patient per year was $345.45 at Kool Smiles practices and $483.89 at DSO clinics, compared with $711.54 for non-DSO offices. Kool Smiles and DSOs in general are not overcharging either, compared to regular dentists.

- Dentists at DSO clinics also billed Medicaid less per patient than other dentists for those procedures that could indicate the presence of fraud or mistreatment, such as tooth extractions, pulpotomies (removal of infected tooth pulp), and crowns.

All of the 2011 data for Texas suggest that DSO dentists provide conservative, low-cost treatment to a previously underserved population, thus improving the dental health of Texas' low income children and families. Today, DSOs are doing just what we need: providing a critically important health service to people who desperately need it, ultimately at a lower cost to the taxpayer.

As consumers and taxpayers, we should embrace this win-win-win solution.[3]

All of the 2011 data for Texas suggest that DSO dentists provide conservative, low-cost treatment to a previously underserved population.

These types of benefits that are created by the DSO industry should not be foregone simply because a few organizations or individuals engage in illegal activities. For instance, it would not be beneficial to society if the financial markets were completely shut down simply because Bernie Madoff ran a Ponzi scheme that stole billions of dollars from investors. Shutting down the financial industry would make the U.S. economy poorer and lower the quality of life for all Americans.

In fact, it is clear that responding to the Madoff scandal by making money management illegal is an extreme over-reaction by regulators and lawmakers to a problem that was (and should be) managed by prosecuting those individuals who engaged in the illegal behavior. Responsible individuals and organizations in the financial industry should have been (and were) allowed to continue providing beneficial financial services to the millions of Americans that require investment vehicles to save for college, home purchases, and/or their retirement. The same principle holds for DSOs.

This analysis illustrates that DSOs are an excellent example of private sector innovation that created a solution to a serious societal problem. The paper begins by documenting the serious health problem that has emerged in many lower income communities due to a lack of access to regular dental care. DSOs are a market solution to this problem that empowers dentists to effectively serve populations that are not effectively served otherwise.

Next, the DSO structure is described to illustrate how leveraging a DSO organizational structure provides many benefits to dentists and also empowers the dentistry profession to serve the lower income communities that have otherwise lacked service. While it is true that not all DSOs provide care for lower income, Medicaid or CHIP eligible patients, the model lends itself to meeting the needs of an underserved market.

The final section provides the current developing evidence that DSOs are creating significant economic benefits for the dentistry profession, and providing better and more widely available dentistry services to all communities—especially the lower income communities where dental services have been in short supply.

The paper concludes by summarizing how DSOs exemplify the societal benefits that private sector organizations can create by pursuing their own private interests.

The U.S. Dental Health Market: Bridging the Great Divide

Data from the Agency for Healthcare Research and Quality (AHRQ) confirm that lower income individuals tend to have less access to necessary dental care.[4] Figure 1 presents the percentage of people who were unable to receive (or received delayed) necessary dental care in 2009. The data show that lower income individuals were three times more likely to delay or forgo necessary dental care. Figure 2 illustrates that the primary reason for forgoing the care was prohibitive costs.

Figure 1

Percentage of People Who Either Delayed or Did Not Receive Needed Dental Care
United States, 2009

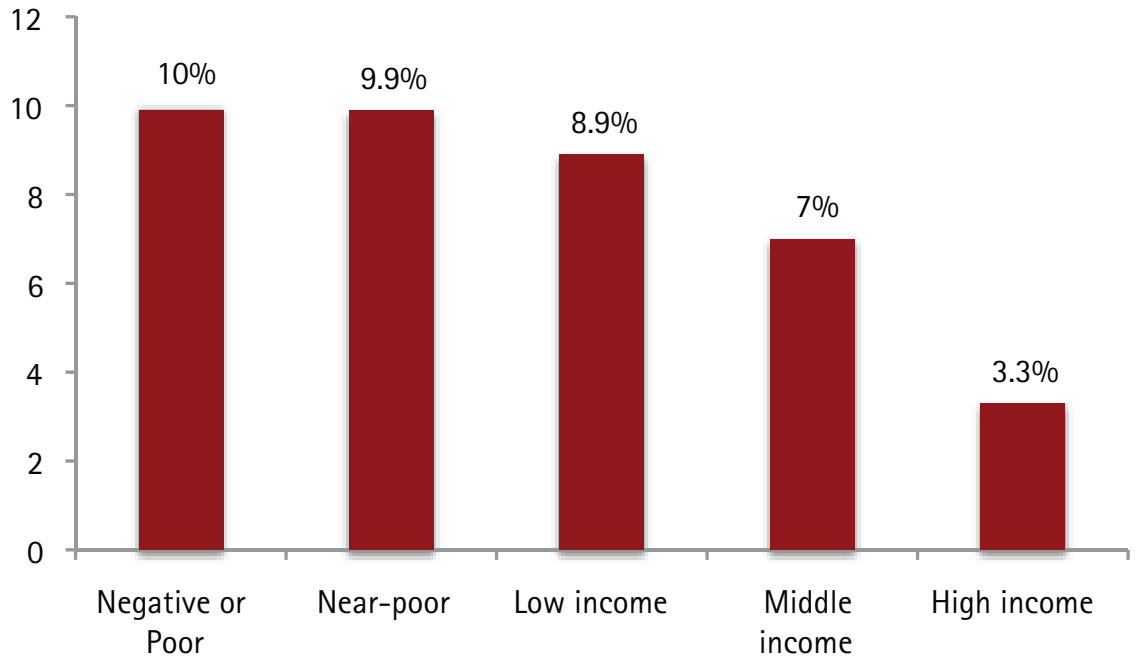
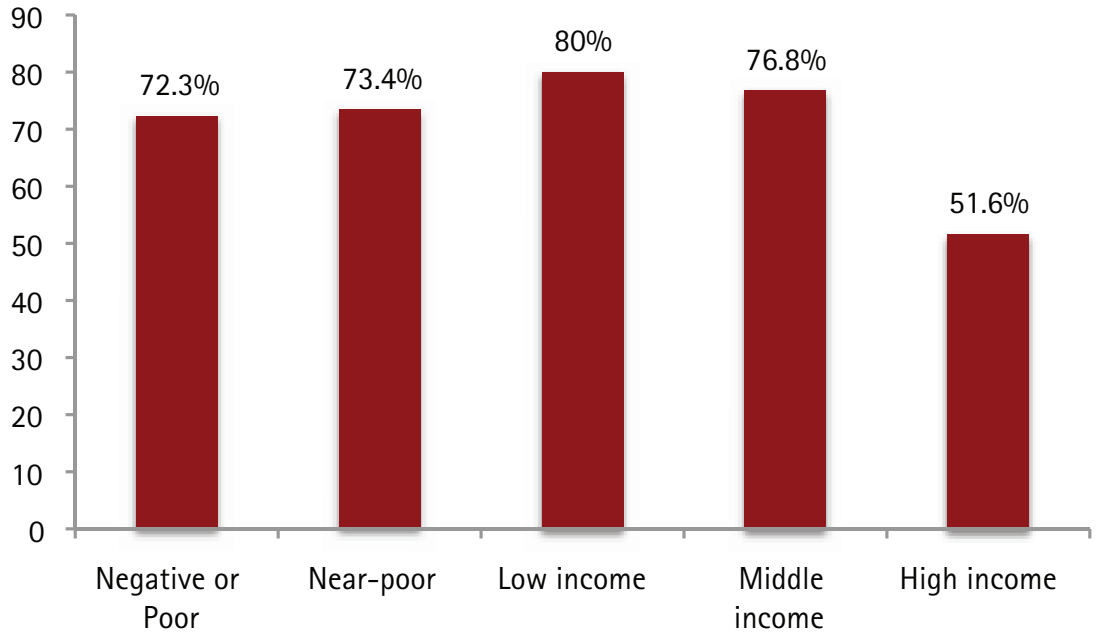


Figure 2

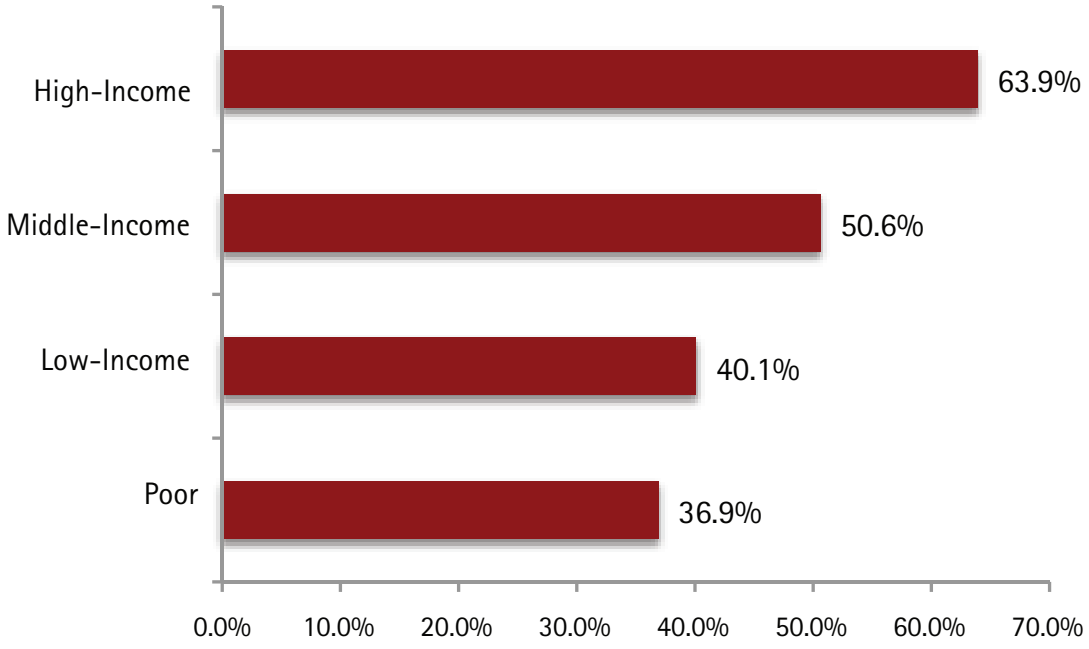
Percentage of the People Who Delayed or Did Not Receive Needed Dental Care
That Delayed/Did Not Receive Care Due to Lack of Affordability
United States, 2009



The data show an even greater disparity in care and access for children. Only slightly more than one-third of children aged 2–17 from the poorest families reported having at least one dental checkup in 2008, see Figure 3. In comparison, nearly two-thirds of children aged 2–17 from the wealthiest families reported having at least one dental checkup in 2008.

Figure 3

Percentage of U.S. Children with at Least One Dental Visit in 2008 by Poverty Status



Confirming these results, according to a 2010 Pew Center study, "an estimated 17 million low-income children in America go without dental care each year. This represents one out of every five children between the ages of 1 and 18 in the United States."[5]

This extreme differentiation in access to dental care for the poorest children is linked to lower health outcomes. A 2011 *Reuters* story reported that "in the U.S., it's estimated that up to 11 percent of 2-year-olds and 44 percent of 5-year-olds have cavities. And the majority of those children are from low-income families."[6]

The Pew Center study also describes the dire consequences created by this lack of access: "The problem is critical for these kids, for whom the consequences of a "simple cavity" can escalate through their childhoods and well into their adult lives, from missing significant numbers of school days to risk of serious health problems and difficulty finding a job."[7]

An estimated 17 million low-income children in America go without dental care each year.

Alternatively, regular visits to dentists are associated with greater health outcomes. For instance, the *Reuters* story cited researchers at the University of North Carolina who studied

> *…data on nearly 322,500 children enrolled in the state's Medicaid program between 2000 and 2006. Of those children, 13,424 had at least four visits to their doctor for preventive dental care, while almost 195,000 had no visits.*

The researchers found that the effectiveness of the program varied with children's age. They estimate that children who had their initial visits between 12 and 15 months of age were half as likely to need any cavity treatment by the age of 17 months, versus children with no visits.

The program also cut back on cavities in kids older than three-and-a-half.[8]

Better utilization of preventative dental services has also been linked to reduced overall costs for the medical system. According to studies cited by the Children's Dental Health Project:

The data briefly reviewed above are indicative of the growing consensus that access to regular dental services improves health outcomes, while lack of access to regular dental services leads to worse health outcomes.

Low-income children who have their first preventive dental visit by age one are not only less likely to have subsequent restorative or emergency room visits, but their average dentally related costs are almost 40 percent lower ($263 compared to $447) over a five year period than children who receive their first preventive visit after age one….

Without access to regular preventive dental services, dental care for many children is postponed until symptoms, such as toothache and facial abscess, become so acute that care is sought in hospital emergency departments. This frequent consequence of failed prevention is not only wasteful and costly to the health care system, but it rarely addresses the problem, as few emergency departments deliver definitive dental services. As a result, patients typically receive only temporary relief of pain through medication and in some acute cases, highly costly, but inefficient surgical care. A three-year aggregate comparison of Medicaid reimbursement for inpatient emergency department treatment ($6,498) versus preventive treatment ($660) revealed that on average, the cost to manage symptoms related to dental caries on an inpatient basis is approximately 10 times more than to provide dental care for these same patients in a dental office.[9]

The data briefly reviewed above are indicative of the growing consensus that access to regular dental services improves health outcomes, while lack of access to regular dental services leads to worse health outcomes. As illustrated in the next section, a key obstacle to improved access is the mismatch between family dentists' current cost structure compared to Medicaid's reimbursement rates for dentists, coupled with the high administrative costs dentists must spend in order to serve Medicaid patients.

The Problem of Medicaid Reimbursement Rates

The federal government requires all states to provide dental benefits to children as part of Medicaid or the State Children's Health Insurance Program (CHIP). Specifically, the federal government states:

Dental services for children must minimally include:

- Relief of pain and infections
- Restoration of teeth
- Maintenance of dental health

The Early Periodic Screening, Diagnostic and Testing (EPSDT) benefit requires that all services must be provided if determined medically necessary. States determine medical necessity.[10]

However, as of "…2006, only one in three children in Medicaid received a dental service"[11] The reason is dentists' inability to serve Medicaid patients. "Dentists cite three primary reasons for their low participation in state Medicaid programs: low reimbursement rates, burdensome administrative requirements, and problematic patient behaviors."[12]

Medicaid's lack of success in serving the dental needs of lower income children has been well documented by the Government Accountability Office (GAO). In a 2008 review of the evidence, the GAO found that:

> *Dental disease remains a significant problem for children aged 2 through 18 in Medicaid. Nationally representative data from the 1999 through 2004 NHANES surveys—which collected information about oral health through direct examinations—indicate that about one in three children in Medicaid had untreated tooth decay, and one in nine had untreated decay in three or more teeth … Children in Medicaid remain at higher risk of dental disease compared to children with private health insurance; children in Medicaid were almost twice as likely to have untreated tooth decay.*
>
> *Receipt of dental care also remains a concern for children aged 2 through 18 in Medicaid. Nationally representative data from the 2004 through 2005 MEPS survey—which asks participants about the receipt of dental care for household members—indicate that only one in three children in Medicaid ages 2 through 18 had received dental care in the year prior to the survey. Similarly, about one in eight children reportedly never sees a dentist. More than half of children with private health insurance, by contrast, had received dental care in the prior year. Children in Medicaid also fared poorly when compared to national benchmarks, as the percentage of children in Medicaid who received any dental care—37 percent—was far below the Healthy People 2010 target of having 66 percent of low-income children under age 19 receive a preventive dental service.*[13]

Low Medicaid reimbursement rates for dentists and high compliance costs are often cited as key obstacles that prevent lower income children from having access to proper dental care. According to a 2009 GAO study, 36 state Medicaid programs reported that low Medicaid reimbursement rates were a major or moderate barrier for dentists to provide services to patients; and a further nine state programs claimed that low Medicaid reimbursement rates were a minor problem.[14] From the patient perspective, 43 state Medicaid programs reported that a major or moderate barrier for children seeking Medicaid dental services was finding a provider that accepts Medicaid; and a further six state programs claimed that finding a provider was a minor problem.[15] In both cases, very few states saw neither issue as a problem.

According to a 2009 GAO study, 36 state Medicaid programs reported that low Medicaid reimbursement rates were a major or moderate barrier for dentists to provide services to patients

Revisiting this issue again in 2010, the GAO noted that "Obtaining dental care for children in Medicaid and CHIP remains a challenge, as many states reported that most dentists in their state treat few or no Medicaid or CHIP patients."[16]

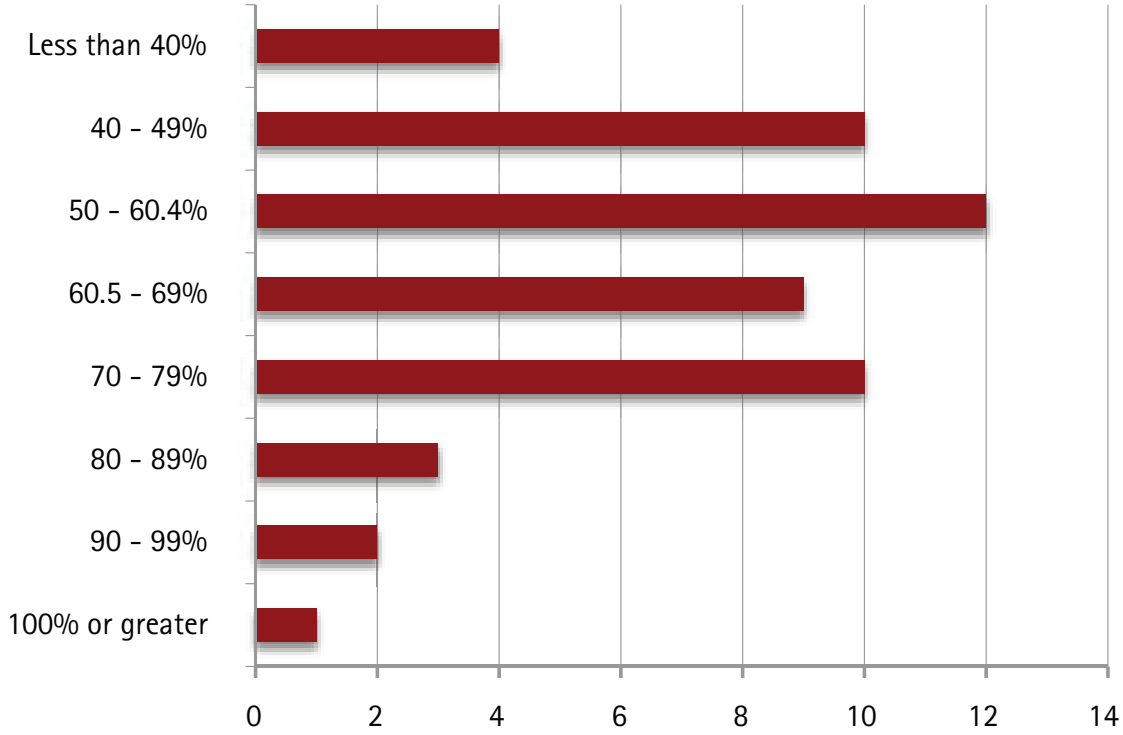
The findings of the Pew Center reinforce the GAO's findings:

> *Many dentists say they are reluctant to participate in state Medicaid programs because they require burdensome paperwork and patients often miss appointments. More frequently, however, they point to low reimbursement rates. It is easy to see why: Pew found that 26 states pay less than the national average (60.5 percent) of Medicaid rates as a percentage of dentists' median retail fees. In other words, their Medicaid programs reimburse less than 60.5 cents of every $1 billed by a dentist. For five common children's procedures (examinations, fluoride applications, sealant applications, basic fillings and tooth extractions), state payments range from rough parity with dentists' median charges in New Jersey to just 30 cents on the dollar in Florida. "If you have a patient coming in that has Medicaid, you know you're going to lose money," said Dr. Nolan Allen, a Clearwater dentist who was president of the Florida Dental Association. "We're small-business owners. We've got overhead and bills to pay."*[17]

Figure 4 reproduces the Pew Center's findings that compare state Medicaid reimbursement rates to the median retail fees as of 2008.[18] Each bar in Figure 4 represents the number of states whose Medicaid reimbursement rates fall within the reimbursement category band. Therefore, the first bar means that only one state has Medicaid reimbursement rates that either equals or exceeds the median retail dentist fees. The second bar means that two states had Medicaid reimbursement rates that were between 90 percent and 99 percent of the median retail fees charged by dentists, and so on. Figure 4 clearly shows that the distribution of state reimbursement rates is clustered around the inadequate 60-cents on the dollar reimbursement level with the majority of states in the 40-cents on the dollar to 80-cents on the dollar range.

Figure 4

Medicaid reimbursement rates as a percentage of dentists' median retail fees, 2008



And, these results make sense. As with any business, it is the last dollars that represent the profits for a dentist—dentists must cover their costs, many of which are fixed (e.g. dentist assistants must be paid their salaries, dental supplies must be purchased, rent must be paid, and payments on purchases or leases of dental equipment must be made). These costs do not decline simply because the Medicaid reimbursement rates are lower.

Additionally, dentists have an obligation called "continuity of care." Continuity of care obliges dentists to continue treating a patient they have seen regardless of the patient's negative impact on profits. Introducing too many unprofitable patients to the practice could ultimately endanger the viability of the entire practice, and diminish their ability to provide care to their current patient population.

DSOs lower the cost of service by creating greater efficiencies and therefore increase dental care access for underserved lower income populations.

As further evidence that Medicaid reimbursement rates are too low for traditional dentistry practices, Decker (2011) estimated the impact that higher dentist reimbursement rates have on increasing the probability that a child covered by Medicaid had seen a dentist.[19] Decker found that "A $10 increase in the Medicaid payment level was associated with an increase in the chance that a child covered by Medicaid had seen a dentist of nearly 3.92 percentage points (95 percent CI, 0.54-7.50) with no statistically significant association for privately-insured children. An increase in the chance that a child covered by Medicaid had seen a dentist of nearly 4 percentage points is a 7 percent increase relative to the average percentage (55 percent) of children covered by Medicaid predicted to have seen a dentist at the lower fee."

And, the Pew Center study also cited evidence that raising Medicaid reimbursement rates will increase the availability of dental services to lower income children.

> *The six states that have gone the furthest to raise reimbursement rates and minimize administrative hurdles—Alabama, Michigan, South Carolina, Tennessee, Virginia, and Washington—all have seen greater willingness among dentists to accept new Medicaid-enrolled patients and more patients taking advantage of this access, a 2008 study by the National Academy for State Health Policy found. In those states, provider participation increased by at least one-third and sometimes more than doubled following rate increases.*[20]

The importance of these findings is two-fold. First, the findings presented above illustrate that better aligning the cost of service with dentists' reimbursement rates can improve dental access for underserved populations.

Second, many reforms focus on aligning the cost of service to Medicaid reimbursement rates by raising the Medicaid reimbursement rates. DSOs represent a private sector innovation that aligns the cost of service to Medicaid reimbursement rates by lowering the cost of providing dental services. DSOs lower the cost of service by creating greater efficiencies and therefore increase dental care access for underserved lower income populations.

Importantly, in these times of tight federal and state budgets, this greater access is achieved without raising the costs for government. Ultimately DSOs could lower the taxpayer burden as more lower-income children receive preventative care services. Greater preventative care services will reduce the number of dental emergencies that require a visit to the ER. Because the total preventative care services costs less than the costs

of more frequent emergency room visits, taxpayers' costs can ultimately be reduced. Additionally, greater dental hygiene improves a person's ability to obtain and retain a job in the future generating additional economic benefits.[21]

It is important to note that the majority of states still have rates that are too low for even the DSOs to profitably serve. However, DSOs are capable of serving Medicaid patients in those states that do provide a more reasonable reimbursement rate. Long term, the states with rates that are too low will saddle themselves with more costly outcomes including emergency room treatments, higher absence rates (school & work) and more unemployed adults.

DSOs: Taking a Bite Out of Dental Costs

The comparative advantage of many dentists is in the sciences and medicine, and the same dentists may not necessarily be effective business managers. Traditional dental offices tend to be relatively small, and these smaller offices lack the economies of scale for back-office operations. Lack of scale creates unnecessary duplication and excessive costs. As documented above, these costs, which are higher than necessary, can ultimately bring about lower health outcomes that are particularly problematic for lower income individuals who may be the most price sensitive health consumers.

From a financial soundness and patient safety perspective, DSOs often employ third-party auditors to assure the veracity of financial statements and many DSOs set clinical auditing standards that exceed current industry standards in both the private and public sectors.

Dental Service Organizations (DSOs) arose in the late 1990s offering dentists marketing services (to increase business); human resource support; greater career options by not being tied to one specific practice; compliance, accounting, and billing functions; management consulting services; and, centralized supply and inventory services that directly reduce costs.

Through the provision of these services, DSOs decrease the costs of operating a dental practice and increase its overall efficiency. According to the Dental Group Practice Association (an industry trade group) there are more than 3,500 practices with more than 6,500 affiliated owners that participate in the industry.[22]

DSO's also eliminate the need for dentists to invest large amounts of capital into a dental practice and therefore transfer the capital risk from the dentist to the DSO; provide the dentist with a steady paycheck; and, offer dental leadership and training resources that are unavailable to individual dentists. These attributes are particularly appealing to those dentists who are more risk averse and who may not be able, or willing, to take capital risk—this could be especially true for younger dentists who may still be paying off their dental school loans. According to the American Academy of Pediatric Dentistry, "the average graduating dental student loan debt was $200,000 in 2010."[23] The lower capital risk and steady paycheck is a valuable option that DSOs can offer many dentists.

From a financial soundness and patient safety perspective, DSOs often employ third-party auditors to assure the veracity of financial statements and many DSOs set clinical auditing standards that exceeds current industry standards in both the private and public sectors. Auditing, medical oversight, and compliance teams are frequently introduced to assure the quality of treatment, prevent fraud, and ultimately improve the value of the investment.

Overall, DSOs can be a beneficial organizational structure for many dentists that enhance their profits, increase their operational efficiencies, increase their quality of life (by freeing them from managing business issues and empowering the dentists to focus on their dentistry practice and/or create a better work-life balance), and in some cases diversify their financial security.

While these benefits can justify the use of the DSO structure for many dental practices, for this paper the benefits from the DSO are evaluated from only one perspective—the ability of DSOs to more effectively serve Medicaid patients in states where rates are sufficient to provide care profitably.

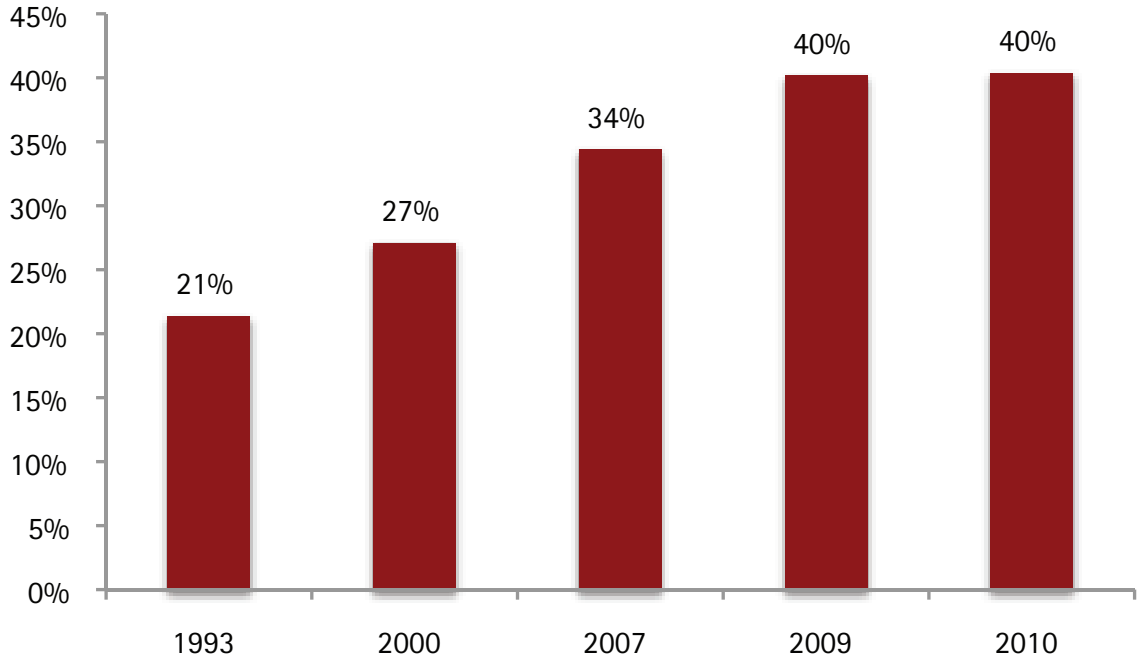
With respect to the Medicaid population, the benefits from DSOs are straightforward. DSOs lower the cost of operations by providing:

- Economies of scale and negotiating power in purchasing equipment and supplies;
- Billing (collections) and administrative efficiencies; and,
- Increased infrastructure to more effectively work with the often complex government bureaucracy.

The early evidence illustrates that due to the DSOs lower costs, access to Medicaid for children from lower-income households is expanding. The Children's Dental Health Project evaluated data from Medicaid reports and Hakim et al (2012).[24] Their analysis illustrated that between 1993 and 1998 the number of children enrolled in Medicaid who had seen a dentist was consistently around the 20 percent level. Beginning in 1999, there was an upward trend in the number of children enrolled in Medicaid who had seen a dentist. Due to the consistent progress, by 2010 around 40 percent of the children enrolled in Medicaid had seen a dentist—approximately double the rate that had seen a dentist during the early- to mid-1990s. Figure 5 reproduces the Children's Dental Health Project data.

Figure 5

Percentage of Children Enrolled in Medicaid with a Dental Visit
Various Years



While many factors helped explain these improvements such as increased awareness of the problem and increased availability of pediatric dentists, DSOs were also found to have played a significant and positive role:

> *Over the last decade, a number of general dentistry practices providing dental services primarily to children in Medicaid under the administrative umbrella of dental management organizations (DMOs) have been instituted or expanded locally, regionally, and nationally. Among the largest three, Kool Smiles reports having treated 507,470 children in Medicaid in 2009 (increasing to 812,415 in 2010); Small Smiles reports having treated approximately 488,000; and Reach Out HealthCare America 380,000. Industry observers estimate that these three DMOs provide care to one-third to one-half of all children in Medicaid served by DMO-affiliated practices. DMO affiliated practices conservatively provided care to 2.8 million children in 2009. Although Medicaid DMOs are not active in all states, in states in which they operate, they may account for a much higher percentage of children treated. For example, one DMO reported that in five states it alone provides from 7.8 percent to 25.6 percent (average 15.0 percent) of all care provided to children in Medicaid based on analyses of state-level claims data.*[25]

The Children's Dental Health Project allocates 21 percent of the increase in children's access to dental services to the expansion of DSOs.

Overall, the Children's Dental Health Project allocates 21 percent of the increase in children's access to dental services to the expansion of DSOs.

Analyses by the Federal Trade Commission (FTC) confirm the findings from the Children's Dental Health Project. In a comment letter to North Carolina legislator Stephen LaRoque the FTC described the detrimental impact to lower income patients that would result if a bill that restricted the operations of DSOs were passed. Specifically, the FTC stated that DSOs have played a positive role in expanding dental care to lower income individuals and a bill to restrict DSOs:

> *…may deny consumers of dental services the benefits of competition spurred by the efficiencies that DSOs can offer, including the potential for lower prices, improved access to care, and greater choice. Underserved communities, such as the 78 of 100 counties in North Carolina that are listed as Dental Health Professional Shortage Areas, may be particularly affected if DSO efficiencies cannot be realized.*[26]

DSOs' ability to control costs and create efficiencies is, consequently, strongly associated with expanding dental services to lower-income groups that would have to go without dental services if not for the benefits that DSOs are able to create.

Conclusions and Recommendations

Dental Service Organizations exemplify the types of health care benefits private sector firms can create—but only if the policy environment does not impede their contributions. In the case of DSOs, these practices effectively provide dental services to lower income children who would otherwise not receive regular dental care.

Lack of access to dental services is a problem because Medicaid's reimbursement rates have been, and continue to be, too low to adequately compensate traditional dental practices. When coupled with the high administrative costs associated with doing business with Medicaid, traditional dental practices lose significant amounts of money by serving Medicaid patients.

DSOs have a lower cost of operations than traditional dental practices, however. Through increased scale, DSOs are able to create operational efficiencies such as lower accounting costs and lower capital costs (through bulk purchases and greater negotiating power). Through specialization, DSOs can also create efficiencies in administration, which is particularly important when dealing with state Medicaid programs. DSOs also bring marketing expertise and other business skill sets that are not part of the traditional dentist training programs.

When combined together, these benefits not only increase the overall profitability of dental practices, dental practices are also empowered to profitably serve Medicaid patients at the current reimbursement rates. Whereas many advocates concerned about the dental health of low income children advocate for more money to be spent, DSOs are able to provide the same benefit without the requirement that more government funds be allocated. Ultimately, the taxpayer burden could decrease as costly emergency room visits are limited and the employment opportunities for lower income individuals improve.

Through increased scale, DSOs are able to create operational efficiencies such as lower accounting costs and lower capital costs.

The DSO structure exemplifies the benefits that can be created when the policy environment welcomes private sector solutions to pressing societal problems. Actions that punish DSOs as an industry, such as frivolous lawsuits or legislation that unduly restricts DSOs, will reduce overall economic welfare. The hardest hit will be lower income individuals and children who are disproportionately benefiting from DSOs.

Of course, this recommendation does not mean that those individuals or organizations that engage in fraud or other illegal or immoral activities should not be punished. They should be. However, the actions of these individuals should not be used to justify hampering an industry that has proven its worth to both dentists and lower income children.

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About the Author

WAYNE WINEGARDEN, PH.D.

Wayne Winegarden has more than 20 years of experience in public policy, economic research, and business. His expertise lies in applying quantitative and macroeconomic analysis to create greater insights for policy leaders, and corporate strategy and planning for decision makers. He has advised Fortune 500 companies, state legislators, political candidates, as well as small business and trade associations. He founded Economic Solutions and Laffer Associates strategy services; managing staff, budget, and corporate development.

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Prior to Arduin, Laffer & Moore Econometrics, Dr. Winegarden was a managing director at Laffer Associates from 2008 to 2012. He was also a manager at Philip Morris International and Philip Morris Management Corporation where he analyzed economic and fiscal issues. His teaching experience includes Marymount University and George Mason University.

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